WASHINGTON 25, D. C.

OFFICIAL BUSINESS

Maps received with Joint Final Report by Examining Team
and FT Final Summary Report 1/5/59:
Figs. 2, 3 and 4, and 5(Vertical Sec. A-A,) 6(Vertical sec. B-B),
and 7 (Vert.Sec. C-C)

DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E 963 DMEA NO. 4182

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(Withdrawn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

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

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

Left Side

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

Right Side

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

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

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

Left Side

Folder No. 2: +2-A (In chron. order)
Interim Summary Reports by W. O. Engineers

Right Side

separate folder 104's

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

Folder No. 3: SETTLEMENT SHEETS + SEMI ANNUAL REPORTS ON CERT. PROJECTS ~~Maps (Use pocket folder or envelope. Fold maps with title block out and show reference to related document or correspondence.)~~

Folder No. 4: ~~Settlement Sheets~~

Folder No. 5: Drill Logs

9775

Docket Copy

UNITED STATES DEPARTMENT OF THE INTERIOR

OFFICE OF SURVEY AND REVIEW
AUDIT OPERATIONS
WASHINGTON, D. C.

Report of Royalty Review-Contract ldm-E963
Docket No. DMEA-4182 (Uranium)
Vitro Minerals Corporation (Operator)
George and Ver Claims
Fremont County, Wyoming

April 1968

We examined the cash receipts records in the Branch of Budget and Finance, Administrative Division, Geological Survey, and reviewed the contract files of the Office of Minerals Exploration (OME) pertaining to royalty due to the Government under provisions of the subject minerals exploration contract. The review was made at Washington, D. C., on April 2, 1968.

The contract dated June 14, 1956, as amended, provides that the Operator, as principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on the value of all minerals produced from the mining claims described in the contract during a period of 11 years from the date of the contract or until the amount of the Government's participation in the exploration costs ($25,734.23) shall have been repaid without interest. On May 17, 1963, the mining claims, including a stockpile of uranium ore, was sold to Federal-Radorock-Gas Hills Partners of which Federal Resources Corporation was the managing partner.

Our previous review of the royalty status of this contract made on May 16, 1967, determined that a portion of the stockpile had been processed and sold and the Operator had paid $3,782.11 to the Government as royalty on the value of such sales. We noted further that a stockpile remained on the property. No exception was taken to the royalty settlements. We recommended that, inasmuch as the royalty repayment

period was then drawing to a close, a determination of the value of any stockpiles should be made and royalty requested on such value under provisions of Article 8(c) of the contract.

In a letter dated July 25, 1967, OME requested payment from the Operator of royalty due on the calculated value of the stockpiled ore as follows:

		Dollar Value		Government Royalty	
	Tons	Total	Per Ton	Percent	Amount
Ore	498	$ 5,622	$11.29	5	$281.10
Protore	17,000	28,730	1.69	$1\frac{1}{2}$	430.95
				Total	$712.05

With a letter dated October 2, 1967, the Operator's executive vice-president, forwarded a check for $281.10, for royalty on the 498 tons of ore and requested that the claim for $430.95, for royalty on the 17,000 tons of protore be withdrawn. On October 12, 1967, the Chief, OME, replied to the Operator stating that he had hoped to be in position to close this account but was unable to do so because "another source" had reported stockpile estimates as of March 31, 1967, as follows:

George Pit		Tons	Grade	Pounds U_3O_8
G-4	Ore	4,626	0.266	24,610

		Tons	Grade	Pounds U_3O_8
G-1	Protore	5,340	0.054	5,767
G-6	"	2,587	0.099	5,122
G-9	"	2,505	0.072	3,697
G-B	"	2,419	0.05	2,419
G-A	"	16,976	0.05	16,976
Totals		29,827	0.0566	33,981

Both the Operator and the present owners of the mining property have stated that they have no knowledge of these inventories and that the only inventory of stockpiled ore on the property is that on which OME requested royalty payments on July 25, 1967.

The "other source" is the Grand Junction, Colorado, Office of the Atomic Energy Commission whose engineers estimated the stockpiles as of March 31, 1967. If it should be determined that the AEC stockpile estimates do in fact relate to production from the property subject to the exploration contract prior to June 14, 1967, there is substantial additional royalty due to the Government. In any event the files on this project should not be "closed" until such determination is made and an administrative conclusion reached with respect to whether or not the Government should demand royalty on the probable value of the very low-grade "protore."

We find that royalty known to be due in the amount of $4,063.31 has been collected and we concur in the action taken to date in the matter

of determining whether any additional royalty is due to the Government under the provisions of this contract.

C. E. Fisher, Auditor

Reviewed by:

W. H. Wilkerson, Jr., Contract and Grant Audit
Audit Operations, Office of Survey and Review

UNITED STATES DEPARTMENT OF THE INTERIOR

OFFICE OF SURVEY AND REVIEW
AUDIT OPERATIONS
WASHINGTON, D.C.

Report of Royalty Review-Contract IDM-E963
Docket No. DMEA-4182 (Uranium)
Vitro Minerals Corporation (Operator)
George and Ver Claims
Fremont County, Wyoming

Report Issued: May 1967

An examination of the cash receipts records in the Branch of Budget and Finance, Administrative Division, U.S. Geological Survey, and a review of the Office of Minerals Exploration contract files pertaining to royalty due to the Government under provisions of the subject minerals exploration contract was made at Washington, D.C., on May 16, 1967.

The contract dated June 14, 1956, as amended, provides that the Operator, as principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on the value of all minerals produced from the mining claims described in the contract during a period of 11 years from the date of the contract or until the amount of the Government's participation in the exploration costs ($25,734.23), shall have been repaid without interest. On May 17, 1963, the mining claims, including a stockpile of uranium ore, was sold to Federal-Radrock-Gas Hills Partners of which Federal Resources Corporation was the managing partner.

Subsequently, a portion of the stockpile was processed and sold. The Operator, as surety, has paid royalty to the Government on the value of such sales, as follows:

Month Sold	Tons Sold	Gross Proceeds	Per Ton	Royalty Rate	Royalty Paid
June 1963	2,947.27	$ 54,932.31	$18.64	5%	$2,746.62
July 1963	2,567.17	24,041.17	9.36	2½%	601.03
Aug. 1963	2,217.60	14,502.74	6.53	1½%	217.54
May 1964	2,495.86	12,083.28	4.84	1½%	181.25
June 1964	777.59	2,305.85	2.96	1½%	34.59
May 1965	13.40	71.92	5.37	1½%	1.08
	11,018.89	$107,937.27			$3,782.11

Federal Resources Corporation in a letter dated May 31, 1966, to the Operator advised that they are carrying the following stockpiles per books as of April 30, 1966:

George Claims	Tons	Grade
Ore	498	0.168
Protore	17,000	0.065

Federal also advised, "We have not shipped this material inasmuch as it contains a sufficient amount of molybdenum to be a problem in our process. We plan to utilize this material; however, it will be in small quantities in order to minimize the molybdenum problem."

No exceptions have been taken with respect to the royalty settlements received aggregating $3,782.11. However, the matter of whether or not there has been other production on which the Government is entitled to royalty should be clarified. In view of the fact that the royalty repayment period is drawing to a close, it would seem that a determination of the value of any stockpiles should be made and royalty requested on such value under provisions of Article 8(c) of the contract.

C. E. Fisher

C. E. Fisher, Auditor

Reviewed by:

Dwight E. Savage

Dwight E. Savage, Office of Survey and Review

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
12/23/70		120
		220

DEC 22 1970

Mr. Eugene B. Hotchkiss
Vice President
Earth Resources Company
90 Park Avenue
New York, New York 10016

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hotchkiss:

By the terms of the subject Exploration Project Contract, as amended, all minerals mined or produced from June 14, 1956, to June 14, 1967, were subject to the Government's royalty as set forth in said contract.

The period during which production was subject to royalty has expired, and material produced from the George claim and stockpiled has been processed, sold, and royalty paid as required. Therefore, the Government according to its present records retains no claim or lien against the property subject to the contract or any future production therefrom, and we are closing our books and records on this contract.

Sincerely yours,

Harold Kirkemo (gla)

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources
OME docket
OME Reading File
OME Region III
Branch of Budget and Finance
Mr. Kirkemo
130

HKirkemo/gla 12-22-70

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Contract Idm-8963, Docket DMEA-4182 (uranium) dated June 14, 1956, with

Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah
and
261 Madison Avenue
New York 16, New York

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the George and Var Group of claims located in Fremont County, Wyoming, during the period June 18, 1959, through June 14, 1962.

A certification of discovery or development was issued on September 30, 1957, and, in accordance with Article 8 and Amendment No. 2 of the contract, royalty is payable on all minerals produced from the land described in Article 2 of the contract for a period of 11 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated October 17, 1957, indicated accepted costs under the exploration contract amounting to $34,312.52 with the Government's contribution on a 75 percent basis being $25,734.23.

The status of the project, the scope of review, and the reasons therefor are stated on page 2.

This review established no sales subject to the Government's royalty subsequent to the period covered by a prior Report of Royalty Review which also found no sales subject to the Government's royalty through June 17, 1959. Accordingly, as of June 14, 1962, the royalty account of this project was found to be:

Total Royalty Payable	$ -0-
Total Royalty Paid	-0-
Balance of Royalty Due	$ -0-

E. D. Talbert, OME Auditor

July 25, 1962

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This contract provides that the Operator, as principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on all minerals produced from the land thereunder. The land consists of 18 unpatented claims (George 1 through 7 and Ver 1 through 11) situated in secs. 22, 26, and 27, T. 33 N., R. 90 W., 6th Principal Meridian, Gas Hills Mining District. At the time the contract was executed the Operator was in possession by virtue of ownership of an undivided one-half interest in each group of claims and pursuant to agreements with the other owners. In consideration of the contract Consents to Lien were executed by the other owners.

Exploration work under the contract was concluded on May 15, 1957, and formally terminated by an agreement dated August 21, 1957. No ores were produced during the exploration period. Inspections of the property by DMEA Field Team representatives during 1957, 1958, and 1959 disclosed no work on the property other than additional exploratory drilling by the Operator.

The Operator has submitted reports, over the signature of its controller, that "no ore has been mined from the claims covered by the contract" at six-month intervals. The last such report, by letter dated June 18, 1962, covered the period ending June 14, 1962.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) The files contain no indication of production from the property under the contract; and

(2) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Executive Officer, OME Field Team, Region III, Denver, Colorado pertaining to Contract Idm-2963, Docket No. DMRA 4182, dated June 14, 1956, with

Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

for the purpose of determining the amount of royalties due the U. S. Government on the sales of Uranium, from property referred to as George and War Claims, located in Fremont County, Wyoming, during the period June 14, 1956 to June 17, 1959.

A Certification of Discovery or Development was issued on September 30, 1957, and accordingly royalty is payable on all production from the land described in Article 2 of the contract for a maximum period of 11 years from the date of the contract. A Report of Review in lieu of Final Cost Audit dated October 17, 1957, indicated accepted costs under the exploration contract amounting to $34,312.32, with the Government's contribution on a 75 percent basis being $25,734.23.

No royalty has been paid to the Government to date in connection with this contract.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(a) According to the Field Team's Semi-Annual Report of certified project for the period January 1 to June 30, 1957, operation ceased about May 31, 1957; no ore has been shipped since June 14, 1956, (The date of the exploration contract). Subsequent semi-annual reports of Field Team during the period July 1, 1957 to December 31, 1958, indicate the property inactive and no operations or ore shipments are anticipated in 1959.

(b) The administrative costs to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

June 17, 1959

JUN 22 1959
O.M.E.

Donald T. Finch
Donald T. Finch
OME Auditor

Docket

Murphy
Ellis
Rutin
Hoffman
Chambers
Selfridge
Johnson

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

To: Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

Pursuant to the provisions of Exploration Project Contract No. Idm-2963, dated June 14, 1956, (Docket No. DMEA-4182), hereinafter called the contract, between Vitro Minerals Corporation, incorporated in the State of Delaware, and the United States of America, hereinafter called the Government; to establish and fix the Government's percentage royalty on production and its lien therefor and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Surface non-core drilling performed in the project area penetrated a number of marginal uranium-bearing ore areas occurring in the sedimentary Wind River formation of early Eocene age. The uranium in part, is present as uraninite.

Date: SEP 30 1957

FMMurphy/izm 9-23-57 (9-17-57)

THE UNITED STATES OF AMERICA

by C. Mittendorf
Administrator, Defense Minerals
Exploration Administration

cc: Operator
John E. Bansept, Agent for
Sateco Uranium Co.
Fremont Metal & Mining, Inc.
Contract Adm. & Audit Div.
DMEA FT Reg. III (2)
Finance Office
Docket
Elton A. Youngberg, AEC, GJ. Colo.
Jesse C. Johnson, AEC
Admr.'s Reading File
Frank E. Johnson
Operating Committee
Frank D. Lamb, R. 3608
T. H. Killsgaard, Rm. 5224
Mr. Murphy

NSE MINERALS EXPLORATION ADMIN RATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

DMEA
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DATE		CODE
10-21		800
21		100
21		110
		120
10/22		900

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

pertaining to Exploration Project Contract No. Idm-E963, Docket No. DMEA-4182, including Amendments Nos. 1 and 2, for the months of July, 1956 to May, 1957, covering a project for the exploration of Uranium on property known as George and Ver Claims located in Fremont County, Wyoming.

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

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

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

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

(c) a major portion ($27,490.86) of the costs incurred covered work performed at unit rates under independent contract; and

(d) the balance ($6,821.46) of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs for work actually performed.

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

Total cost as billed by Contractor		$35,006.78
Exceptions: (Schedule attached)		
By DMEA Finance Officer	$694.46	
Herewith	0.00	694.46
Total Accepted Cost		$34,312.32

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Twenty-five thousand, seven hundred thirty-four and 23/100ths Dollars

** $25,734.23 **

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

October 17, 1957

T. H. Brading, Audito

SCHEDULE OF EXCEPTIONS

VITRO MINERALS CORPORATION

Contract No. Idm-E963 | Docket No. DMEA-4182

JULY, 1956

Hole No. 37-28.5 was drilled to a depth of 255 feet, which was beyond the potential ore-bearing zone 91 feet. Disallowed footage begins at 164 feet, the first recorded lithologic change below the radio active zone record by the Babbel probe.

Disallow 91 feet @ $0.493 per foot	$44.86
Disallow incidental allowance for 91 feet @ $0.09 per foot	8.19
Total amount to be disallowed - July, 1956	$53.05

FEBRUARY - MARCH, 1957

STAGE II

Seven Stage II holes reported during the period were later redrilled to greater depth during this same period, and cost of drilling was claimed for both original drilling and later redrilling. The redrilling costs are accepted and cost of original drilling disallowed as follows:

HOLE NO.	ORIGINAL DRILLING
40 - 34.5	180
40 - 31.5	185
40 - 28.5	185
41.5-33	180
38.5-31.5	185
34 - 31.5	180
41.5-30	185
Total Excess Footage	1,280

Disallow invoice cost for above 1,280 feet	$496.32
Incidental allowance @ $0.09 per foot for above 1,280 feet	115.20
Total amount to be disallowed February-March, 1957, Stage II	$611.52

STAGE III

Amount claimed on MF-104 - Drilling Cost	$10,777.39
Amount shown on Drilling Reports	10,747.50
Error in claim - Excess	$ 29.89

SUMMARY

July, 1956		$ 53.05
February-March, 1957	Stage II	611.52
February-March, 1957	Stage III	29.89
Total Disallowed		$694.46

Disallowances made by Finance Officer; approved by Auditor.

EXTRA COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

October 16, 1957

Memorandum

To: T. H. Brading, DMEA Auditor

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

Subject: Docket DMEA-4182 (Uranium) Contract Idm-E963, Vitro Minerals Corporation (George and Ver claims) Fremont County, Wyoming

With respect to our recent discussions on the subject contract, it is my opinion that the average drilling cost of 40.568 cents per foot is fair and acceptable. This cost is far below the 70 cents maximum allowed under the subject contract and much below the unit costs of $1.13 per foot allowed under Contract Idm-E946, and $1.00 per foot allowed under Contract Idm-E1115. The latter two cost figures include incidental allowances.

Drilling under the three contracts was in similar material and holes were drilled to comparable depths.

In view of above facts, it is my opinion that it should be unnecessary to request the Operator to furnish copies of the nine drilling sub-contracts.

E. N. Harshman

E. N. Harshman

ENH:jy

cc: Townsend
Corresp. E963
MF-104 file
Chron.

ORIGINAL FILE COPY
DMEA
RECEIVED SEP 23 1957
DATE | INITIALS | CODE

Government's copy

"Appd. Sol. Off."

TERMINATION AGREEMENT

It is agreed this 21st day of August, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Vitro Minerals Corporation, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-E963 (Docket No. DMEA-4182), dated June 14, 1956, as amended, hereinafter called the "Contract," that:

1. Effective June 1, 1957, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute to allowable costs incurred prior to said effective date.

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

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

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

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

THE UNITED STATES OF AMERICA

By Frank E. Johnson
ACTING Administrator, Defense Minerals Exploration Administration

VITRO MINERALS CORPORATION

By W B Hall

Title Vice Pres

Docket Division

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DMEA
RECEIVED JAN 14 1957
DATE | INITIALS | CASE

EXPLORATION PROJECT CONTRACT
VITRO MINERALS CORPORATION
DOCKET NO. DMEA-4182

Amendment No. 2

It is agreed this 10th day of January, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration, and Vitro Minerals Corporation, parties to Exploration Project Contract No. Idm-E963, Docket No. DMEA-4182, dated June 14, 1956, that:

1. (a) The work under the Contract shall be suspended during the period beginning November 27, 1956, and ending not later than March 15, 1957.

(b) The Government shall not contribute to any costs incurred by the Operator during the period of suspension or to any costs of rehabilitation or repair which, in the Government's opinion, would not have occurred if there had been no suspension of the work.

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

2. The date fixed in Article 3 for completion of the work is extended from January 1, 1957, to August 14, 1957.

3. The maximum period for royalty payments and liens for the payment thereof, provided for in the Contract, is extended to eleven (11) years.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the amount of any item designated as maximum.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Sindritz 12/26/56
Dwyer
Supply Sch. Off.
Murphy
F L Kraus
Chambers
Selfridge
Mitchell

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

VITRO MINERALS CORPORATION

By W B Hall

Title Vice Pres

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EXPLORATION PROJECT CONTRACT
VITRO MINERALS CORPORATION
DOCKET NO. DMEA 4182
CONTRACT NO. Idm-E965

AMENDMENT NO. 1

It is agreed this 18th day of October, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Vitro Minerals Corporation, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E965, Docket No. DMEA 4182, dated June 14, 1956, hereinafter called the "Contract," that the Contract is amended as follows, effective June 14, 1956:

> Referring to Exhibit "A" attached to Exploration Project Contract form MF-200 (Revised June 1954), page 2, subheading "Stage I," first paragraph, in the first line change the figure "63" to read "64"; in the next to the last line, change the figure "58" to read "59."

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Executed in sextuplicate the day and year first above written.

VITRO MINERALS CORPORATION

By C. J. Potter
C. J. Potter, President

UNITED STATES OF AMERICA

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

Docket Copy

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JUL 2 - 1956

MF-200
(Revised June 1954)

Docket No. DMEA 4182

Commodity Uranium

Contract No. Idm-E 963

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this JUN 14 1956 day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Vitro Minerals Corporation, a Delaware Corporation, whose mailing address is P. O. Box 67, South Salt Lake City, Utah, hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, and Map, Figure 2

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

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

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] See Annex I of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] See Annex I, [7] recorded in Book ....., page ....., official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: None

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: Consents to Lien of tenants in common (See Annex I)

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 8, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 8(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Uranium The work to be performed is described in Exhibit "A." The Operator on or before July 15, 1956, shall commence the work, and on or before January 1, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall [redacted] have completed the work [redacted] Exhibit "A." except as otherwise provided in Exhibit "A" with respect to Stages of work.

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $64,816.00 The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $48,612.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

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

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 8.

be Article 13.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—
(a) Categories (2) through (7) of Article 6(a) are deleted. (b) To the extent that costs are set forth in Exhibit "A" as "Fixed Unit Costs" they are in lieu of the actual costs that otherwise would be allowable costs of the project under Article 6 of the contract. The Government will contribute to the fixed unit costs as they accrue, on the basis of units of work actually performed. The fixed unit costs include all costs of the work necessary to complete the project. (c) That part of the last sentence in the first paragraph of Article 6(a) commencing after the semicolon is deleted.

Rubin
Lawyer
"Appd. Sol. Off."
Murphy
Ellis
Talbert
Martin
H J Mason

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. F. Mitteudorf
Administrator, Defense Minerals
Exploration Administration

VITRO MINERALS CORPORATION
(Operator)

By C. J. Potter
C. J. Potter, President

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

H. Vernon Fritchman

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
VITRO MINERALS CORPORATION
DOCKET NO. DMSA-4182

ANNEX I

The land referred to in Article 2 of the contract form consists of eighteen (18) unpatented mining claims situated in secs. 22, 26, and 27, T. 33 N., R. 90 W., Sixth Principal Meridian, for which location notices are recorded in the Office of the Fremont County Recorder at Lander, Wyoming, as follows:

Claim	Original Filing			Amended			Further Amended		
	Book	Page	Recorded	Book	Page	Date	Book	Page	Date
George 1	57	1	11/2/53	58	213	8/16/54	147	438	12/3/55
George 2	57	2	11/2/53	58	214	8/16/54	147	439	12/3/55
George 3	57	3	11/2/53	58	215	8/16/54	147	440	12/3/55
George 4	57	4	11/2/53	58	216	8/16/54	147	441	12/3/55
George 5	57	5	11/2/53	58	217	8/16/54	147	442	12/3/55
George 6	57	176	11/12/53	65	73	8/16/54	147	443	12/3/55
George 7	60	553	5/3/54	65	82	8/16/54	147	444	12/3/55
Ver 1	57	96	11/9/53	65	109	8/18/54	147	463	12/5/55
Ver 2	57	97	11/9/53	65	110	8/18/54	147	464	12/5/55
Ver 3	57	98	11/9/53	65	111	8/18/54	147	465	12/5/55
Ver 4	57	99	11/9/53	65	112	8/18/54	147	466	12/5/55
Ver 5	57	100	11/9/53	65	119	8/18/54	147	467	12/5/55
Ver 6	57	101	11/9/53	65	113	8/18/54	147	468	12/5/55
Ver 7	57	102	11/9/53	65	114	8/18/54	147	469	12/5/55
Ver 8	57	103	11/9/53	65	115	8/18/54	147	470	12/5/55
Ver 9	57	104	11/9/53	65	116	8/18/54	147	471	12/5/55
Ver 10	57	105	11/9/53	65	117	8/18/54	147	472	12/5/55
Ver 11	60	532	5/3/54	65	118	8/18/54	147	473	12/5/55

The approximate locations of the claims are shown on the attached map entitled, "Figure 2 - Map of George and Ver Group Showing Location of Proposed Stage I Holes and Part of Proposed Stage II Holes, Vitro Minerals Corporation, Fremont County, Wyo., DMSA-4182."

The Operator is the owner of an undivided one-half interest in each group of claims and has exclusive possession of the premises

pursuant to agreements with the other co-owners; the Consents to Lien of the other owners are attached to the contract as follows:

> Consent to Lien, on the George claims Nos. 1 through 7 signed by or for John E. Bansept, Josephine F. Bansept, Robert Jerome Albert, John Bansept, Sr., George J. Snyder, Emma W. Snyder, and Clark Decker; and
>
> Consent to Lien, on the Var claims Nos. 1 through 11 signed by the Fremont Metal and Mining, Inc., a Wyoming Corporation.

MF-203
Revised March 24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Vitro Minerals Corporation
Docket No. DMEA-4182
Contract No. Idm-E
Contract Date

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of Fremont, State of Wyoming, described as follows:1/

The George Group of Mining Claims, numbered 1 through 7 inclusive, located in Sections 22 and 27, Township 33 North, Range 90 West; and as amended, and further described in Annex I attached hereto and made a part hereof.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of a percentage royalty on production as may be provided for by the contract;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/

None

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

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

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

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

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

5. Added provision: None

Dated this _____ day of _____, 195__.

_____ [Seal]

_____ [Seal]

_____ [Seal]

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

John E. Bansept (Seal)

John Bansept, Sr. (Seal)

Robert Jerome Albert (Seal)

Clyde Decker (Seal)

J. E. Bansept, also known as Josephine F. Bansept (Seal)

George Snyder, also known as George J. Snyder (Seal)

Emma [illegible]ler, also known as Emma W. Snyd[illegible] (Seal)

ANNEX I

The George claims are recorded in the official records of Fremont County, Wyoming in the book and page as follows: -

	Original Filing				Amended			Further Amended		
Claim	Book	Page	Re-corded	Dis-covered	Book	Page	Date	Book	Page	Date
George 1	57	1	11-2-53	10-3-53	58	213	8-16-54	147	438	12-3-55
George 2	57	2	"	"	58	214	"	147	439	"
George 3	57	3	"	"	58	215	"	147	440	"
George 4	57	4	"	"	58	216	"	147	441	"
George 5	57	5	"	"	58	217	"	147	442	"
George 6	57	176	11-12-53	11-5-53	65	73	"	147	443	"
George 7	60	553	5-3-54	4-21-54	65	82	"	147	444	"

MF-203
Revised March 24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Vitro Minerals Corporation
Docket No. DMEA-[illegible]
Contract No. Idm-E 963
Contract Date JUN 14 1956

RECEIVED
JUN - 1 1956

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of Fremont, State of Wyoming, described as follows:1/

The Ver Group of Mining Claims, numbered 1 through 11 inclusive, located in Sections 22, 25, 27, Township 33 North, Range 90 West; and as mapped, and further described in Annex I attached hereto and made a part hereof.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of a percentage royalty on production as may be provided for by the contract;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/

None

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

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

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

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

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

5. Added provision: None

Dated this 28th day of May, 1956

Chas C Bripaugh Jr [Seal]
Fremont Metal & Mining, Inc.

[Seal]

[Seal]

I, Emma Snyder certify that I am the secretary (Secretary, etc.) of the corporation named herein; that Chas. C. Bripaugh who signed this agreement was then President (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

Emma Snyder
[Corporate Seal]

ANNEX I

The Ver claims are recorded in the official records of Fremont County, Wyoming in the book and page as follows: -

Original Filing					Amended			Further Amended		
Claim	Book	Page	Re-corded	Dis-covered	Book	Page	Date	Book	Page	Date
Ver 1	57	96	11-9-53	11-8-53	65	109	8-18-54	147	463	12-5-55
Ver 2	57	97	"	"	65	110	"	147	464	"
Ver 3	57	98	"	"	65	111	"	147	465	"
Ver 4	57	99	"	"	65	112	"	147	466	"
Ver 5	57	100	"	"	65	119	"	147	467	"
Ver 6	57	101	"	"	65	113	"	147	468	"
Ver 7	57	102	"	"	65	114	"	147	469	"
Ver 8	57	103	"	"	65	115	"	147	470	"
Ver 9	57	104	"	"	65	116	"	147	471	"
Ver 10	57	105	"	"	65	117	"	147	472	"
Ver 11	60	532	5-3-54	4-21-54	65	118	"	147	473	"

EXPLORATION PROJECT CONTRACT
VITRO MINERALS CORPORATION
DOCKET NO. DMEA-4182

Exhibit "A"

Description of the Work

General Provisions:

The object of this project is to explore for ore deposits in the potential uranium-bearing Wind River formation of Lower Eocene Age. The exploratory work consists of non-core or rotary drilling, from the surface, beginning with dry drilling, and then changing to wet drilling when the ground water level is reached by a drill hole. It is estimated that holes averaging 160 feet in depth will be required to penetrate the potential ore-bearing formation.

During the drilling, samples of the cuttings shall be collected for each 2 feet of hole drilled. The samples shall be examined for physical and geologic characteristics and scanned radiometrically. One-half of each sample shall be stored for Government use in heavy paper sample sacks marked to show the hole number and the depths represented by the sample. The other half of each sample is for the Operator's use and, if it shows significant radioactivity, shall be fluorimetrically analyzed for its U_3O_8 content.

All holes shall be logged petrographically and probed for radioactivity. Records of such logging and probing, together with the assay certificates of the "cuttings" samples, shall be submitted with each of the Operator's monthly progress reports. The Operator's report shall also include a map or sketch showing the approximate locations of all holes drilled during the reporting period.

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

The Government will not participate in the cost of any incompleted hole, or any hole that cannot be probed with standard radiometric probing equipment.

Two geologists and two samplers shall be employed full time in connection with the performance of the project work.

The extent and method of drilling, the location and depth of the drill holes, and the manner of sampling and storing the cuttings are all subject to approval of the Government.

The work is divided into three stages as hereinafter set forth. The Operator shall perform all the work in Stage I, and shall perform as much of the work in Stages II and III as is approved in advance in writing by the Government.

If the estimated requirements for Stages I and II are insufficient to complete the number of authorized holes specified in Stage I or Stage II, a part of the requirements and costs therefor estimated for Stage III may be used to complete such holes with prior written approval of the Government. Similarly, if any requirements estimated for Stage I are surplus, they and the costs therefor may be transferred to Stage II with prior written approval of the Government. However, requirements and costs that may be surplus after completion of Stages I and II shall not be used for Stage III.

Stage I

Stage I consists of drilling ~~65~~ 64 holes, estimated to aggregate not more than 10,690 feet, and spaced on a 300-foot center diamond pattern, (except for one hole that shall be drilled to test the anomaly in the northeast part of George No. 1 claim). The approximate locations of the holes are indicated by single and double circle symbols on the attached map, Figure 2. The five holes indicated by a double circle, shall be drilled to a depth of approximately 250 feet, or deep enough to penetrate the entire thickness of the Wind River formation. The ~~35~~ holes indicated by single circles shall be drilled to penetrate the ore-bearing formation.

Not to exceed 250 samples shall be analyzed fluorimetrically for U_3O_8 content.

Stage II

Stage II is divided into three phases as follows:

Phase (1) consists of drilling 64 holes, estimated to aggregate not more than 10,400 feet, on a 300-foot center diamond pattern. The approximate locations of the holes are indicated by a triangle symbol on the attached map, Figure 2.

Phase (2) consists of drilling 76 holes, estimated to aggregate not more than 12,160 feet. The holes shall be drilled, on not less than approximately 150-foot centers, as offsets to those holes drilled under Stage I which show uranium in amounts that the Government considers to be significant.

Phase (3) consists of drilling 80 holes, estimated to aggregate not more than 12,800 feet. The holes shall be drilled on approximately but not less than 150-foot centers, as offsets to those holes drilled under Stage II which show uranium in amounts that the Government considers to be significant.

Not in excess of 220 holes, totaling an estimated 35,360 feet, shall be drilled under this Stage II of the contract.

Not to exceed 850 samples shall be analyzed fluorimetrically for U_3O_8 content.

Stage III

Stage III consists of drilling not in excess of 188 holes, totaling not in excess of 30,080 feet. The holes shall be drilled, on approximately but not less than 75-foot centers, as offsets to holes drilled in the previous stages which show uranium in amounts that the Government considers to be significant.

Not to exceed 750 samples shall be analyzed fluorimetrically for U_3O_8 content.

Estimated Costs of the Project

Stage I

Actual Costs

Category (1) Independent Contracts

10,690 feet of non-core drilling @ $0.70/ft.	$7,483.00	
Standby time for probing holes, 32 hours @ $10.00/hr.	320.00	
Categories (2) through (7)		
None	_____	$7,803.00

Fixed Unit Costs

Incidental allowance 1/ for each foot of hole drilled, 10,690 feet @ $0.09/ft.	$ 962.10	
Analyses of 850 samples for U_3O_8 content @ $1.25/sample	312.50	1,274.60
Estimated Total Cost Stage I		$9,077.60

Stage II

Actual Costs

Category (1) Independent Contracts

35,360 feet of non-core drilling @ $0.70/ft. $24,752.00

Standby time for probing holes, 110 hours @ $10.00/hr.	$ 1,100.00	
Categories (2) through (7)		
None	_____	$25,852.00
Fixed Unit Costs		
Incidental allowance 1/ for each foot of hole drilled, 35,360 feet @ $0.09/ft.	$ 3,182.40	
Analyses of 850 samples for U_3O_8 content @ $1.25/sample	1,062.50	4,244.90
Estimated Total Cost Stage II		$30,096.90

Stage III

Actual Costs		
Category (1) Independent Contracts		
30,080 feet of non-core drilling @ $0.70/ft.	$21,056.00	
Standby time for probing holes 94 hours @ $10.00/hr.	940.00	
Categories (2) through (7)		
None	_____	21,996.00
Fixed Unit Costs		
Incidental allowance 1/ for each foot of hole drilled, 30,080 feet @ $0.09/ft.	2,707.20	
Analyses of 750 samples for U_3O_8 content @ $1.25/sample	937.50	3,644.70
Estimated Total Cost Stage III		$25,640.70

SUMMARY

Estimated Total Cost, Stage I	$ 9,077.60	
Estimated Total Cost, Stage II	30,096.90	
Estimated Total Cost, Stage III	25,640.70	
TOTAL	$64,815.20	
Estimated Total Cost of Project (rounded)		$64,816.00
Government Participation @ 75 Percent		$48,612.00

1/ Includes all costs whatsoever that are not included under the Category for "Independent Contracts" or in the fixed unit costs for analyses and includes such items as would otherwise be allowable under Categories (2) through (7) of the contract.

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

RECEIVED
FEB 17 1956

February 13, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Aid (Uranium), Vitro Minerals Corporation, George and Ver claims, Secs. 22, 26, and 27, T. 33 N., R. 90 W., Fremont County, Wyoming

Enclosed are three copies of the subject application in the amount of $64,040.00. One copy of the application is being retained in our files.

W. M. Traver

W. M. Traver

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Rec'd.
FEB 10 1956

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

RECEIVED
FEB 17 1956
BUREAU OF MINES
Denver, Colorado

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

Not to be filled in by applicant

Docket No. 4182
Metal or Mineral Uranium
Date Received 2-17-56
Estimated Cost $64,040.00
Participation (Government %) $85,219.00

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Vitro Minerals Corporation (Delaware), joint subsidiary of the Vitro Corporation of America (Delaware), and the Rochester and Pittsburg Coal Company (Incorp., Pennsylvania). Address: VITRO MINERALS CORPORATION, Post Office Box 67, South Salt Lake City, Utah Phone - INgersoll 7-3681.

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

(*c*) If a corporation, add to above statement, titles, names and addresses of officers. See page 2

(*d*) If a partnership, add to the above statement the names and addresses of all partners. Not applicable.

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract 18 unpatented lode claims in contiguous block consisting of: George claims 1 thru 7, and Ver claims 1 thru 11. Located in parts of Secs. 22, 26, and 27, T. 33 N., R. 90 W., Gas Hills area, Fremont Co., Wyoming. See certified survey maps, Plates I and II and III.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise operator; also joint owner as tenant in common, holding an undivided half interest.

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

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. See page 2

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. Not applicable.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you. See p. 3, 4 - Plates III, IV, V; and Appendix.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. See page 10

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power. See page 10

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Uranium and related fissionable elements; and other valuable minerals incidentally.

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. See p. 11 and Plates III, IV, V, and VI.

(*c*) The work will start within 30 days and be completed within 6 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. See pages 13, 14

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project: See p. 14

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.). See pg. 14 and three competitive drilling contract bids.

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants. See page 14

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel. See page 14

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be. See page 15

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project. Not applicable.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project. Not applicable

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes. See page 15

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

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs. See page 15

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

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

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

Explain in detail on acompanying paper. See page 15

CERTIFICATION

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

Dated February 2, 1956

VITRO MINERALS CORPORATION
(Applicant)

By W B Hall

W. B. HALL

Vice President

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

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

RECEIVED
FEB 17 1956

APPLICATION

FOR AID IN AN EXPLORATION PROJECT,

PURSUANT TO DMEA ORDER 1,

UNDER

THE DEFENSE PRODUCTION ACT OF 1950,

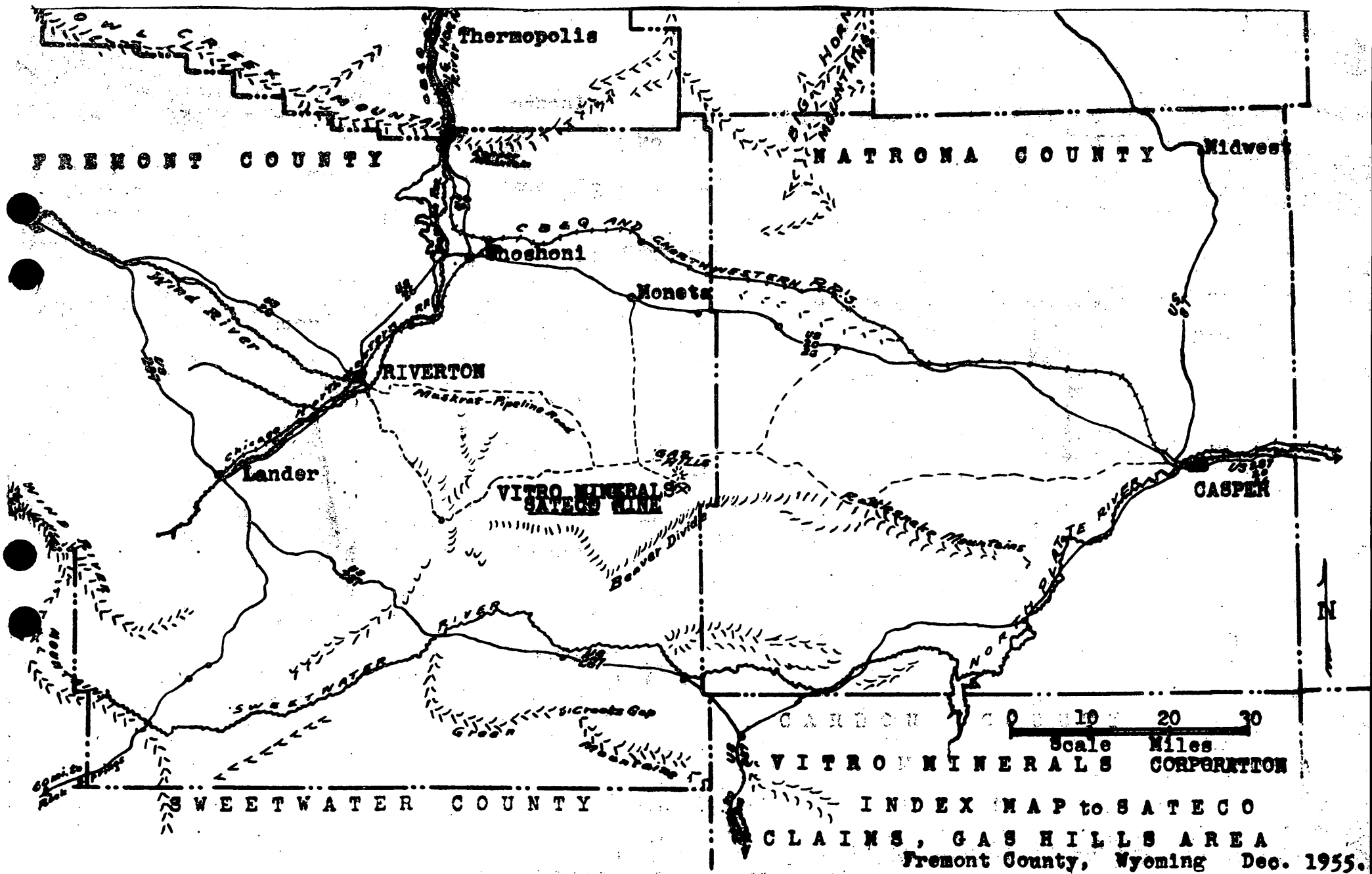
AS AMENDED

-

GEORGE AND VER CLAIMS, GAS HILLS AREA
FREMONT COUNTY, WYOMING

VITRO MINERALS CORPORATION
600 West 33rd South
Salt Lake City, Utah
- or -
Post Office Box 67
South Salt Lake City, Utah
PH. - INgersoll 7-3681

December 22, 1955



VITRO MINERALS CORPORATION

INDEX MAP to SATECO CLAIMS, GAS HILLS AREA

Fremont County, Wyoming Dec. 1955.

RECEIVED
FEB 17 1956

RECEIVED
FEB 17 1956

TABLE OF CONTENTS

Index Map . . . . . Frontispiece

Application Form:

1. (c) Corporation Officers, and their addresses.

3. (f) Claim Location Notices - Filings.

4. (a) Exploration Completed to Date.
   (c) Geologic Report and Reasons for Exploration - General Statement.

   History of Uranium Discovery and Development.
   Historical Geology, from J. D. Love, USGS Cir. 352
   Origin of Uranium, from J. D. Love, USGS Cir. 352
   Geochemistry, from an AEC paper by Donald L. Everhart
   Stratigraphy
   Two Types of Ore Deposits

   (d) Accessibility of the Project.
   (e) Availability of Manpower, Supplies, Materials.

5. (b) Description of the Proposed Work.
   (d) Operating Experience of the Applicant.

6. - Estimate of Costs.

7. - Furnishing a Share of the Costs.

ENCLOSED IN ENVELOPE

Plates I and II ---- Certified Claim Survey Maps

Plate III ---------- Topographic and Areal Geologic Map

Plate IV ---------- Surface and Sub-surface Anomaly Map, Previous Drilling

Plate V ---------- Two Cross-Sections Based on Drill Holes

Plate VI ---------- Proposed Drilling Grids

Appendix I --------- Summary of Previous Drilling and Data Collected
Three Competitive Bids for the Contract Drilling

Copy of Agreement between Vitro and Original Claim Owners

DMEA LOAN APPLICATION

* * *

1. (c) Vitro Minerals Corporation Officers:

POTTER, CHARLES J., President
Rochester and Pittsburgh Coal Company
P. O. Box 729
Indiana, Pennsylvania

HALL, WILLIAM B. JR, Vice President
Vitro Uranium Company
600 West 33rd South Street
Salt Lake City 15, Utah

DENNE, WILLIAM H. JR., Secretary
RUDER, RAYMOND T., Treasurer
Vitro Corporation of America
261 Madison Avenue
New York 16, New York

3. (f) Recorded at Fremont County Courthouse, George and Ver Claim Location Notices.

	ORIGINAL FILING			AMENDED			FURTHER AMENDED		
Claim	Book	Page	Date	Book	Page	Date	Book	Page	Date
George 1	57	1	11-2-53	58	213	8-16-54	147	438	12-3-55
George 2	57	2	"	58	214	"	147	439	"
George 3	57	3	"	58	215	"	147	440	"
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George 7	60	553	5-3-54	65	82	"	147	444	"
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Ver 9	57	104	"	65	116	"	147	471	"
Ver 10	57	105	"	65	117	"	147	472	"
Ver 11	60 ~~57~~	532	5-3-54	65	118	"	147	473	"

4. (a) Previous to Vitro's participation, no exploration work had been accomplished. At Vitro's expense, 186 holes were drilled; this drilling was completed in July,

4. (a) Cont'd.

1955. An isorad survey, conducted during the month of August, 1955, disclosed three ground anomalies which had not been tested by drilling. No further drilling has been done. Exploration, to date, has not delineated mineable quantities of uranium, however, commercial-grade uranium assays have been obtained from three of these drill holes. No mine workings nor production facilities are to be found on the ground. All parts of the subject claims are easily accessible to vehicles.

A resumé of the drilling, listing the holes drilled in each claim, and the total footage drilled in the George and in the Ver groups is given at the beginning of the enclosed Appendix I. The remainder of the Appendix summarizes the information accumulated on the drill logs. The positions of these drill holes are shown on Plate IV. From the plate it can be seen that less than one third of the area of the claims has been tested by drilling. With the exception of the validation holes, spacing on this drilling was 100 feet or less; too clustered and shallow for adequate exploration of any of the claims. On the cross-sections on Plate V, it is indicated that many of these holes may not have been drilled deep enough.

Four anomalies discovered by the subsequent isorad survey also are plotted and numbered on Plate IV. Only anomaly number three has to any extent been tested by drilling. The isorad survey was of reconnaissance nature, and other important ground-anomalies may yet be discovered. The survey was conducted by geologists, taking readings on a Nucleometer every 50 feet along lines which were 300 feet apart; following the claim lines and center lines of the claims. When unusual readings were encountered along these lines, the anomalous areas were blocked out, taking readings on 50-foot centers. The first anomaly, with readings ranging up to twice the background count of surrounding areas, covers 1-1/2 acres within the northeast corner of George 1. The second anomaly, with

4. (a) Cont'd.

readings up to three times normal background, covers 2-1/4 acres in George 6, and Ver 11. The third anomaly, with readings up to three times background, covers one acre in the northeast corner of Ver 1. The fourth anomaly, with readings up to 2-1/2 times background, covers 2-2/3 acres, mostly in the southeast corner of Ver 8.

4. (c) The plates, figures, and the technological information enumerated in the index and enclosed with this application may be retained, as part of the document. Details concerning mineralization, type of deposit, and a recapitulation giving our reasons for wishing to explore are presented within the detailed geologic report given on the following pages. Sections concerning historical geology, origin of uranium in the Gas Hills, and geochemical characteristics of uranium are presented as quotations from AEC and USGS literature.

GEOLOGIC REPORT - GEORGE AND VER CLAIMS

GENERAL STATEMENT:

Uranium ore, as shown by other operations in the area, occurs in bedded deposits which are associated with channels of ancient streams in the Wind River formation. Stratigraphically, only sediments of the Tertiary Wind River formation are exposed on these claims. Several horizons of mineralization in commercial quantities are known in this formation in the Gas Hills area. These ore horizons vary in thickness from two to more than twenty feet, and they are usually found at, or near, the water table on a particular mine site. In areal extent, these bodies may be up to 600 feet in diameter, and they may involve over 100,000 tons of uranium ore. There are also shallow, semi-oxidized, pod-like ore bodies occurring in the sandstones, which are known to yield over 1,000 tons of ore. The George and Ver claims, as well as the Lucky Mc and Vitro mines are structually all situated on the northwest flank of the Gas Hills or Dutton Basin anticline. The same ore horizon from which Vitro and Lucky Mc

are producing underlies the area of the George and Ver claims, at reasonable drilling depths. Because channel-type lithology is characteristic for the ore horizon, it is expected that ore bodies in related, or parallel, channels to those producing uranium ore on adjacent properties, will be discovered by the proposed drilling. Lucky Mc has been mining uranium ore for more than a year, approximately 300 yards from the east line of the Ver-1 and 2 claims, and they have reportedly blocked out ore up to the borders of these claims. Approximately one mile east from the center of the George and Ver claims, Vitro is mining and shipping uranium ore in quantities exceeding 3,000 tons per month.

The George and Ver claims are worthy of exploration because of their favorable geologic correlations, and their proximity in position to producing properties; because of the discovery of uranium mineralization in initial exploration; and because of the subsequent discovery of three radioactive ground anomalies on the claims, which have not been explored by drilling.

HISTORY OF URANIUM DISCOVERY AND DEVELOPMENT:

The first discovery of commercial uranium mineralization in the Wind River formation in the Gas Hills was made by Mr. Neil McNeice of Riverton on September 9, 1953, near the site of the present Lucky Mc mine. Subsequently, exploration drilling and development work has uncovered several ore bodies in a ten-mile radius of the original discovery. It is believed that Vitro was the first to uncover ore in the 'blue shale' of the Wind River formation in the Gas Hills. These uranium ore discoveries and indications of sizeable reserves were instrumental in the establishment of an A.E.C. ore buying station at Riverton on March 1, 1955. Major producers in Gas Hills area are: Lucky Mc, Vitro, Globe, Aljob and Savannah, with Vitro currently being the largest shipper. Positions of these workings are shown on the topographic and areal geologic map, Plate III. McAllister, Mountain Mesa and Upetco have also shipped. Hughes, Two States, Cheyenne, and others are presently opening up ore bodies, and several companies are expressing interest in building a mill

in the vicinity.

HISTORICAL GEOLOGY.

from J. D. Love, U.S.G.S. Circular 352, 1954.

" The Gas Hills are hogbacks of steeply dipping Mowry shale and of sandstone in the Cloverly formation of the north and west flanks of the Dutton Basin anticline. This anticline branches off the Granite Mountains to the south and plunges northwestward into the Wind River Basin. Folding occurred near the close of Paleocene time and erosion developed the present topography on the pre-Eocene rocks. The overlying Wind River formation and the succeeding younger Tertiary strata were then deposited until the structural basin between the Granite Mountains to the south and Owl Creek Mountains to the north was filled with nearly horizontal Eocene, Oligocene, Miocene, and possibly Pliocene rocks, at least to the level of the present crest of the Beaver Divide escarpment. Pliocene and Pleistocene uplift started the present erosion cycle, and as the face of the Beaver Divide escarpment moved southward, the Gas Hills and other areas of older resistant folded rocks along the south margin of the Wind River Basin were exhumed. Remnants of lower and middle Eocene rocks are present in steep pre-Eocene valleys between the hogbacks of Mesozoic rocks. These valleys extend generally south and probably continue for some distance beneath the Tertiary strata that form the Beaver Divide. This relationship may have a bearing on the orientation and distribution of uranium deposits. About 10 miles southeast of the Gas Hills, in the south of the Rattlesnake Hills is a volcanic field of middle and late Eocene age, the rocks of which were intruded through pre-Cambrian, Paleozoic, the Mesozoic rocks. These vents furnished much of the volcanic debris in the middle and upper Eocene rocks in the Gas Hills area."

"ORIGIN OF URANIUM IN THE GAS HILLS AREA".

from J. D. Love, U.S.G.S. Circular 352, 1954.

"Insufficient data are available on the occurrences of uranium minerals now known in the Gas Hills area to warrant a definite statement as to the origin of the deposits. It is apparent that these minerals were deposited in their present sites by water moving through the rocks and bringing uranium into an environment favorable for precipitation. The source of the uranium ions and the origin of the water that carried them can only be assumed at the present time.

"The uranium deposits may be the result of hydrothermal solutions coming from the volcanic rocks in and south of the Rattlesnake Hills. These volcanic rocks are dacites, andesites, and alkalic rocks." . . . "of middle and late Eocene age. There is no known evidence of hydrothermal activity in the Gas Hills area other than, possibly, the uranium deposits themselves. The writer prefers the theory that the uranium originally was a primary constituent in the ashes in the White River formation or younger Tertiary rocks in this area, that the uranium was leached out by ground water which transported it downward and laterally along sandstone aquifers in the middle Eocene sequence and the Wind River formation, and that the uranium concentrated wherever favorable host rocks were found." . . . . . "The Oligocene and younger rocks once extended over the Gas Hills area and across the Wind River Basin, for remnants are found in the mountains on both sides. In the Pumpkin Buttes area, the Wasatch formation, which is the same age as the Wind River formation and has much the same lithology,

contains uranium deposits and is overlain by the White River formation, which is uraniferous." . . . . . .

"In all of these areas, the possibility of hydrothermal activity that would form uranium deposits seems slight. The White River formation in the Gas Hills area is contributing above-normal amounts of Uranium to ground water today . . . . . and may have supplied the uranium now found in the underlying rocks. The uranium in the water in the Wind River formation may come either from the White River formation or from secondary uranium minerals previously deposited by ground water in the Wind River formation."

"GEOCHEMICAL CHARACTERISTICS OF URANIUM", Donald L. Everhart, AEC; excerpts from a paper presented before the A.I.M.M.E., February 16, 1954.

. . . . . "uranium is, generally speaking, a very soluble and ubiquitous element. It occurs in at least two valency states and for this reason is not easily tied down in natural solutions. As Gruner has pointed out, though, it is probable that uranium starts out in the hexavalent state in nearly all solutions ranging in pH from 1 to 5, the uranyl ion is most commonly in association with $SO_4^{=}$, as far as most natural acidic solutions are concerned. Furthermore this solubility is effective down to room temperatures. It is also a well established fact that several kinds of basic carbonate solutions, with a pH of 8.5 upward, hold uranium as 'complexed' ions, at temperatures mostly from about 150°c, upward. Thus only solutions that are nearly neutral, with pH from 5 to 8.5, generally, fail to hold uranium in solution."

. . . . . "Although uranium in general is a comparatively soluble element, there are a number of things that act as effective precipitants. One of the most spectacular of these is carbonaceous matter. This acts in at least two ways -- first, by creating reducing conditions, during decomposition, with the production of H_2S, and thereby radically changing the pH, and secondly, by its powerful ability to adsorb uranium from many kinds of solutions. High base-exchange clays also seem to have a high affinity for uranium. Another very obvious precipitating agent is any kind of carbonate in areas where the uraniferous solutions have a pH of five or less." ....."with uraniferous colloids invading any new environment that produces charges opposite to those on particles in the colloid, neutralization, destruction of the dispersive property of the colloid, and deposition ensue."

. . . . . "One more aspect of the geochemistry of uranium is pertinent to the problem of origin. Considering Mason's geochemical cycle, it is obvious from our classification of known uranium deposits that uranium shows up in virtually every part of the cycle. Presumably because of its high solubility over a wide range in pH, temperature, and pressure, it can survive many of the geologic processes. Likewise, because of the variety of precipitants of uranium, many geologic environments in the cycle are favorable for uranium precipitation and concentration."

STRATIGRAPHY

Because only the Wind River formation (Lower Eocene) is exposed on these claims, and the Upper Cretaceous Cody Shale is most probably the underlying strata, only these two formations will be discussed in some detail. Drilling depth to the Cody is probably more than two hundred feet at any place within the claims. (The Cody - Wind River contact on Plate III is not accurately drawn because it is taken from a small scale map.) The angular unconformable contact relationship can be seen in exposures one mile north of the George and Ver claims. This basal sequence consists of brightly variegated claystones, clayey sandstones, and a few lignite beds. The disconformable contact between upper and lower Wind River strata is over 100 feet below the ore horizon in which we are most interested. The ore is within a continuous sequence of blue, black, or blue-green sandstones, siltstones, claystones, clays, and conglomerates found above the basal beds. These are predominantly channel deposits, and similar deposits are found at higher horizons in the Wind River formation. However, the bulk of the materials making up the formation are found in lenticular beds of poorly to well sorted arkosic and quartz sandstones, conglomerates; which are interbedded with lesser amounts of siltstones, claystones, and occasionally lignites. These rocks are poorly-to well-cemented with calcium carbonate or iron oxide, and by less apparent amounts of silica. The formation ranges in thickness from a feather edge, to more than 300 feet, and may attain a possible thickness of 600 feet.

The marine Cody shale formation is gray to black and quite soft; it also contains gray, calcareous shales, and a few thin bentonite beds. There is one sandstone near the base of the formation; and several thin, fossiliferous, shaley, buff-colored sandstones and sandstone lenses near the top. An oil-test well ten miles to the northwest went through 5,000 feet of Cody. It is equivalent in age to the Niobrara and Steele shales of adjacent sedimentary basins.

Abundant marine fossils, such as baculites are found at some horizons. It is believed that much of the shale in the Wind River formation is reworked Cody material. The Cody underlies extensive areas of the Wind River formation north and west of the Gas Hills.

TWO TYPES OF ORE DEPOSITS

Uranium ore in the Wind River formation of the Gas Hills area has been found both in a zone of oxidation which extends from the surface to the water table, and in an unoxidized zone which is at and below the ground water table.

Many secondary uranium minerals are present in the zone of oxidation, most common among them are autunite ($CaO \cdot 2U_3O_8 \cdot P_2O_5 \cdot 8H_2O$) and meta-autunite ($Ca(UO_2)_2(PO_4)_2 \cdot 2\frac{1}{2} - 6\frac{1}{2}H_2O$). Incompletely oxidized lenses contain uraninite (UO_2) (UO_3), and pyrite (FeS_2). Very little vanadium (less than .05%) is combined. The importance of oxidized deposits is variable because much of this material is out of balance radiometrically (high Geiger count, but very low chemical assays), and much of the mining is limited to hand sorting methods. Large quantities of high grade material have been shipped from these 'oxidized pods', however.

Principal production in the Gas Hills is from the ore bodies of unoxidized material. Mineralization in these is essentially in the form of uranite, with some coffinite present. Vanadium content runs as low as 0.02% V_2O_5. Pyrite and carbon are usually intimately associated with the ore. The following discussion of the characteristics of such an ore deposit is drawn largely from observations made at Vitro's and Lucky Mc's open pits.

The ore horizon is frequently uniform in thickness and grade, following contacts between the lithologically contrasting beds of a channel deposit. Ore concentrations are controlled by both the stratigraphy and sedimentation within buried channels. A number of highly mineralized branching sedimentary

stringers are sometimes also associated with the main body. The more uniform zones appear to be in the better sorted, more horizontal siltstones and sandstones in the central portions of the channel troughs. The portion of the ore body associated with the stringers is in the poorly sorted sediments found on the sloping walls of the channels. An impermiable claystone bed at the base of the channel-type lithology acted as a barrier to downward migration of uranium bearing solutions. From four to six feet of this floor claystone material is frequently commercially mineralized.

4. (d) The property is reached by traveling 55 miles east from Riverton, by the 'Muskrat-Pipeline' graded dirt road. This road is maintained by Fremont County and is patrolled by graders except during the winter months. An alternate route may be taken from Riverton; 44 miles east to Moneta, via U. S. Route 20-26, thence south 33 miles on county-maintained dirt roads. The latter is the official trucking route this winter. Contracts have been let by the AEC for the construction of a surfaced road from Riverton to a point within nine miles of the property.

The American Smelting and Refining Company maintains an AEC buying station in Riverton. Ore is shipped by truck to the buying station, which is on a siding provided by the Chicago Northwestern Railroad. Casper is 80 miles east of Moneta, also on U.S. Route 20-26. The C.B. & Q. and Northwestern Railroads roughly parallel the Riverton-Casper highway. Riverton, with a population of 5,000, and twice-daily air connections with Denver, Salt Lake, and Billings, is an excellent point of supply. Vitro Minerals maintains a mining camp within two miles by road from the subject claims. This camp provides sleeping accomodations, lockers, showers, and dining facilities.

4. (e) Most necessary manpower, materials, supplies, and equipment are readily obtained in Riverton. Ample technical personnel can be drawn from the permanent employees of Vitro Minerals Corporation. Vitro maintains a 1,000

gallon water tank at its mining camp. Drinking water is trucked from Riverton, or drawn from a well at the Lucky Mc camp. Water for drilling can be obtained by hauling from reservoirs up to 20 miles away; but a need for drilling water is anticipated only for core-drilling. Enough power is generated at Vitro's mining camp to effect electric-welded repairs on equipment at the mine site. Fuel oil, diesel, and gasoline are stored in large supplies at the camp.

5. (b) The proposed exploration drilling program is divided into three successive phases. A decision to continue with the next succeeding phase would depend upon the agreed success of the preceding phase. Phase One, on 300 foot drilling location centers; Phase Two, on 150 foot centers; and Phase Three, on 50 foot centers, are illustrated on Plate VI. These holes, previously drilled on the property to a sufficient depth, make it possible to consider several small areas adequately explored at the time of writing. All previous holes are plotted on Plate IV. The cross-sections on Plate V show, in a general way, the types and thicknesses of the strata to be encountered. However, most of the previous holes were not drilled deep enough to encounter the horizons of the ores being developed in nearby operations. (see Appendix I). Because of the non-resistant erosional characteristics of the Wind River formation, contacts, or surface outcroppings of the ore horizon cannot be accurately plotted without the additional stratigraphic correlations to be acquired in the Phase One drilling. Most of the ground is at elevations above the ore horizon, as it is presently projected through the claims by means of the cross sections in Plate V.

Phase One, to be drilled on a completed 300 foot grid spacing, requires 150 holes. The average depth proposed for each hole is 120 feet. Each hole will be drilled so that the deepest known ore horizon will be penetrated by at least 20 feet.

It is proposed that one-fifth of the footage drilled in this phase should be cored. From the experience of Vitro's and Lucky Mc's drilling in the immediate vicinity, coring is impossible in the sands lying above the ore horizon, and time-consuming in the critical zones, which are only slightly better consolidated. Bids for coring are frequently made on an hourly basis, rather than attempting to estimate the cost per foot. For exploration purposes a greatly excessive cost per foot for coring is not considered justified, and it is anticipated that a decision as to where to draw the line will have to be agreed upon as the program gets underway. The cost per foot on coring is probably too low, but may be met as a proper technique is worked out. A presently practiced technique, whereby casing is driven to within five feet of the core being cut, is considered to be too costly for the proposed exploration. Three holes are exceptions to the grid spacing, and are centered on high radio-active ground anomalies. The chances for hitting a large ore body, with at least one hole in Phase One spacing are fairly good.

Phase Two, on intermediate, or 150 foot grid spacing, requires approximately 240 - 120 foot holes; that one fifth of the footage should be cored. Phase Two is designed to localize areas in which possible ore bodies may be contained. In general, only holes would be drilled which offset mineralized holes encountered in either Phase One or Two.

Phase Three, on 50 foot centers, with one-fourth of the footage cored, requires 150 holes, each 100 feet deep. Phase Three is for the purpose of determining whether or not a mineable ore body is present. Mineralized holes, discovered in any of the three drilling phases would be off-set by 50 feet for each new drilling location in Phase Three. The number of holes proposed is adequate for testing six or seven mineralized areas of good promise. Incidentally, 50 foot, or closer spacing, is required for recognizing oxidized, shallower, pod-like bodies.

Drilling equipment will be such that air, water, mud and coring equipment may be used interchangeably. It has been the experience of the applicant, as well as other exploration units in the area, that non-core drilling can be drilled exclusively with air as the circulating medium. In air-drilled holes, the cuttings will be collected at two-foot intervals with a cyclone collector. B-x cores (2-3/8 inch diameter) will be taken as coring is required. Microscopic examinations will be made whenever necessary, for correlations from one hole to another. Samples, showing radioactivity, will be assayed chemically by the fluorimetric method. All holes will be probed with Babbel counter-reels, and the readings and lithologic descriptions recorded on individual logs. Elevations will be run in for each drilling location, as the grids are laid out.

5. (d) The Vitro Minerals Corporation has conducted a number of exploratory drilling operations for uranium, both in Wyoming and on the Colorado Plateau. These operations are under the supervision of experienced geologists and engineers and careful and scientific attention is given to all stages of the work. In the Gas Hills, Vitro is currently engaged in strip-mining an ore body which was discovered by exploration drilling. The Vitro Minerals Corporation is jointly owned by the Vitro Corporation of America, and by the Rochester and Pittsburgh Coal Company of Indiana, Pennsylvania. The Vitro Uranium Company, operators of the Vitro mill in Salt Lake City, is a division of the Vitro Corporation of America. The Vitro Minerals Corporation has direct access to the mining 'know-how' of the Rochester and Pittsburgh Coal Company, as well as an ample supply of mining equipment and machinery. Vitro Minerals likewise benefits from the facilities offered by the Vitro Uranium Company in uranium extraction research and laboratory assay work. The proposed exploration drilling project will be under the office supervision of J. O. Horton, General Manager of Vitro Minerals, and under the direct field

management of D. L. Welsh, Division Geologist for Wyoming. Robert D. Adamson and James Churgin, Project Geologists at the Riverton office, have had experience in several exploration drilling programs in the Gas Hills.

6. Estimate of Costs

(a) Independent Contracts - for Drilling.

	No. Holes	Aver. Depth Per Hole	Footage	Cost/Foot	Total Cost
Phase One					
Drilling			14,400 ft.		$ 8,640.00
One-fifth footage cored			3,600 ft.		10,800.00
Sub total or average	150	120 ft.	18,000 ft.	Av. $1.08	$ 19,440.00
Phase Two					
Drilling			24,000 ft.	$0.60	$ 14,400.00
One-fifth footage cored			4,800 ft.	3.00	14,400.00
Sub total or average	240	120 ft.	28,000 ft.	$1.03	$ 28,800.00
Phase Three					
Drilling			12,000 ft.	$0.60	$ 7,200.00
One-fourth footage cored			3,000 ft.	3.00	9,000.00
Sub total or average	150	100 ft.	15,000 ft.	$1.08	$ 16,200.00
TOTAL 3 PHASES	540	114 ft.	61,800 ft.	$1.04	$ 64,040.00

6. (b) Labor, Supervision, no Consultants; estimated four months of drilling.

Two (2) Project Geologists	@ $450.00	$3,600.00
One (1) Project Supervisor	@ $650.00	$2,600.00
Two (2) Samplers	@ $350.00	$2,800.00
Total, averaging $0.145 per foot		$9,000.00

The Project Supervisor and Project Geologists will survey in and run elevations on all drill locations, supervise drilling, collect all samples, construct lithologic strip logs, probe all holes, and keep up field geologic interpretations on all data.

6. (c) Such items of operating materials and supplies that are not covered under independent contracts, such as core boxes and sample bags, drill log forms and surveyors stakes, will be purchased, as required, during the program.

Estimated total cost of such items - $600.00, or $0.0097/foot

6.(d) Operating Equipment - Fuel, oil, for two 4-wheel drive units to be furnished by Vitro Minerals. Two (2) units, four (4) months, @ $60.00 per month--$480.00, or $0.008/foot. No use allowance will be charged on these vehicles, or on surveying, drafting, scintillation, geiger counters, probes, reels, microscope equipment.

6. (g) Miscellaneous:

Maintenance on operating equipment	$ 400.00
Fluorimetric Assays - 2200 @ $1.25	2,750.00
Direct Accounting Costs @ $50.00/month	200.00
TOTAL (Aver. $0.054/foot)	$3,350.00

6. (h) Contingencies: Add 10% to all items above, for such contingencies as difficult drilling in certain areas, bad weather, mechanical break-downs. This 10% will also include Vitro costs for Workmens' Compensation, Employers' Liability Insurance and Payroll Taxes. . . . . $ 7,747.00

Estimated Total Cost of the Project - $85,217.00 or $ 1.38/foot.

(Three competitive bids for the contract drilling are submitted herewith)

7. (a) Vitro Minerals Corporation is prepared to furnish its share of the cost of the proposed project in accordance with the regulations on Government participation, (Sec. 7, DMEA No. 1).

(b) Vitro Minerals Corporation agrees to carry its full cost of the operation in the form of direct monetary contribution, on a monthly basis, and will submit monthly statements to the Defense Minerals Exploration Administration, for pro rata reimbursement.

Respectfully submitted,

VITRO MINERALS CORPORATION

BY: W. B. Hall

W. B. HALL
Vice President

APPENDIX I

Applying to Parts 4 (a), and 4 (c), DMEA Loan Application Form

RECEIVED FEB 17 1956

Resumé of Drilling on George and Ver Claims:

A total of 186 holes were drilled; 102 holes, total footage - 6,486 feet-on the Ver group; 84 holes, total footage-4,608 feet- on the George claims. These holes were drilled with air as the circulation medium; cuttings were placed in two-foot interval piles. These holes are listed according to the claim on which they were found:

Holes Drilled		
24	Ver - 1	116, 136, 137, 138, 139, 144-152, 156-159, 164, 165, 166, 171-173.
20	Ver - 2	117, 140-143, 153-155, 160-163, 167-170, 174-177.
2	Ver - 3	119, 219
2	Ver - 4	118, 178
1	Ver - 5	132
1	Ver - 6	135
1	Ver - 7	134
10	Ver - 8	133, 396-398, 402-407.
18	Ver - 9	131, 388-395, 399-401, 409-414.
19	Ver - 10	130, 226-229, 231, 232, 381-387, 408, 415-418.
4	Ver - 11	127, 234, 235, 379.
32	George-1	122, 124, 316-324, 329, 331, 333, 335, 339-342, 344, 346, 348, 419-428.
12	George-2	128, 325-327, 330, 332, 334, 336-338, 343.
1	George-3	125
8	George-4	121, 217, 220, 223-225, 230, 233.
2	George-5	120, 218.
1	George-6	129.
28	George-7	123, 126, 345, 347, 349, 351-369, 371, 373, 375, 377.

Summary of Drill Log Information

The remainder of this appendix summarizes information gathered from logs of holes drilled on the George and Ver claims during the period January 19, 1955 to July 5, 1955. Drilling was conducted under the supervision of Mr. David Williams, District Geologist, assisted by Mr. Galen Quigley, Project Geologist.

All holes were probed with a Universal Engineering "Babble" geiger counter, Model 600, with mounted reel and footage indicator.

Sample readings were taken either with a "Babble" geiger counter, Model 600 (short probe), or Detectron geiger counter, Model No. DG-2.

Hole No.	Claim	T.D.[1]	Elev.	Radiometrically High Probe	Radiometrically High Sample	Depth to Lower Twdr	Vitro Uranium Fluorimetric Assay
116	V-1	78'	--	none over .01	none over .02	n.r.[2]	---
117	V-2	60'	--	.04 (26'-28')	.03 (30'-32')	n.r.	.007(22'-24') .005(24'-26') .005(26'-28')
118	V-4	31'	--	.03 (16'-18')	none over .01	19?	---
119	V-3	30'	--	all .02	all .01	n.r.	---
120	G-5	30'	--	all .02	none over .02	n.r.	---
121	G-4	14'	--	all .01	all .01	n.r.	---
122	G-1	72'	6490	.10(43'-44') .18(44'-45') .12(45'-46') .10(46'-48') .08(48'-50') .12(50'-51') .17(51'-52') .11(52'-53') .10(53'-54') .11 (54'-55') .10 (55'-56')	.10(6'-8') .10(42'-44') .08(44'-46') .08(46'-48') .12(48'-50') .06 (50'-52') .12 (52'-54') .08 (54'-56') .08 (56'-58') .08 (58'-60') .08 (60'-62')	n.r.	.007 (6'-8') .08 (44'-46') .05 (48'-50') .044 (50'-52') .007 (52'-54') .033 (54'-56')
123	G-7	71'	6490	.06 (42'-46')	.08 (46'-48')	n.r.	---

[1] T.D = Total Depth

[2] n.r. = Lower Wind River formation not reached or not established as having been reached.

Hole No.	Claim	T.D.	Elev.	Radiometrically High Probe	Radiometrically High Sample	Depth to Lower Twdr	Assay
124	G-1	74'	6487	.03 (32'-34')	.07 (56'-60')	54'	
125	G-3	76'	6490	Caved at 14'	.04 (18'-20')	n.r.	.009 (18'-20')
126	G-7	60'	6517	.06 (38'-40')	none over .03	42'?	
127	V-11	106'	6525	none over .04	none over .04	n.r.	
128	G-2	62'	6500	none over .04	.04 (38'-40')	n.r.	.011 (50'-52')
129	G-6	90'	6500	none over .03	.04 (14'-16')	79'?	.003 (46'-48')
130	V-10	75'	6515	.03 (52'-54')	none over .04	66'	
131	V-9	75'	6532	none over .03	none over .02	n.r.	
132	V-5	75'	6535	.04 (42'-44')	none over .03	n.r.	
133	V-8	75'	6540	all .00	none over .03	60'?	
134	V-7	90'	6545	not probed	none over .03	70'	.005 (28'-30')
135	V-6	70'	6525	not probed	none over .03	n.r.	
136	V-1	78'	6500	.17 (35'-36') .06 (66'-68')	.12 (36'-38') .10 (72'-74')	n. r.	
137	V-1	82'	6494	.06 (36'-38') .06 (44'-46')	.06 (36'-38') .06 (38'-40')	n.r.	.026 (36'-38')
138	V-16	18'	6488	none over .01	none over .01	n.r.	
139	V-1	50'	6479	none over .02	none over.03	n.r.	
140	V-2	16'	6476	all .02	none over .01	n.r.	
141	V-2	45'	6473	.05 (24'-26')	.03 (30'-32')	30'?	
142	V-2	47'	6470	.04 (18'-20')	none over .03	32'?	
143	V-2	25'	6467	caved at surface	none over .01	n.r.	
144	V-1	84'	6497	.04 (28'-30')	.12 (30'-32') .08 (70'-72')	70'?	
145	V-1	90'	6497	none over .01	.08 (88'-80')	80'?	
146	V-1	80'	6485	caved at surface	.04 (72'-80')	64'?	
147	V-1	52'	6472	not probed	none over .03	n.r.	
148	V-1	50'		not probed	none over .03	n.r.	
149	V-1	90'	6497	.07 (36'-37') .10 (37'-38') .06 (86'-88')	.14 (38'-40') .08 (86'-88') .09 (88'-90')	76'?	.045 (38'-40') .026 (72'-74') .02 (74'-76') .026 (88'-90')

Hole No.	Claim	T.D.	Elev.	Radiometrically High Probe	Radiometrically High Sample	Depth to Lower Twdr	Assay
150	V-1	76'	6491	.02 (32'-34')	none over .01	n.r.	
151	V-1	70'	6485	none over .02	all .03	n.r.	
152	V-1	64'	6478	.03 (30'-32')	all. 03	n.r.	
153	V-2	50'	6475	.05 (38'-40')	.02 (30'-32')	30'	
154	V-2	24'	6472	none over .03	none over .03	n.r.	
155	V-2	16'	6469	all .02	none over .03	n.r.	
156	V-1	101'	6452	.05 (94'-98')	.06 (90'-92') .08 (94'-96') .06 (96'-98')	76'	
157	V-1	86'	6524	none over .04	.09 (82'-84')	52'	
158	V-1	72'	6519	none over .03	none over .03	n.r.	
159	V-1	68'	6514	none over .03	none over .03	n.r.	
160	V-2	60'	6510	none over .02	none over .03	44'?	
161	V-2	60'	6505	.04 (24'-26')	none over .03	44'	
162	V-2	38'	6500	.03 (26'-28')	none over .03	n.r.	
163	V-2	42'	6500	none over .02	none over .03	n.r.	
164	V-1	94'	6497	none over .03	.03 (62'-64')	n.r.	
165	V-1	36'	6495	none over .02	none over .03	n.r.	
166	V-1	64'	6488	none over .02	none over .03	n.r.	
167	V-2	36'	6485	none over .02	none over .03	n.r.	
168	V-2	61'		none over .02	none over .03	32'	
169	V-2	54'		none over .02	none over .03	36'	
170	V-2	36'	6468	none over .02	none over .03	n.r.	
171	V-1	32'		none over .03	none over .03	n.r.	
172	V-1	86'		.04 (36'-38')	.04 (38'-40')	74'?	
173	V-1	78'		none over .03	.05 (38'-40')	50'	
174	V-2	66'		none over .03	none over .03	50'?	
175	V-2	68'		none over .03	none over .03	45'	

Hole No.	Claim	T.D.	Elev.	Radiometrically High Probe	Radiometrically High Sample	Depth to Lower Twdr	Assay
176	V-2	56'		none over .04	none over .02	40'	
177	V-2	60'		.01 (12'-14')	none over .03	42'?	
178	- - - - - - - - - - - LOG IS LOST -						
217	G-4	50'		.09 (40'-42') .08 (42-43')	.10 (38'-40') .07 (40'-42') .06 (42'-44') .07 (44'-46')	40'	.011 (22'-24') .035 (40'-42') .029 (42'-44') .023 (44'-46') .014 (46'-48')
218	G-5	52'		no probe	.04 (32'-34')	34'?	
219	V-3	60'		no probe	.05 (28'-30') .04 (48'-50') .04 (56'-58')	32'	.02 (28'-30') .02 (48'-50') .02 (56'-58')
220	G-4	60'		.10 (48'-49') .10 (49'-50')	.07 (48'-50') .17 (50'-52')	46'?	.037 (46'-48') .014 (48'-50') .064 (50'-52') .036 (52'-54')
223	G-4	46'		.02 (30'-32')	.06 (40'-42')	n.r.	
224	G-4	50'		none over .02	none over .04	n.r.	
225	G-4	75'		.07 (58'-60')	.04 (62'-64')	46'	
226	V-10	60'		.05 (48'-50')	.08 (50'-52') .07 (54'-56')	n.r.	
227	V-10	60'		none over .01	none over .03	n.r.	
228	V-10	60'		.09 (42'-44')	.09 (46'-48')	42'	
229	V-10	45'		none over .02	.10 (38'-40')	n.r.	
230	G-4	45'		.05 (28'-30')	.07 (28'-30') .08 (30'-32')	32'?	
231	V-10	45'		.02 (40'-42')	none over .03	33'?	
232	V-10	45'		.02 (20'-22')	.03 (28'-30')	n.r.	
233	G-4	45'		none over .01	none over .03	n.r.	
234	V-11	68'		none over .01	.06 (4'-6')	n.r.	
235	V-11	50'					
316	G-1	48'		.03 (16'-18')	.07 (34'-36')	35'?	
317	G-1	40'		.04 (16'-20')	none over .06	27'?	

Hole No.	Claim	T.D.	Elev.	Radiometrically High Probe	Radiometrically High Sample	Depth to Lower Twdr	Assay
318	G-1	60'		.21 (31-32') .32 (32'-33') .19 (33'-34') .08 (34'-35')	.23 (30' - 32') .48 (32'-34') .44 (34'-36') .20 (36'-38') .10 (48'-50')	48'?	.01(30'-32') .015(32'-34') .016(34'-36') .015(36'-38')
319	G-1	50'		.09 (24'-26') .13 (26'-27') .17 (27'-38') .22 (28'-29') .23 (29'-30') .29 (30'-31') .22 (31'-32') .19 (32'-33') .17 (33'-34') .13 (34'-35') .11 (35'-36') .11 (36'-37') .10 (37'-38')	.22 (30'-32') .29 (32'-34') .22 (34'-36') .15 (36'-38') .40 (38'-40') .11 (40'-42')	40'?	.018 (28'-30') .029 (30'-32') .052 (32'-34') .092 (38'-40')
320	G-1	64'		.07 (42'-44')	none over .05	n.r.	
321	G-1	64'		.08 (38'-40')	.17 (62'-64')	n.r.	
322	G-1	66'		none over .04	.13 (58'-60') .29 (60'-62') .28 (62'-64') .17 (64'-66')	56'?	.14 (60'-62') .11 (62'-64')
323	G-1	50'		.07 (24'-25')	.06 (38'-44')	n.r.	
324	G-1	60'		none over .03	.06 (48'-50')	50'?	
325	G-2	20'		none over .00	none over .02	n.r.	
326	G-2	66'		.07 (48'-50')	.10 (52'-54')	n.r.	
327	G-1	60'		none over .04	.05 (46'-48')	47'?	
328	G-2	62'		.12 (42'-43') .32 (43'-44') .16 (44'-45')	.10 (42'-44') .50 (44'-46') .10 (46'-48') .13 (52'-54') .10 (54'-56')	50'?	.019 (44'-46')
329	G-1	56'		.10 (48'-49') .11 (49'-50')	.08 (50'-52')	n.r.	
330	G-2	68'		.06 (42'-44')	.06 (42'-44')	46'	

Hole No.	Claim	T.D.	Elev.	Radiometrically High Probe	Radiometrically High Sample	Depth to Lower Twdr	Assay
331	G-1	50'		.09 (20'-21')	.15 (22'-24')	n.r.	.009 (22'-24')
				.17 (21'-22')	.30 (24'-26')		.009 (24'-26')
				.31 (22'-23')	.20 (26'-28')		.042 (26'-28')
				.27 (23'-24')	.20 (28'-30')		.050 (28'-30')
				.42 (24'-25')	.20 (30'-32')		.023 (30'-32')
				.41 (25'-26')	.20 (32'-34')		.023 (32'-34')
				.26 (26'-27')	.10 (34'-36')		.039 (34'-36')
				.26 (27'-28')	.07 (36'-38')		.015 (36'-38')
				.40 (28'-29')	.08 (38'-40')		.018 (38'-40')
				.45 (29'-30')			.019 (40'-42')
				.23 (30'-31')			
				.14 (31'-32')			
				.13 (32'-33')			
				.12 (33'-34')			
				.12 (34'-35')			
				.12 (35'-36')			
				.10 (36'-37')			
				.11 (37'-38')			
				.11 (38'-39')			
332	G-2	50'		.04 (28'-30')	.06 (28'-30')	38'?	
333	G-1	50'		.24 (20'-22')	.07 (24'-28')	40'?	.014 (24'-26')
				.12 (22'-23')	.06 (28'-32')		.012 (28'-30')
				.13 (23'-24')			.031 (38'-40')
				.09 (24'-26'			
				.10 (26'-28')			
334	G-2	60'		.04 (28'-30')	none over .04	50'?	
335	G-1	50'		.05 (18'-20')	.07 (38'-40')	40'?	
				.05 (36'-38')	.06 (40'-42')		
336	G-2	68'		.12 (50'-51')	.11 (44'-46')	55'?	.012 (50'-52')
				.32 (51'-52')	.11 (46'-48')		.014 (52'-54')
				.10 (52'-53')	.15 (48'-50')		.077 (54'-56')
					.11 (50'-52')		
					.28 (52'-54')		
					.32 (54'-56')		
					.24 (56'-58')		.11 (56'-58')
					.20 (58'-60')		.066 (58'-60')
					.15 (60'-62')		.032 (60'-62')
337	G-2	60'		.17 (44'-45')	.13 (42'-44')	n.r.	
				.14 (45'-46')	.14 (50'-52')		
338	G-2	68'		none over .04	.09 (50'-52')	n.r.	
339	G-1	50'		.05 (22'-26')	.10 (24'-26')	n.r.	
					.09 (40'-42')		
					.10 (42'-44')	n.r.	

Hole No.	Claim	T.D.	Elev.	Radiometrically High Probe	Radiometrically High Sample	Depth to Lower Twdr	Assay
340	G-1	64'		.09 (38'-40') .10 (54'-55')	.08 (24'-26') .11 (26'-28') .08 (28'-30')	n.r.	
341	G-1	50'		.16 (24'-26') .10 (36'-38') .10 (38'-39') .08 (39'-40') .10 (40'-42')	.11 (26'-28') .11 (44'-46') .21 (46'-48')	n.r.	.019 (26'-28') .064 (46'-48')
342	G-1	54'		.07 (22'-24')	.06 (26'-28')	40'?	
343	G-2	54'		.10 (32'-34') .06 (34'-36') .13 (36'-37') .18 (37'-38') .16 (38'-39')	.14 (38'-40') .12 (40'-42') .20 (42'-44')	n.r.	.014 (38'-40') .025 (42'-44')
344	G-1	54'		.07 (16'-18')	.13 (52'-54')	33'	
345	G-7	40'		.10 (32'-36')	.12 (34'-36')	n.r.	.013 (34'-36') .022 (36'-38') .018 (38'-40')
346	G-1	74'		.08 (30'-32')	.08 (32'-34')	58'?	
347	G-7	42'		.03 (12'-14')	.06 (40'-42')	n.r.	
348	G-1	56'		none over .04	.10 (42'-44')	41'?	
349	G-7	60'		none over .03	.08 (26'-28')	44'?	
351	G-7	64'		.04 (36'-38')	.10 (36'-38') .08 (38'-40')	44'	
352	G-7	40'		none over .02	all .02	30'?	
353	G-7	30'		all .00	all .02	n.r.	
354	G-7	30'		none over .02	none over .03	n.r.	
355	G-7	62'		.04 (54'-56')	.06 (36'-38')	52'?	
356	G-7	45'		none over .03	none over .03	n.r.	
357	G-7	60'		none over .03	none over .03	44'?	
358	G-7	60'		.05 (32'-34')	.05 (34'-36')	44'	
359	G-7	40'		all .00	all .02	n.r.	
360	G-7	40'		none over .01	all .02	n.r.	
361	G-7	40'		all .00	all .02	n.r.	

Hole No.	Claim	T.D.	Elev.	Radiometrically High Probe	Radiometrically High Sample	Depth to Lower Twdr	Assay
362	G-7	40'		all .00	all .02	n.r.	
363	G-7	50'		.04 (48'-50')	none over .03	n.r.	
364	G-7	60'		none over .01	all .02	n.r.	
365	G-7	60'		none over .01	none over .03	n.r.	
366	G-7	64'		none over .02	none over .03	n.r.	
367	G-7	48'		all .00	none over .03	n.r.	
368	G-7	60'		none over .03	none over .03	n.r.	
369	G-7	40'		none over .01	all .02	n.r.	
371	G-7	42'		none over .02	all .02	n.r.	
373	G-7	66'		all .00	all.02	n.r.	
375	G-7	66'		all .00	all .02	n.r.	
377	G-7	100'		none over .01	none over .03	unk.	
379	G-7	75'		none over .02	none over .03	n.r.	
381	V-10	60'	6488	no probe-caved	.04 (50'-52')	n.r.	
382	V-10	60'	6485	all.00	none over .03	n.r.	
383	V-10	70'	6484	all .00	all .02	n.r.	
384	V-10	60'	6486	all .00	none over .03	n.r.	
385	V-10	60'	6492	none over .02	.04 (24'-26')	n.r.	
386	V-10	75'	6499	none over .02	none over .03	60'?	
387	V-10	70'	6503	all .00	all .02	n.r.	
388	V-9	76'	6508	none over .02	none over .03	n.r.	
389	V-9	75'	6509	all .00	all .02	n.r.	
390	V-9	80'	6508	all .00	none over .04	66' ?	
391	V-9	80'	6506	none over .02	none over .03	n.r.	
392	V-9	70'	6505	none over .01	.04 (32'-34')	n.r.	
393	V-9	70'	6502	.02 (32'-34')	none over .03	n.r.	
394	V-9	70'	6500	all .00	all .02	n.r.	

Hole No.	Claim	T.D.	Elev.	Radiometrically High Probe	Radiometrically High Sample	Depth to Lower Twdr	Assay
395	V-9	70'	6501	none over .01	none over .03	n.r.	
396	V-8	76'	6502	none over .01	all .02	n.r.	
397	V-8	75'	6509	none over .02	none over .03	n.r.	
398	V-8	70'	6512	none over .02	.05 (20'-22')	54'?	
399	V-9	90'		all .00	none over .03	71'	
400	V-9	80'		all .00	all .02	n.r.	
401	V-9	75'		all .00	none over .03	n.r.	
402	V-8	66'		all .00	none over .03	n.r.	
403	V-8	60'		none over .01	.04 (34'-36')	n.r.	
404	V-8	70'		all .00	none over .03	n.r.	
405	V-8	70'		all .00	all .02	n.r.	.032 (20'-21') .022 (22'-24') .015 (26'-28') .022 (28'-30')
406	V-8	60'		.03 (12'-14')	none over .03	n.r.	
407	V-8	70'		.11 (16'-18') .10 (18' - 19')	.16 (18'-20')	50'?	
408	V-10	84'		caved at 22'	none over .03	n.r.	
409	V-9	86'		all .00	all .02	n.r.	
410	V-9	80'		all .00	.03 (68'-70')	n.r.	
411	V-9	80'		all .00	all .02	n.r.	
412	V-9	70'		all .00	none over .03	n.r.	
413	V-9	70'		none over .02	.04 (30'-32')	n.r.	
414	V-9	70'		none over .01	none over .03	n.r.	
415	V-10	66'		all .00	none over .03	n.r.	
416	V-10	60'		all .00	none over .03	n.r.	
417	V-10	62'		all .00	all .02	n.r.	
418	V-10	62'		all .00	all .02	n.r.	
419	G-1	56'		none over .04	none over .04	37'?	

Hole No.	Claim	T.D.	Elev.	Radiometrically High Probe	Radiometrically High Sample	Depth to Lower Twdr	Assay
420	G-1	56'		none over .05	none over .04	41'?	
421	G-1	56'		.05 (26'-28')	none over .03	n.r.	
422	G-1	60'		.05 (24'-26')	.15 (40'-42') .15 (42'-44')	n.r.	
423	G-1	60'		.11 (34'-36') .31 (36'-37') .09 (37'-38')	.11 (36'-38') .30 (38'-40') .10 (40'-42') .09 (42'-44') .09 (44'-46') .08 (48'-50') .09 (50'-52')	49'?	
424	G-1	?	- - - -	Log is Lost -			
425	G-1	60'		none over .04	.07 (42'-44')	36'	
426	G-1	60'		.12 (20'-22') .21 (22'-23') .12 (23'-24') .13 (24- 25') .13 (25'-26')	.11 (22'-24') .26 (24'-26') .23 (26'-28') .09 (28'-30') .09 (30'-32') .10 (34'-36') .11 (36'-38') .12 (46'-48')	43'?	.029 (24'-26')
427	G-1	60'		.10 (20'-21') .30 (21'-22') .17 (22'-23') .10 (23'-24')	.19 (22'-24') .24 (24'-26') .12 (26'-28') .11 (38'-40')	38'	.057 (24'-26')
428	G-1	56'	6475	.14 (32'-34') .10 (34' - 36') .20 (36'-37') .22 (37'-38') .17 (38'-39') .12 (39'-40')	.10 (32'-34') .12 (34'-36') .20 (36'-38') .23 (38'-40') .23 (40'-42') .50 (44'-46') .22 (46'-48')	43'?	.12(44'-46') .072 (46'-48')

AGENT

January 13, 1956

RECEIVED
FEB 17 1956

Vitro Minerals Corp.
Box 67
South Salt Lake City, Utah

Attn: Mr. Jack O. Horton

Gentlemen:

In accordance with our conversations we herewith submit our proposal for drilling on your property in Fremont County, Wyoming.

As we have discussed with you, there are unusual conditions pertaining to the geological formations to be drilled which make it difficult to submit a contract proposal covering this work. Therefore, we would advise that this proposal is submitted with the understanding that should conditions encountered after drilling commences be such that a new agreement is desired, then a new agreement may be negotiated.

PROPOSAL:

Item 1. For non-core dry drilling in which dust samples are taken at intervals specified by Owner or for non-core wet drilling and in which said drilling is done in open holes without casing.....$1.00 per ft.

Item 2. For reaming and placing and removing casing as required for the purpose of obtaining samples..$1.00 per lin. foot.

Item 3. For core drilling or for non-core dry drilling in which the non-core dry drilling is done through casing after casing is placed in hole.....$5.00 per ft.

It is understood that non-core dry drilling covered by this item is for obtaining careful samples in which the object is to obtain as accurate a sample as conditions will permit.

Item 4. Transportation charge of $500.00 per rig which is NOT applicable if footage drilled per rig exceeds 5,000 feet.

Grand Junction, Colorado
January 13, 1956

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(Cont. Page -2-)

ALTERNATE PROPOSAL:

Item 1. An hourly rate of $20.00 per hour, per drill assembly, said drill assembly to consist of a truck mounted drill rig, air compressor, all accessory equipment, a water truck where necessary, and a two man crew for operation of the drill rig. For this rate Sprague & Henwood, Inc. will supply all equipment and supplies including all bits, diamond or others. All equipment supplied shall remain the property of Sprague & Henwood, Inc. excepting casing lost in holes which will be charged to Owner at list price. Such rate of twenty dollars ($20.00) per hour shall apply through forty-eight hours (48) working hours during each calendar week. For those hours over 48 working hours per calendar week which the equipment and crews work, the rate will be twenty-five($25.00) per drill assembly, provided however, that such overtime shall apply only if Owner requests that the drill work such time over forty-eight (48) working hours per calendar week. In the case of mechanical breakdown of drilling equipment, the rate for drill assembly shall be fifteen dollars ($15.00) per regular working hour up to eight (8) hours for such breakdown, provided that no overtime rate shall be charged to Owner during such breakdown and that mechanical breakdown in excess of eight (8) hours shall not be charged. The charge of twenty dollars ($20.00) per hour shall begin when equipment and crew are at job location.

Item 2. Five hundred dollars ($500.00) moving in-and-out expense per drill assembly consisting of equipment described in Item 1. The moving in-and-out charge will be eliminated if amount of invoice for work performed exceeds ten thousand dollars ($10,000.00) per drill assembly.

The above proposals are subject to the following conditions:

1. It is undertood that all drilling performed is for the purpose of obtaining information for the Owner and that Sprague & Henwood, Inc. willmake every effort to obtain the information as desired by Owner. Sprague & Henwood, Inc. shall furnish such equipment as is normally required to obtain the desired information, said equipment to include duclone sampling equipment 4 inch I.D. flush coupled casing, NX casing, "Large Series" 2 3/4x3 7/8 coring bits and NXM Diamond coring bits and core barrels to use with above described diamond bits.

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

Grand Junction, Colorado
January 13, 1956

(Cont. Page -3-)

3. Cores and samples are to be delivered at hole locations and storage and preservation of cores and sample is to be the responsibility of the Owner. Any containers required for storage and preservation of cores and samples will be supplied by Owner.

We thank you for the opportunity of submitting this proposal. We do hope to be favored with your order for this work. If there are any questions or clarifications of this proposal which you may require, please call on us at any time.

Very truly yours,

SPRAGUE & HENWOOD, INC.

R. R. Carver
Western Manager

RRC:bc

CC: Scranton
File

RAY DRILLING COMPANY, INC.
[illegible]
SALT LAKE CITY 11, UTAH

Vitro Uranium Company
☐ Note & Ret. ☐ Handle
JAN 19 1956
RCC..... JCM..... NGM.....
NTE..... JDM..... RNM.....
CAT..... EBR..... RBC.....

January 16, 1956

Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

Re: Drilling Proposal, Gas Hills

Gentlemen:

Our Riverton, Wyoming office has submitted your proposed drilling program and asked that we submit prices covering the drilling and/or coring of such a program. The program submitted is as follows:

Phase	No. Holes	Each Hole Depth/Hole	Each Hole Drill-Feet	Each Hole Core-Feet	Total Feet
First	150	120'	60'	60'	18,000
Second	250	120'	90'	30'	30,000
Third	150	100'	80'	20'	15,000

We are pleased to quote the following footage prices covering a minimum of 30,000 feet and limiting the coring to not more than 45% of the total footage:

Depth Range	Drill/Foot	Core/Foot	Idle Time Standby/Hour
0 to 50'	$0.525	$1.975	$8.625
50 to 100'	$0.60	$2.35	$8.625
100 to 150'	$0.675	$2.625	$8.625

Hourly rate: $17.50/Hour plus bits and coreheads and travel time.

We anticipate the use of two or four drills depending on the magnitude of the program. One drill will plug and will be folowed by a core drill. We reserve the right to operate each drill 24 hours daily and will charge standby time after three hours of delay. There will be a two man crew on each drill and all of the sample catching and core marking will be for your account. A smaller program than the minimum of 30,000 feet will be subject to increased rates.

Very truly yours,

RAY DRILLING COMPANY, INC.

A. C. Wiegand

Andrew Wiegand

cc: Riverton
Quadruplicate

CONTRACT

To: Vitro Uranium Company
600 Judge Bldg. So. St.,
Salt Lake City 15, Utah

Drilling of 550 holes to the average depth of 115 feet to equal about 63,000 feet on the George and Ver claims in Fremont County, Wyoming.

1. Drilling to be divided into three phases as follows:
   - 1st. phase 18,000 feet, average hole depth 120 ft, half of footage (9,000 ft) to be cored.
   - Second phase 30,000 ft., average hole depth 140 ft. One fourth of footage (7500) to be cored.
   - Third phase 15,000 ft., average hole depth of 100 ft.. One fifth of footage (3000 ft.) to be cored.

2. [illegible] to be completed in about four months.
3. Contractor to furnish drilling equipment, supplies, and labor for drilling holes with air (or with water if air proves inadequate).
4. Contractor agrees to drill at following set rates:

Plug bit drilling	0--100	60¢/foot
	100--200	70¢/ft.
	over 200	80¢/ft.

5. Any experimentation or deviation from normal operations such as drilling with a fluid other than air or water, or running casing in the hole will be handled in this manner.
   - a. Client to furnish fluid and casing.
   - b. Time required to run casing [illegible] for at the rate of $15.00 per hour.

6. Core Drilling:

0 --100	$1.75/foot
100 --200	2.00/ft.
over 200	2.25/foot.

7. Any experimentation or deviation from normal such as pulling core of less than 5 foot intervals, coring with diesel fuel, casing holes, or dry coring shall be handled in this manner:
   - a. Pulling core less than 5 ft.; trip [illegible] for at the rate of $15.00/ hr.
   - b. Diesel fuel supplied by client.
   - c. Casing supplied by client and set at rate of $15.00 / hr and pulled at rate of $15.00/hr.
   - d. Dry Core barrel furnished by client.

Sincerely,

J. W. Rupert Drilling Co.

RECEIVED
FEB 17 1956

A G R E E M E N T

THIS AGREEMENT made and entered into this 20th day of ~~September~~ October, 1955, by and between the JOHN GROUP and the GEORGE GROUP, a partnership, together with its partners, namely, John E. Bansept, J. F. Bansept, also known as Josephine F. Bansept, Robert Jerome Albert, John Bansept, Sr., George Snyder, also known as George J. Snyder, Emma Snyder, also known as Emma W. Snyder, and Clyde Decker, all hereinafter referred to as the First Party, and VITRO MINERALS CORPORATION, a corporation of Delaware, hereinafter referred to as Second Party,

WITNESSETH:

WHEREAS, the parties are the owners of a joint venture under a written agreement between First Party and Sateco Uranium Company, a limited partnership, dated May 3, 1954; and

WHEREAS, Second Party has succeeded to the interest of the said Sateco Uranium Company in the said joint venture; and

WHEREAS, First and Second Parties are equally entitled to ownership, under said joint venture agreement, to the following described unpatented lode mining claims, situated in Fremont County, State of Wyoming:

> The John Group of Mining Claims, numbered 1 through 7 inclusive, located in Sections 22 and 25, and Section 26, Township 33 North, Range 90 W.; and as amended;
>
> The George Group of Mining Claims, numbered 1 through 7 inclusive, located in Sections 22 and 27, Township 33 North, Range 90 West; and as amended;

Said claims hereinafter being called the property or properties; and

WHEREAS, First Party by its various members, located said claims and the above named members are the original owners; and

WHEREAS, the parties find the said joint venture agree-

ment ambiguous and mutually unsatisfactory, and do desire to hereby replace the same by this contract, but each party retaining its equal share in the title to the said claims; and

WHEREAS, Second Party has been in possession of the said claims under said joint venture agreement, and has thereon performed exploration, development and mining work; and

WHEREAS, it is the intent and desire of the parties to further explore, mine and develop the properties and to obtain therefrom successful commercial production of ores, and particularly uranium and uranium-vanadium bearing ores; and

WHEREAS, Second Party is able and willing to contribute its experience, efforts and certain capital to this enterprise;

NOW, THEREFORE, in consideration of the mutual promises and covenants herein contained, it is hereby agreed between the parties as follows:

1. The said joint venture is hereby dissolved and the said joint venture agreement is cancelled, and the parties do, and shall hereafter hold title to said mining claims as tenants in common, each holding an undivided one-half interest. A deed of even date to that effect has been executed by First Party and delivered to Second Party.

2. Second Party is hereby given the exclusive possession of all of the property from and after the date hereof, to continue its mineral exploration and development, and to carry on the mining, extraction and marketing of all uranium, vanadium, thorium and any other fissionable and non-fissionable materials, as well as other valuable minerals. Second Party shall conduct its operations in an efficient, miner-like fashion, with the object of obtaining maximum commercial ore production.

3. This agreement shall exist for a period of five years from the date hereof, with the right of renewal by Second Party for an additional five year period, upon giving First Party

written notice thereof at least more than ninety (90) days prior to the date of expiration.

4. Second Party, during the term hereof, shall have the exclusive control and supervision of all operations upon the property, including but not limited to exploratory and development work, ore extraction and marketing.

5. From the gross receipts obtained from ores shipped by Second Party from the property, either before or after the date hereof, Second Party shall first deduct and retain the sum of Five Thousand Dollars ($5,000.00) in full settlement of any and all sums due or to become due on account of Second Party's payment of costs incurred by Sateco Uranium Company, a limited partnership, upon the property, or related thereto in any way. In no event will a deduction on this account exceed 25% of gross receipts received by Second Party in any one month.

6. From said gross receipts, First Party shall be entitled to and shall be paid a royalty based upon percentage of gross receipts remaining after the deduction of said Sateco costs, as follows:

Percentage of U_3O_8	Royalty
Under .20	10%
.20 and up	12%

On all ore shipments for which Vitro has already received payment, royalty shall be paid within twenty (20) days from the date hereof. On all other shipments royalty shall be paid on or before the 15th day of the month following the month in which Vitro receives payment, unless the A.E.C., or its buying station, has made direct payment to First Party pursuant to written authorization from the First and Second Parties. Royalty payments shall be based upon the payments actually received by Second Party.

Gross receipts shall not include development allowance

or freight allowance paid for ores shipped by Second Party, but shall include all bonus and premium payments.

7. While this agreement is in force, Second Party agrees to perform all necessary annual labor upon the properties, and file the proofs thereof.

8. Second Party shall pay, as due, all mine, employee and property taxes, workmen's compensation costs, and all other charges, liens and liabilities connected in any manner with its operations hereunder, and will protect First Party and all said property from establishment of any such liability.

9. During proper hours and at all times during the continuance of this agreement, First Party and its representatives shall be authorized at their own risk to go through any workings on the property, and to examine, inspect and survey the same, and to examine and make extracts of all books and weight sheets which show in any way the ore output, and all logs and records of drilling, trenching, coring and other mining operations on the property. Second Party shall also make available to First Party any completed drilling reports on the property, and shall give to First Party, upon request, copies of any settlement sheets. The said records, information and reports shall be furnished within thirty (30) days after Second Party's receipt from First Party of specific written request. Upon termination of this agreement, Second Party shall fully disclose to First Party any ore bodies found upon the property.

10. Work and operations hereunder may be suspended because of acts of nature, strikes, fire, flood, storms, requirement or regulation of government, unavailability of ore markets, or any other cause without regard to the foregoing enumerations, beyond the control of Second Party, it being agreed, however, that upon the removal of the cause of suspension the work hereunder shall promptly be resumed.

11. Second Party at any time, upon sixty (60) days written notice to First Party shall have the right to cancel and terminate this agreement, provided, however, any such notice of cancellation shall not be made between the 1st day of May and the 30th day of June of any year covered by this agreement. First Party shall be entitled to royalties payable for any ores already shipped.

12. Upon termination of this agreement for any cause, Second Party shall have the right, for a period of sixty (60) days thereafter, to remove from the property its machinery, tools, equipment and other personal property, as well as all structures and buildings not permanently affixed to the land. It will repair any damage thereby caused.

13. Any notice to be given under this agreement shall be made in writing and as follows:

(a) First Party: ~~Mr. Arthur F. Colend~~ John E. Bancroft
~~Baldwin Building~~ Box 257
~~310 Main Street~~
Lander, Wyoming

(b) Second Party: 600 West 33rd South Street
Salt Lake City, Utah

Said notice shall be deemed given as of the date of mailing, postage prepaid. All payments made hereunder by Second Party shall be directed likewise.

14. If Second Party fails to carry on exploration, development or mining upon the property for any ninety (90) consecutive day period, or in lieu thereof to expend at least $1,000.00 upon the property in exploration, development or mining in any quarterly period in which said failure occurs, conditions set out in paragraph ten being excepted, then First Party shall have the right to enter into a lease or other working agreement of the property with a third party, and Second Party shall thereupon surrender possession and not interfere therewith. Second Party shall share equally in any proceeds coming to First Party under said lease or other agreement. A quarterly period here means January through March, April through June, July through September,

and October through December of each year.

15. Default on the part of either party in performing the provisions hereof shall not thereby render this agreement null and void, but in such case the other party may notify the defaulting party in writing of such breach and it shall have thirty (30) days thereafter in which to cure such default. In the event such default is not cured within said thirty (30) day period, the other party may terminate this agreement by serving upon the defaulting party a written notice of termination.

16. Nothing herein shall affect either party's title to the property as set forth in paragraph one above.

17. Both parties shall have the right to assign, transfer and sell their interest in this agreement and the said property, but neither party shall be required to recognize any assignment, transfer or change of interest, however accomplished or occurred, until fiftsen (15) days after being furnished with written notice thereof by registered United States mail.

18. This agreement shall be binding upon and inure to the benefit of the heirs, successors and assigns of the parties hereto.

JOHN GROUP and GEORGE GROUP

BY John E. Bansept

J. F. BANSEPT, also known as
JOSEPHINE F. BANSEPT

BY John E. Bansept
Her Agent

ROBERT JEROME ALBERT

BY John E. Bansept
His Agent

JOHN BANSEPT, SR.

BY John E. Bansept
His Agent

GEORGE SNYDER, also known as
GEORGE J. SNYDER

BY John E. Bansept
His Agent

ELLA SNYDER, also known as
ELLA D. SNYDER

BY John E. Bennett
Her Agent

OLVER PECKER

BY John E. Bennett
His Agent

John E. Bennett
JOHN E. BENNETT

First Party

VITRO MINERALS CORPORATION

BY W. B. Hall
Second Party

STATE OF UTAH)
: ss.
COUNTY OF SALT LAKE)

On the 30th day of September, 1955, personally appeared before me William B. Hall, who being by me duly sworn, did say that he is the Vice President of Vitro Minerals Corporation, and that said instrument was signed on behalf of said corporation by authority of a resolution of its Board of Directors, and said William B. Hall acknowledged to me that said corporation executed the same.

Ray L. Watson
NOTARY PUBLIC
Residing in Salt Lake City, Utah

My Commission Expires:
September 8 1959

RECEIVED
FEB 17 1956

AGREEMENT

THIS AGREEMENT made and entered into this 27 day of ~~September~~ October, 1955, by and between [illegible] MINING, INC., a Wyoming corporation, hereinafter referred to as the First Party, and VITRO [illegible] CORPORATION, a corporation of Delaware, hereinafter referred to as Second Party,

WITNESSETH:

WHEREAS, the parties are the owners of a joint venture under a written agreement between First Party and Cotoco Uranium Company, a limited partnership, dated May 3, 1954; and

WHEREAS, Second Party has succeeded to the interest of the said Cotoco Uranium Company in the said joint venture; and

WHEREAS, First and Second Parties are equally entitled to ownership, under said joint venture agreement, to the following described unpatented lode mining claims, situated in Fremont County, State of Wyoming:

> The Gunnel Group of Mining Claims, numbered 1 through 14 inclusive, located in Sections 24, 25 and 26, Township 33 North, Range 93 West; and as amended,
>
> The Vee Group of Mining Claims, numbered 1 through 11 inclusive, located in Sections 22, 26 and 27, Township 33 North, Range 93 West; and as amended, including Sec. 3 (a).

Said claims hereinafter being called the property or properties; and

WHEREAS, First Party located said claims and is the original owner; and

WHEREAS, the parties find the said joint venture agreement ambiguous and mutually unsatisfactory, and do desire to hereby replace the same by this contract, but each party retaining its equal share in the title to the said claims; and

WHEREAS, Second Party has been in possession of the said claims under said joint venture agreement, and has thereon performed exploration, development and mining work; and

WHEREAS, it is the intent and desire of the parties to further explore, mine and develop the properties and to obtain therefrom successful commercial production of ores, and particularly uranium and uranium-vanadium bearing ores; and

WHEREAS, Second Party is able and willing to contribute its experience, efforts and certain capital to this enterprise;

NOW, THEREFORE, in consideration of the mutual covenants and covenants herein contained, it is hereby agreed between the parties as follows:

1. The said joint venture is hereby dissolved and the said joint venture agreement is cancelled, and the parties do, and shall hereafter hold title to said mining claims as tenants in common, each holding an undivided one-half interest. A deed of even date to that effect has been executed by First Party and delivered to Second Party.

2. Second Party is hereby given the exclusive possession of all of the property from and after the date hereof, to continue its mineral exploration and development, and to carry on the mining, extraction and processing of all uranium, vanadium, thorium and any other fissionable and non-fissionable materials, as well as other valuable minerals. Second Party shall conduct its operations in an efficient, miner-like fashion, with the object of obtaining continuous commercial ore production.

3. This agreement shall exist for a period of five years from the date hereof, with the right of renewal by Second Party for an additional five year period, upon giving First Party written notice thereof at least more than ninety (90) days prior to the date of expiration.

4. Second Party, during the term hereof, shall have the exclusive control and supervision of all operations upon the property, including but not limited to exploratory and development work, ore extraction and marketing.

5. From the gross receipts obtained from ores shipped

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FEB 17 1956

by Second Party from the property, either before or after the date hereof, Second Party shall first deduct and retain the sum of Ten Thousand Seven Hundred Dollars ($10,700.00) in full settlement of any and all sums due or to become due on account of Second Party's payment of costs incurred by Sateco Uranium Company, a limited partnership, upon the property, or related thereto in any way. In no event will a deduction on this account exceed 23% of gross receipts received by Second Party in any one month.

5. From said gross receipts, First Party shall be entitled to and shall be paid a royalty based upon percentage of gross receipts remaining after the deduction of said Sateco costs, as follows:

Percentage of U3O8	Royalty
Under .20	10%
.20 and up	12%

On all ore shipments for which Vitro has already received payment, royalty shall be paid within twenty (20) days from the date hereof. On all other shipments royalty shall be paid on or before the 15th of the month following the month in which Vitro receives payment, unless the A.E.C., or its buying station, has made direct payment to First Party pursuant to written authorization from the First and Second Parties. Royalty payments shall be based upon the payments actually received by Second Party.

Gross receipts shall not include development allowance or freight allowance paid for ores shipped by Second Party, but shall include all bonus and premium payments.

7. While this agreement is in force, Second Party agrees to perform all necessary annual labor upon the properties, and file the proofs thereof.

8. Second Party shall pay, as due, all mine, employee and property taxes, workmen's compensation costs, and all other charges, liens and liabilities connected in any manner with the operations hereunder, and will protect First Party and all said

property from establishment of any such liability.

9. During proper hours and at all times during the continuance of this agreement, First Party and its representatives shall be authorized at their own risk to go through any workings on the property, and to examine, inspect and survey the same, and to examine and make extracts of all books and weight sheets which show in any way the ore output, and all logs and records of drilling, trenching, coring and other mining operations on the property. Second Party shall also make available to First Party any completed drilling reports on the property, and shall give to First Party, upon request, copies of any settlement sheets. The said records, information and reports shall be furnished within thirty (30) days after Second Party's receipt from First Party of specific written request. Upon termination of this agreement, Second Party shall fully disclose to First Party any ore bodies found upon the property.

10. Work and operations hereunder may be suspended because of acts of nature, strikes, fire, flood, storms, requirement or regulation of government, unavailability of ore markets, or any other cause without regard to the foregoing enumerations, beyond the control of Second Party, it being agreed, however, that upon the removal of the cause of suspension the work hereunder shall promptly be resumed.

11. Second Party at any time, upon sixty (60) days written notice to First Party shall have the right to cancel and terminate this agreement, provided, however, any such notice of cancellation shall not be made between the 1st day of May and the 30th day of June of any year covered by this agreement. First Party shall be entitled to royalties payable for any ores already shipped.

12. Upon termination of this agreement for any cause, Second Party shall have the right, for a period of sixty (60) days thereafter, to remove from the property its machinery, tools, equipment and other personal property, as well as all structures

and buildings not permanently affixed to the land. It will repair any damage thereby caused.

13. Any notice to be given under this agreement shall be made in writing and as follows:

(a) First Party: Mr. Arthur W. Oeland
Baldwin Building
310 Main Street
Lander, Wyoming

(b) Second Party: 600 West 33rd South Street
Salt Lake City, Utah

Said notice shall be deemed given as of the date of mailing, postage prepaid. All payments made hereunder by Second Party shall be directed likewise.

14. If Second Party fails to carry on exploration, development or mining upon the property for any ninety (90) consecutive day period, or in lieu thereof to expend at least $1,000.00 upon the property in exploration, development or mining in any quarterly period in which said failure occurs, conditions set out in paragraph ten being excepted, then First Party shall have the right to enter into a lease or other working agreement of the property with a third party, and Second Party shall thereupon surrender possession and not interfere therewith. Second Party shall share equally in any proceeds coming to First Party under said lease or other agreement. A quarterly period here means January through March, April through June, July through September, and October through December of each year.

15. Default on the part of either party in performing the provisions hereof shall not thereby render this agreement null and void, but in such case the other party may notify the defaulting party in writing of such breach and it shall have thirty (30) days thereafter in which to cure such default. In the event such default is not cured within said thirty (30) day period, the other party may terminate this agreement by serving upon the defaulting party a written notice of termination.

16. Nothing herein shall effect either party's title

to the property as set forth in paragraph one above.

17. Both parties shall have the right to assign, transfer and sell their interest in this agreement and the said property, but neither party shall be required to recognize any assignment, transfer or change of interest, however accomplished or occurred, until fifteen (15) days after being furnished with written notice thereof by registered United States mail.

18. This agreement shall be binding upon and inure to the benefit of the heirs, successors and assigns of the parties hereto.

FREMONT METAL & MINING, INC.

BY _____

First Party

VITRO MINERALS CORPORATION

BY _____

Second Party

STATE OF UTAH)
: ss.
COUNTY OF SALT LAKE)

On the 20 day of September, 1955, personally appeared before me William R. Hall, who being by me duly sworn, did say that he is the Vice President of Vitro Minerals Corporation, and that said instrument was signed on behalf of said corporation by authority of a resolution of its Board of Directors, and said William R. Hall acknowledged to me that said corporation executed the same.

_____
NOTARY PUBLIC
Residing in Salt Lake City, Utah

My Commission Expires:

_____

Recorded by Fremont Metal 2-11-95

OFFICIAL FILE COPY

Date	Surname	Code
7/27/70		120
		220

Mr. Eugene B. Hotchkiss
Executive Vice-President
Vitro Minerals Corporation
90 Park Avenue
New York, New York 10016

JUL 27 1970

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hotchkiss:

We are advised by the Atomic Energy Commission that the following liquidations of ore from the George claim, Fremont County, Wyoming, occurred during fiscal year 1970:

Month	Tons	Pounds U_3O_8
December 1969	1,949.91	2,807.27
January 1970	5,718.87	7,017.47
February 1970	5,458.58	6,688.57
Totals	13,127.36 tons	16,513.31 lbs.

On August 14, 1968, we wrote you regarding royalty on stockpiled material mined from the property under the subject contract. We stated then that we would await the results of future processing of the stockpiled material to determine whether or not additional royalty is due the Government under the exploration contract.

Please reconcile the production noted above with the stockpiled material discussed in our letter on the subject in August 1968. Any royalties due the Government should be paid promptly.

Sincerely yours,

Harold Kirkemo (gla)

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources
OME docket
OME Reading File
Mr. Kirkemo
130
OME Region III
HKirkemo/gla 7-27-70

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225

Office of Minerals Exploration
Building 53 Room 200

July 10, 1970

OFFICIAL COPY
O. M. E.
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JUL 13 1970
INITIALS CODE
gla 130
120
220

Memorandum

To: Chief, Office of Minerals Exploration

From: J. William Hasler

Subject: ~~OME~~ DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Enclosed are two copies of a letter dated July 2, 1970, from the Atomic Energy Commission, reporting shipments of uranium ore from the George Claim, Freomnt County, Wyoming during December 1969 and January and February, 1970.

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

Enclosures

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION OFFICE
GRAND JUNCTION, COLORADO 81501

July 2, 1970

OME Region III
RECEIVED
JUL 6 - 1970
Denver, Colorado

Mr. J. William Hasler
Field Officer, Region III
Office of Minerals Exploration
U. S. Geological Survey
Building 53 Room 200
Federal Center
Denver, Colorado 80225

Dear Mr. Hasler:

Our records indicate the following liquidations of ore from the George claim, Fremont County, Wyoming during fiscal year 1970:

December 1969	1949.91 Tons	2807.27 Pounds U_3O_8
January 1970	5718.87 "	7017.47 " "
February 1970	5458.58 "	6688.57 " "

Sincerely,

Don R. Hill, Director
Mining Division

MP:AWS

Office of Minerals Exploration
Building 53 Room 200

ORIGINAL COPY
O. M. E.
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JUL 2 1970
INITIATE CODE
gla 130
HK 120
R20
cy for 63 file

June 29, 1970

Mr. Don Hill
Mining Division
U. S. Atomic Energy Commission
Grand Junction, Colorado 81501

Subject: ~~OME~~ DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hill:

Will you please check, at your convenience, and determine if there has been any ore marketed from the subject property since June 1, 1969 and so inform us.

Sincerely yours,

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME (2)
OME-4182
OME chron
Mr. Hasler

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
6/26/70		120
		220

JUN 2 1970

AIRMAIL

Memorandum

To: Field Officer, Region III

From: Chief, Office of Minerals Exploration

Subject: OME-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

At your convenience, please check again with the Atomic Energy Commission to determine if there has been any ore marketed from the subject property since June 1, 1969.

Harold Kirkemo (glx)

Harold Kirkemo

cc: Director's Reading File
Mineral Resources
OME docket
OME Reading File
Mr. Kirkemo
130 (2)

GLAult/a 6-26-70

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225

Office of Minerals Exploration
Building 53 Room 200

June 23, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 25 1969

INITIALS	CODE
gla	130
HK	120
	120

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region III

Subject: OMEA
OME-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Transmitted herewith are two copies of a letter from Don R. Hill, Director, Atomic Energy Commission stating that according to their records, there has been no production from the George and Ver claims between December 1968 and June 1, 1969.

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION OFFICE
GRAND JUNCTION, COLORADO 81501

June 17, 1969

OME Region III
RECEIVED
JUN 19 1969
Denver, Colorado

Mr. J. William Hasler
Field Officer, Region III
Office of Minerals Exploration
Department of the Interior
Building 53, Room 200
Federal Center
Denver, Colorado 80225

Dear Mr. Hasler:

We have your letter of June 6, 1969 in which you inquire about production since December 1968 from the George and Ver claims in Fremont County, Wyoming.

According to our records, there has been no production from the George and Ver claims between December 1968 and June 1, 1969.

Sincerely,

Don R. Hill, Director
Mining Division

Office of Minerals Exploration
Building 53 Room 200

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 9 1969

INITIALS	CODE
gla	130
OHK	120
	220

June 6, 1969

Mr. Don Hill, Mining Division
U. S. Atomic Energy Commission
Grand Junction, Colorado 81501

Subject: OME-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hill:

Will you please check to determine if there has been any production from the property under the subject contract since December 1968.

Sincerely yours,

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME (2)
OME chron
Mr. Hasler
OME-4182

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/26/69		120
		220

JUN 3 1969

Memorandum

To: Field Officer, Region III

From: Chief, Office of Minerals Exploration

Subject: OME-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Please check again with the Atomic Energy Commission to determine if there has been any ore marketed from the subject property since December 1968.

Harold Kirkemo (gla)

Harold Kirkemo

cc: Director's Reading File
Economic Geology File
OME docket
OME Reading File
Mr. Kirkemo
130

GLAult/a 5-26-69

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225

Office of Minerals Exploration
Building 53 Room 200

January 29, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 31 1969

INITIALS	CODE
glr	130
	~~120~~
PL	~~110~~
HK	~~120~~ 220

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region III

Subject: OME-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Transmitted herewith are two copies of a letter from Don R. Hill, Director Mining Division, Atomic Energy Commission indicating that there has been no ore marketed from the subject property during the period July 1967 through December 1968.

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

Enclosures

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION OFFICE
GRAND JUNCTION, COLORADO 81501

JWH

January 20, 1969

OME Region III
RECEIVED
JAN 22 1969
Denver, Colorado

Mr. J. William Hasler
Field Officer, Region III
Office of Minerals Exploration
U. S. Geological Survey, Bldg. 53, Rm. 203
Federal Center, Denver, Colo. 80225

Re: ~~OME~~ DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hasler:

Ore receipts records received by this office indicate that there has been no ore marketed from the subject property during the period July 1967 through December 1968.

Sincerely,

Don R. Hill, Director
Mining Divison

FEDERAL-AMERICAN PARTNERS

Telephone 856-9192
520 EAST MAIN STREET POST OFFICE BOX 991
RIVERTON, WYOMING 82501

January 13, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 15 1969

INITIALS	CODE
	130
	110
	220

Mr. Frank E. Johnson
Chief, Office of
Minerals Exploration
U. S. Department of the Interior
Washington, D. C. 20242

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Johnson:

In answer to your letter of January 6, 1969, there has been no ore processed from the above named property since June 1968.

Very truly yours,

FEDERAL-AMERICAN PARTNERS

Thomas M. Hill
Project Manager

TMH/bh

Office of Minerals Exploration
Building 53 Room 200

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 15 1969

INITIALS	CODE
gla	120
DKJ	110
	220

January 10, 1969

Mr. Don Hill, Mining Division
U. S. Atomic Energy Commission
Grand Junction, Colorado 81501

Subject: ~~OME~~ DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hill:

Will you please check to determine if there has been any production from the property under the subject Contract since June 1967, and inform us.

Sincerely yours,

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME (2)
OME-4182 (Uranium)
OME chron
Mr. Hasler

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/6/69		110
		220

Memorandum

JAN 6 1969

To: Field Officer, Region III

From: Chief, Office of Minerals Exploration

Subject: ~~OME~~ DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Please check with the Atomic Energy Commission to determine if there has been any production from the property under the subject Contract since June 1967.

FRANK E. JOHNSON (gla)

Frank E. Johnson

cc: Director's Reading File
Economic Geology File
OME docket
OME Reading File
130 (2)

FEJohnson/gla 1-6-69

MME Form 7
(2/63)

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Date	Surname	Code
1/6/69		110
		220

JAN 6 1969

Mr. Thomas M. Hill
Project Manager
Federal-Radorock-Gas Hills Partners
Post Office Box 991
Riverton, Wyoming 82501

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hill:

Please advise if any ore produced from the property under the subject contract has been processed in your plant since June 1968 and, if so, please furnish copies of appropriate settlement statements.

Sincerely yours,

FRANK E. JOHNSON (gla)
Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Economic Geology File
OME docket
OME Reading File
OME Region III
130

FEJohnson/gla 1-6-69

MME Form 7
(2/63)

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Date	Surname	Code
8/7	Johnson	110
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	App'd. Sec. Off.	110
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AUG 14 1968

Mr. Eugene B. Hotchkiss
Executive Vice-President
Vitro Minerals Corporation
90 Park Avenue
New York, New York 10016

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hotchkiss:

Reference is made to our letter of October 12, 1967, to you, and your reply of October 17, 1967, concerning royalty on stockpiled material mined from the property under the subject contract.

We have had considerable correspondence with the field regarding differences in stockpile estimates mentioned in our letter to you, and a representative of the Government has made a field trip to the property to inspect the stockpiles. We have been unable, however, to resolve the differences in the estimates by these means. As Federal-Radorock-Gas Hills Partners contemplate processing the stockpiles during the next two years, it appears that stockpile values may be determined by such processing. Under the circumstances, we will await the results of future processing of the stockpiled material to determine whether or not additional royalty is due the Government under the exploration contract.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's reading file
Economic Geology file
OME file
OME reading file
OME Region III
130

FEJohnson/bih 8/7/68

MME Form 7
(2/63)

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Date	Surname	Code
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Memorandum

To: Files

From: Chief, OME

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

After completion of the subject project, the Operator performed additional work on the property. It reported no production except stockpiled material estimated as follows:

Ore - 2,965 ST - assumed to assay 0.18% U_3O_8 or better.
Protore - 20,595 ST - assumed average grade 0.10% U_3O_8 or less.

The stockpiles were sold to Federal-Radorock-Gas Hills Partners by Vitro under an agreement dated May 17, 1963, covering the sale of the property. Reports state that no material has been mined from the property since that date. The buyer subsequently, weighed, assayed, and milled a total of 11,018.89 ST of stockpile material, averaging 0.153% U_3O_8. Vitro paid royalty to the Government on this production.

The buyer reported the following estimates for stockpiles as of April 30, 1966:

George	Short Tons	Grade
Ore	498	0.168
Protore	17,000	0.065

The period for repayment of the Government's contribution to exploration costs expired June 14, 1967. On July 25, 1967, the Operator was requested to pay royalty to the Government on the estimated value of the remaining stockpiled material as reported by the buyer, in accordance with the terms of the exploration contract. The Operator paid royalty on the material termed ore but not on the protore. The protore is difficult to process because of impurities and its treatment is unprofitable because of its low grade. By milling a little at a time with higher grade material it may be possible to recover some of the uranium content of the protore at a profit.

A check with the Atomic Energy Commission confirmed the grade and tonnage processed on which royalty has been paid. However, AEC reported estimates of stockpiles on the property as of March 31, 1967, as follows:

George Pitt	Short Tons	Grade
G-4 - Ore	4,626	0.266
G-1 - Protore	5,340	0.054
G-6 "	2,587	0.099
G-9 "	2,505	0.072
G-B "	2,419	0.050
G-A "	16,976	0.050

An exchange of correspondence with AEC and Federal-Radorock-Gas Hills Partners has failed to reconcile differences in the estimates for remaining stockpiled material, much of which is too low grade to be of commercial value. A field check of the stockpile was made by one of our geologists. He was unable to confirm tonnages and grades reported by AEC.

As Federal-Radorock-Gas Hills Partners contemplate processing the stockpiles during the next two years, the value possibly may be determined by this means. In view of the situation, it is recommended that payment of any additional royalty due the Government be based on the results of future processing the material. A check on the material processed should be made with the buyer at the end of the year and also with the AEC.

Frank E. Johnson

Frank E. Johnson

cc: Director's reading file
Economic Geology file
OME file
OME reading file
130

FEJohnson/bih 8/7/68

FEDERAL-RADOROCK-GAS HILLS PARTNERS

Telephone 856-9192

520 EAST MAIN STREET POST OFFICE BOX 991

RIVERTON, WYOMING 82501

July 22, 1968

Mr. Frank E. Johnson
Chief, Office of
Mineral Exploration
U. S. Department of the Interior
Geological Survey
Washington, D. C. 20242

SUBJECT: DMEA-4182 (Uranium
Vitro Minerals Corp.
George & Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Johnson:

In reply to your inquiry of July 18, 1968 relative to the above subject. No ore from the subject property has been processed in our mill since June 1965.

Very truly yours,

FEDERAL-RADOROCK-GAS HILLS PARTNERS

Thomas M. Hill

Thomas M. Hill
Project Manager

TMH/bh

Copy to Region III 7/25/68

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
7/18		110
		220

JUL 18 1968

Federal-Radorock-Gas Hills Partners
P. O. Box 991
Riverton, Wyoming 82501

Re: EMKA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Gentlemen:

Please advise if any ore produced from the property under the subject contract has been processed in your plant since June 1965, and furnish copies of appropriate settlement statements.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's reading file
Division file
Economic Geology file
OME file
OME reading file
Reg. III
FEJohnson/bih 7/18/68

FEDERAL-RADOROCK-GAS HILLS PARTNERS
Telephone 856-9192
520 EAST MAIN STREET POST OFFICE BOX 9
RIVERTON, WYOMING 82501

July 1, 1968

OME Region III
RECEIVED
JUL 3 - 1968
Denver, Colorado

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Mr. Jacques F. Robertson, Geologist
Office of Minerals Exploration
U. S. Department of the Interior
Federal Center Building 53 Room 203
Denver, Colorado 80225

SUBJ: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm E-963

Dear Mr. Robertson:

We were happy to attempt to give you a thorough field trip with the opportunity to evaluate for your office, stockpiles from the George claims. Mr. Routon informs me you and he were unable to locate a G-4 stockpile.

We have no other choice but to quote stockpile tons and grade of record as we have done. There is no justification for me to confirm stockpile figures quoted by a mysterious third party as you have requested.

When the stockpile estimates you are making are completed, I will appreciate a copy.

Very truly yours,

FEDERAL-RADOROCK-GAS HILLS PARTNERS

Thomas M. Hill

Thomas M. Hill
Project Manager

TMH/bh

Office of Minerals Exploration
Building 53 Room 203

OFFICIAL COPY
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JUL 1 1968
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June 25, 1968

Mr. Thomas M. Hill
Federal-Radorock Gas Hills Partners
P. O. Box 991
Riverton, Wyoming 82501

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idn E-963

Dear Mr. Hill:

During my visit to your property on June 4, Mr. Don Reuton gave me the company estimates of grade and quantity of stockpiled uranium ore and protore from the George Claims. At the time, however, no survey had yet been made by the company of the G-4 stockpile, although Don indicated that the company expected to survey it shortly. Would you please furnish me with your estimates of this stockpile, or confirm the amount and grade quoted to you in the OME letter of February 8, 1968.

Sincerely yours,

Jacques F. Robertson, Geologist
Office of Minerals Exploration

cc: Chief, OME
DMEA-4182
OME chron
Mr. Hasler
Mr. Robertson

rm 7

OFFICIAL FILE COPY

Date	Surname	Code
6/20/68		110
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JUN 20 1968

Memorandum

To: Field Officer, Region III

From: Chief, Office of Minerals Exploration

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Reference is made to Mr. Jacques F. Robertson's memorandum of June 11, 1968, reporting on stockpiles at the property under the subject contract.

The main discrepancy in the various stockpile estimates appears to involve the G-4 ore stockpile of 4,626 tons reported by AEC. In the estimate of the Federal Resources Corporation of May 31, 1966, a stockpile of only 498 tons of ore was reported. In the list of stockpile estimates on page 2 of Mr. Robertson's memorandum he indicates that Federal Radorock agrees with the AEC estimate for the G-4 ore stockpile, and that Vitro evidently did not include the G-4 ore stockpile in its estimates. It appears, therefore, that the G-4 ore stockpile was overlooked or underestimated in the report of May 31, 1966, made by Federal Resources. If this is the case, we will look to Vitro for additional royalty due the Government.

May we have your comments on the G-4 ore stockpile and your confirmation of its estimated tonnage and grade.

Also, please furnish a concurring memorandum on the Report of Royalty Review issued in April 1968, as requested in our memorandum of May 13, 1968.

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's Reading File
Economic Geology File
OME docket
OME Reading File
130 (2)

FEJohnson/gla 6-20-68

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225

Office of Minerals Exploration
Building 53 Room 203

June 11, 1968

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 14 1968

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Memorandum

To: Chief, Office of Minerals Exploration

From: Jacques F. Robertson

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm E-963

A field trip was made to the subject property on June 4, 1968 to inspect the stockpiles of uranium ore and protore from the George claims, as per your instructions of May 13. This was preceded by consultation with Mr. Don R. Hill, Director, and Mr. Stanley Mayer of the Mining Division of the AEC in Grand Junction.

The present owners of the property, Federal-Radorock-Gas Hills Partners, acquired the stockpiles mined from the George pit, along with the George claims, from Vitro Minerals Corporation in May, 1963 but have not mined from the George or Ver claims since that time to this date. No detailed inventory of the remaining George stockpiles had been made by the present owners until recently; the company only had Vitro's list of stockpiled material to go by, as noted in their letter of May 23. The company has recently sampled and resurveyed the stockpiles, and their figures were available to me on my visit. Below are listed the AEC, Vitro Corp., and Federal-Radorock stockpile figures for comparison purposes:

STOCKPILE	AEC			VITRO MINERALS CORP.		FEDERAL RADOROCK	
	Tonnage	Grade	U_3O_8 (lbs.)	Tonnage	Grade	Tonnage	Grade
G-4 ore	4,626	0.266	24,610	2,965	0.16	4,126 Not available, but agree with AEC figure.	0.266
G-95 ore				90	0.200	60	0.300
G-1 protore	5,340	0.054	5,767	4,758		4,578	0.045
G-6 protore	2,587	0.099	5,122	2,920		2,587	0.064
G-9 protore	2,505	0.072	3,607	2,260		2,260	0.048
G-B	2,419	0.050	2,419			2,419	0.109
G-A (G-5)	16,976	0.050	16,976	4,154		4,200	0.067
Protore total	29,827			14,092		~~16,224~~ 16,044	

There is a fair comparison in tonnages between the AEC figures and the sets of company figures, except for the G-A (G-5) tonnages that show a large discrepancy. I surveyed the stockpile purported by the company to be G-A (G-5), and obtained a figure of 4,148 tons, which agrees very closely with the figures recorded by the 2 companies. The engineers and Mr. Thomas Hill of the Federal Radorock-Gas Hills Partners were apparently unaware of any other stockpile having a large tonnage, such as the 16,976 tons recorded by the AEC.

On June 6 after my return to Denver, I called Mr. Don Hill, AEC, Grand Junction, Colorado, and told him of the discrepancy and asked him to review the AEC tonnage figure on the G-A (G-5) stockpile. Their preliminary review seemed to substantiate the original AEC survey, but Mr. Hill asked the Casper, Wyoming AEC office to make a field check, which they did on the same day, June 6.

The AEC field office in Casper reports that they cannot account for the disposition of the larger stockpile (G-A (G-5) that was measured as of March 31, 1967. Their field man measured the stockpile presently designated G-A (G-5) by the company and closely verified the company's figure of 4,200 tons, as I did, but it was impossible to tell what had happened to the original stockpile if it did contain as much as 16,976 tons. The AEC office in Grand Junction is of the opinion that they have no alternative but to accept the company's tonnage figure as it now stands.

Several possibilities for the discrepancy occur to me: 1) It is conceivable that AEC measured some stockpile designated G-A at some earlier time, and this has become confused with the stockpile designated G-5 by the company. The company informed me that G-A was the AEC designation for their G-5 stockpile. 2) Perhaps a large part (three-fourths) of the stockpile in question had been processed (inadvertently or not) in the past year and what is now there, is the remainder. It might be difficult to prove such a possibility; AEC might be able to determine the amount of processed material from the company's detailed monthly report to them. 3) It may be just coincidence that total protore reported by the company is 16,224 tons and the AEC figure for the G-A (G-5) stockpile is 16,976 tons. Because the figures are reasonably close, however, it may be that an AEC engineer applied a total protore tonnage figure in error to the one stockpile, although this seems a rather remote chance. It is an interesting exercise to replace the AEC figure of nearly 17,000 tons for the G-A (G-5) stockpile with the 4,154 tons reported by the Vitro Corporation. The total tonnage for protore then becomes 17,005 tons which is the total amount reported by Vitro Minerals Corporation as of April 30, 1966.

You might note the small stockpile of ore, G-95, estimated by Federal Radorock as containing 60 tons of 0.3% U_3O_8 (90 tons of 0.2% ore estimated by Vitro Corp.), that was overlooked by the AEC. In addition, the stockpile G-B might now qualify as ore with 0.109% U_3O_8.

The company sampled the stockpiles quite thoroughly by drilling and gamma-ray logging and made some wet chemical analyses by which to check and calibrate the radiometric results. Their calculated grades are below those of the AEC for the protore stockpiles G-1, G-6, and G-9. I obtained the impression that the company diluted the grade, representing it as shown in the table above by taking the results from the limited probe length, which did not penetrate entirely through the stockpiles, and weighting the values over the full thickness of the stockpile (assuming that the part not penetrated by the probe is waste). This places a more conservative grade on the value of the stockpiled material than I think it actually has.

In essence, it would seem that we are obliged to accept the Federal Radorock-Gas Hills Partner's figures for stockpile tonnages, inasmuch as the AEC cannot account for the discrepancy of the 16,976 tons. As far as can be determined, no previous inspection has ever been undertaken by OME or DMEA to outline or verify the amount of material mined from the George and Ver claims. It is clear that royalties to the government for the full value of the stockpiles would be returned only when the material is processed, which the company contemplates within the next 2 years. The present estimated value of the stockpiles determined by the company seems somewhat conservative as a basis for making final settlement of royalty owed to the government.

Jacques F. Robertson

Jacques F. Robertson, Geologist
Office of Minerals Exploration

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225

Office of Minerals Exploration
Building 53 Room 203

May 31, 1968

OFFICIAL COPY
O. M. E.
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JUN 3 1968
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Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region III

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm E-963

Transmitted herewith are two copies of a reply to our letter of May 16, 1968 on the above-stated subject.

J. William Hasler
mc

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

J

FEDERAL-RADOROCK-GAS HILLS PARTNERS

Telephone 856-9192
520 EAST MAIN STREET POST OFFICE BOX 991
RIVERTON, WYOMING 82501

May 23, 1968

OME Region III
RECEIVED
MAY 27 1968
Denver, Colorado

Mr. J. William Hasler
United States Department of Interior
Office of Minerals Exploration
Building 52 Room 203
Denver, Colorado 80225

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm E-963

Dear Mr. Hasler:

We are again searching our records to try and find the map referred to in your letter of May 16, 1968. To our knowledge, presently at least, all we received from Vitro Minerals was a list of stockpile numbers, tons, grade and pounds of each stockpile.

For our own internal control all stockpiles, including those received from Vitro, have been sampled and surveyed and located on a map. The work is just being completed and will be available to Mr. Robertson when he arrives.

We are happy to have Mr. Robertson come to our property and will assist him in any way we can to help resolve the existing stockpile discrepancy.

Very truly yours,
Federal-Radorock-Gas Hills Partners

Thomas M. Hill

Thomas M. Hill
Project Manager

TMH/mc

Office of Minerals Exploration
Building 53 Room 203

May 16, 1968

file 130
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cy-63 file

Mr. Thomas M. Hill, Project Manager
Federal-Radorock Gas Hills Partners
P. O. Box 991
Riverton, Wyoming 82501

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm E-963

Dear Mr. Hill:

We have been instructed by our Washington office to make a visual inspection on the subject property in order to determine the tonnage and grade of the remaining material in the stockpiles from the George and Ver claims.

Both you and Vitro Minerals Corporation state that you have no knowledge of the stockpile figures reported in my letter to you dated February 8, 1968. These figures indicate stockpiles of much greater size and grade than those indicated by figures reported by both you and Vitro, especially for ore grade material.

Vitro has informed us that a map setting forth the actual location of the stockpiles was probably turned over to you at the time the sale of the property was made. Perhaps we could obtain a copy of this map. The map would be of considerable help to us in investigating the discrepancies.

Mr. Jacques F. Robertson, one of our geologists, will be in the area during the first week of June on other Office of Minerals Exploration business and we would like to have him visit the property at that time. Anything you can do to facilitate his visit and the eventual closing out of this contract will be greatly appreciated.

Sincerely yours,

cc: Chief, OME (2)
DMEA-4182
OME chron
Mr. Hasler

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

MME Form 7
(2/63)

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MAY 13 1968

AIRMAIL

To: Field Officer, Region III

From: Chief, Office of Minerals Exploration

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Enclosed is a copy of the Report of Royalty Review issued in April 1968. This report is for record purposes only and a copy is not to be furnished the Operator.

If you concur in the facts as stated in the report, please so indicate by memorandum in duplicate to this Office. If you do not concur, please return the report with your comments.

On your next trip to Wyoming, you should check on the stockpiled material on the property, and if possible, determine the tonnage and grade of the remaining material.

FRANK E. JOHNSON

Frank E. Johnson

Enclosure

cc: Director's Reading File
Economic Geology File
OME File
OME Reading File
Mr. Johnson
130

FEJohnson/bsl 5/10/68

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

APR 2 9 1968

Memorandum

To: Director, Geological Survey

From: Assistant Director, Contract and Grant Audit
Audit Operations, Office of Survey and Review

Subject: Report of Royalty Review - Contract ldm-E963
Docket No. DMEA-4182 (Uranium)
Vitro Minerals Corporation (Operator)
George and Ver Claims
Fremont County, Wyoming

Pursuant to a request dated January 30, 1968, from the Chief, Office of Minerals Exploration (OME), we have made a royalty review of Contract ldm-E963, examining the contract and accounting records and files of OME and the Branch of Budget and Finance, Administrative Division, Geological Survey. Four copies of the report of review are enclosed.

W A Wilkerson, Jr.

For Donald R. Moysey

Enclosures

U.S. GEOLOGICAL SURVEY
MAY 2 9 AM 1968
OFFICE OF THE DIRECTOR

MME Form 7
(2/63)

OFFICIAL FILE COPY

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APR 15 1968

AIRMAIL

To: Field Officer, Region III

From: Chief, Office of Minerals Exploration

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Reference is made to your memoranda of February 23 and March 26, 1968, with enclosures, concerning stockpiled material mined from the land under the subject contract prior to June 14, 1967.

Both Vitro Minerals Corporation and Federal-Radorock-Gas Hills Partners have stated that they have no knowledge of the stockpile figures reported by AEC in its letter to you of July 10, 1967. Because these figures indicate stockpiles of much greater size and grade than those indicated by figures reported by Vitro and Federal, especially for ore-grade material, it is necessary that we further investigate the discrepancies.

Vitro has informed us that a map setting forth the actual location of stockpiles was probably turned over to Federal at the time the sale of the property was made. Perhaps you could obtain a copy of this map.

It may be necessary for you to make a visit to the property on your next trip to Wyoming and make an independent estimate of the remaining stockpiles. Please advise if this can be arranged.

We are particularly interested in the stockpile designated by AEC as George Pit G-4 ore, 4,626 tons of 0.266 U_3O_8 grade. Perhaps this ore is on neighboring property such as the Lucky Mac group and not actually on the contract property. The stockpile map that Vitro may have turned over to Federal would be helpful to you in making a check on the stockpiles.

Harold Kilmer

For: Frank E. Johnson

Enclosure

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Reading File
130 (2)

FEJohnson/gla 4-15-68

Vitro MINERALS CORPORATION

90 PARK AVENUE · NEW YORK, N. Y. 10016 · MURRAY HILL 2-5700

April 9, 1968

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Mr. Frank E. Johnson
Chief, Office of Minerals Exploration
U.S. Department of the Interior
Interior Building, Room 4460
Washington 25, D.C.

Dear Frank:

When I returned to the office after our meeting on Friday, I searched for the report and/or map that I recalled that set forth the actual location of the stockpiles of uranium ore which we sold to Federal.

Unfortunately, I was unable to find anything and I can only surmise that this data was part of the records which we turned over to Federal when we sold our property.

Sorry I can't help you.

Very truly yours,

VITRO MINERALS CORPORATION

Gene

Eugene B. Hotchkiss
Executive Vice President

EBH:mg

Copy to R-III

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225
Office of Minerals Exploration

March 26, 1968

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Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region III

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Attached are two copies of a letter from the Atomic Energy Commission dated March 15, 1968 in reply to our request for clarification concerning the stockpiled ore and protore reported by Federal-Radorock-Gas Hills Partners from the George and Ver claims referred to in the above-cited contract.

The letter is self-explanatory, however in a telephone conversation on March 15, 1968 with Mr. Stanley Myers, Engineer for the Atomic Energy Commission, Grand Junction, Colorado, he informed me that he was one of the engineers assigned to estimating the stockpiles from the George-Ver pit, and that the George Pit Nos. G-4, G-1, G-6, G-9, G-B and G-A were merely numbers on individual stock piles and do not necessarily designate the claim number from which the ore was mined. This should clear up the suggestion that production should have come from the George 5 or a (G-5) as indicated from the G-1 series of numbers used by the Atomic Energy Commission. It looks as though little can be done on settlement of this contract until Federal-Radorock-Gas Hills decides when to process the stockpiled ore. Undoubtedly, they are waiting for a better price for their uranium.

Sincerely yours,

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

Enclosures

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION OFFICE
GRAND JUNCTION, COLORADO 81501

March 15, 1968

OME Region III
RECEIVED
MAR 21 1968
Denver, Colorado

IN REPLY REFER TO:

MP:SAM

Mr. J. William Hasler
Field Office, Region III
Office of Mineral Exploration
U. S. Geological Survey
Federal Center, Bldg. 53, Rm. 203
Denver, Colorado 80225

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Dear Mr. Hasler:

Your letter of March 6, 1968 which refers to our letters of July 10 and November 2, 1967, where there are certain discrepancies in the amounts of stockpiled ore as reported by Federal-Radorock and that estimated by AEC engineers, has been received.

The amount of ore and protore in stockpiles as reported by Federal-Radorock to the AEC is the same as reported to you.

At the time the engineers from the AEC estimated the stockpiles from the George-Ver pit, there was no means of ascertaining from which claim the stockpiled ore or protore was mined. The George-Ver pit is on the Ver No. 3 claim and George No. 4 and No. 5 claims. Due to the proximity of the stockpiles to the George Nos. 1 to 7 and Ver Nos. 1 to 11 claims, it is assumed that these stockpiles are the result of mining from these claims.

We will be unable to give you more accurate information, until such time as the stockpiles are processed and the tons and grade reported to the Commission.

Very truly yours,

Don R. Hill, Director
Mining Division

Office of Minerals Exploration
Building 53 Room 203

March 6, 1968

Mr. Don R. Hill, Director
Mining Division
U. S. Atomic Energy Commission
Grand Junction, Colorado 81501

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Idm-E-963

Dear Mr. Hill:

We are desirous of closing out this DMEA contract, but we are not having much luck in ascertaining a discrepancy that exists in stockpile estimates.

In your letter to me dated November 2, 1967 you mentioned in paragraph two that your information concerning the stockpiles inventoried in March 31, 1967 shows that ore in stockpiles designated as G-1, G-4, G-6, G-9, G-B, and G-A was derived from pits on various claims in the George Nos. 1 - 7 group. Also in your letter of July 10, 1967 you listed individual stockpiles on page 2, however there was no estimate of stockpiled ore from George Claim No. 5 as stated in Mr. Thomas M. Hills' letter to me dated February 16, 1968. Would you have any way to clarify this?

I am enclosing copies of my last letter to Mr. Thomas Hill, dated February 8, 1968 and his reply to me dated February 16, 1968. You will see in his last letter where he refers to the tonnages as having come from the "George Group--George Claim Number 5." Any light you can throw on this matter will be greatly appreciated.

Sincerely yours,

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME (2)
OME chron
Hasler chron
OME-4182

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225

Office of Minerals Exploration
Building 53 Room 203

February 23, 1968

ORIGINAL COPY O. M. E. RECEIVED FEB 28 1968 INITIALS CODE 110 130

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region III

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corpoation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E-963

Transmitted herewith is an answer from Mr. Thomas M. Hill, Project Manager, to my inquiry of February 8, 1968 on the above-stated subject.

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

964

FEDERAL-RADOROCK-GAS HILLS PARTNERS

Telephone 856-9192

520 EAST MAIN STREET POST OFFICE BOX 991

RIVERTON, WYOMING 82501

February 16, 1968

Mr. J. William Hasler
Field Officer, Region III
Office of Minerals Exploration
Federal Center - Building 53
Denver, Colorado 80225

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E-963

Dear Mr. Hasler:

Your letter of February 8, 1968 refers to "another source reported stockpiles extimated as of March 31, 1967" and forwarded by a listing of stockpiles. We have no knowledge of these figures or who submitted them to you.

The stockpile ore from the George Pit is the same tonnage and grade reported in my letter of July 11, 1967.

These tonnages came from George Group - George Claim number 5.

Very truly yours,
Federal-Radorock-Gas Hills Partners

Thomas M. Hill

Thomas M. Hill
Project Manager

TMH/mc

Office of Minerals Exploration
Building 53 Room 203

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O. M. E.
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FEB 13 1968
INITIALS CODE
130
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February 8, 1968

1 copy - 130

Mr. Thomas M. Hill, Project Manager
Federal-Radorock-Gas Hills Partners
Riverton, Wyoming 82501

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E-963

Dear Mr. Hill:

We are desirous of closing out the account on the above-mentioned contract, however there is a discrepancy in stockpile estimates that has been brought to our attention which requires clarification.

Under date of May 31, 1966, Federal Resources Corporation reported stockpiled material as of April 30, 1966, and on July 11, 1967, you stated that they had mined no ore from the property and reported the same estimates of stockpiled material as of June 14, 1967 as follows:

Stockpiles

GEORGE	TONS	GRADE
Ore	498	0.168
Protore	17,000	0.065

Under date of July 10, 1967, however, another source reported stockpile estimates as of March 31, 1967 as follows, and stated that no mining had been done since that date:

GEORGE PIT		TONS	GRADE	POUNDS U_3O_8
G-4	Ore	4,626	0.266	24,610
G-1	Protore	5,340	0.054	5,767
G-6	Protore	2,587	0.099	5,122
G-9	Protore	2,505	0.072	3,697
G-B	Protore	2,419	0.050	2,419
G-A	Protore	16,976	0.050	16,976
		29,827	0.0566	33,891

12,957

The George Group of Mining Claims numbered 1 through 7 inclusive, located in Sections 22 and 27, Township 33 North, Range 90 West, Fremont County, Wyoming were made apart of the subject contract. The Ver group of mining claims numbered 1 through 11, inclusive, located in Sections 22, 26, 27, Township 33 North, Range 90 West; Fremont County, Wyoming were made a part of the subject contract. Both the George Group of Mining Claims were made a part of Annex I of the subject contract and are under lien to the Government for repayment of the loan from any ore produced from the claims to June 14, 1967 as specified in the subject contract.

We need to know which area these tonnages come from in order to close our records on the subject contract. Were these tonnages obtained from subordinated ground? Any information you can obtain will be greatly appreciated.

Sincerely yours,

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, Office of Minerals Exploration (2)✓
OME chron
Hasler chron
OME-4182

Copy to Washington
11/15/67

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION OFFICE
GRAND JUNCTION, COLORADO 81501

November 2, 1967

IN REPLY REFER TO: MP:AJST

OMAE Region III
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NOV 6 1967
Denver, Colorado

OFFICIAL COPY
U. N. E.
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NOV 17 1967

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Mr. J. William Hasler
Field Officer, Region III
Office of Minerals Exploration
U. S. Geological Survey
Federal Center
Denver, Colorado 80225

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Dear Mr. Hasler:

Your letter of October 9, 1967 points out discrepancies between AEC stockpile estimates for the George pits and those reported to your office by Federal-Radorock-Gas Hills Partners and suggests that some of the tonnages in AEC stockpile estimates may include ore mined from claims other than the George Nos. 1-7 and the Ver Nos. 1-11.

Our information concerning the stockpiles inventoried on March 31, 1967 shows that the ore in stockpiles designated as G-1, G-4, G-6, G-9, G-B, and G-A was derived from pits on various claims in the George Nos. 1-7 group. Therefore, the quantities reported to you in my letter of July 10, 1967 for these stockpiles represented our physical inventory of ore stockpiled from production from the George group, as of March 31, 1967.

A breakdown by stockpiles of Federal's estimate would be helpful in determining the source of the discrepancy between our inventory and Federal's. We do not yet have this information.

Very truly yours,

Don R. Hill, Director
Mining Division

11/22 - Hasler - will write to Fed-Rad - for their breakdown of stockpile tonnages.

11/11/68 - Sol. Hasler - he will follow up on stockpiles with Fed-Rad. for OMAE.

Vitro MINERALS CORPORATION

90 PARK AVENUE · NEW YORK, N. Y. 10016 · MURRAY HILL 2-5700

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 18 1967
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~~120 ML~~
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October 17, 1967

Mr. Frank E. Johnson
Chief, Office of Minerals Exploration
United States
Department of the Interior
Geological Survey
Washington, D.C. 20242

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Johnson:

I would be happy to respond to your request for additional information on the subject of the ore and protore stockpiles from the George and Ver claims as requested in your letter of October 12, 1967.

However, since we have had no information or data on these stockpiles other than that previously furnished to you by the Federal-Radrock-Gas Hills Partners and I had not heard nor seen anything about the stockpile estimate you show they gave you as of March 31, 1967, I am sorry that I can be of no help to you in giving you any additional information on the subject.

Very truly yours,

VITRO MINERALS CORPORATION

Eugene B. Hotchkiss/mg

Eugene B. Hotchkiss
Executive Vice President

EBH:mg

No reply necessary

OFFICIAL
COPY
O. M. E.
RECEIVED
OCT 12 1967

INITIALS	CODE
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	110
	220

Office of Minerals Exploration

October 9, 1967

Mr. Don Hill, Director
Mining Division
U. S. Atomic Energy Commission
Grand Junction, Colorado 81501

Subject: DMEA -4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Dear Don:

This letter is in reply to our telephone conversation October 6, 1967 concerning the subject docket.

Federal-Radorock-Gas Hills Partners quoted us the following figures showing production from June 1963 through May 1965, and material in their stockpile from the George and Ver claims as of June 14, 1967. As you see, they quote some 498 tons of ore with a grade of 0.168 percent U_3O_8 having a dollar value of $5,622, and some 17,000 tons of protore having a grade of 0.065 percent U_3O_8 and a dollar value of $28,730.00. The dollar value calculated on Circular 5.

Your letter to us shows a production of 4,626 tons of ore produced from the George Pit that assayed 0.266 percent U_3O_8, containing 24,610 pounds U_3O_8, and Protore, from G-1, G-6, G-9, G-B, G-A totaling 29,827 tons and assaying 0.056 percent U_3O_8 containing 33, 891 pounds U_3O_8.

It was thought that perhaps some of your tonnages may have come from claims not under lien to the Government under DMEA contract Idm-E-963.

The George Group of Mining Claims, numbered 1 through 7 inclusive, located in Sections 22 and 27, Township 33 North Range 90 West: Fremont County, Wyoming were made a part of the subject contract. The Ver Group of Mining Claims numbered 1 through 11 inclusive, located in Sections 22, 26, 27, Township 33 North, Range 90 West; Fremont County, Wyoming were made a part of the subject contract. Both the George Group of

Mining Claims as listed were made a part of Annex I of the subject contract and are under lien to the Government for repayment of the loan from any ore produced from the claims to June 14, 1967 as specified in the subject contract.

This may aid you in ascertaining just what tonnages are subject to him by the Government. Thank you for your assistance from previous requests.

Sincerely yours,

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

Chief, OME ✓
cc: Hasler chron
OME chron
DMEA-4182

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/12		110
		220

Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
90 Park Avenue
New York, New York 10016

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hotchkiss:

Thank you for your letter of October 2, 1967, concerning the calculated royalty on stockpiled material under the subject contract, and your check in the amount of $281.10 in payment of royalty due the Government on 468 tons of such material.

We note your comments regarding the balance of the calculated royalty in the amount of $430.95 on stockpiled material. We had hoped to be in a position to close this account, however, a discrepancy in stockpile estimates has been brought to our attention which requires clarification.

Under date of May 31, 1966, Federal Resources Corporation reported stockpiled material as of April 30, 1966, and on July 11, 1967, Federal-Radrock-Gas Hills Partners stated that they had mined no ore from the property and reported the same estimates of stockpiled material as of June 14, 1967, as follows:

Stockpiles

George	Tons	Grade
Ore	498	0.168
Protore	17,000	0.065

Under date of July 10, 1967, however, another source reported stockpile estimates as of March 31, 1967, as follows, and stated that no mining had been done since that date:

George Pit		Tons	Grade	Pounds U_3O_8
G-4	Ore	4,626	0.266	24,610
G-1	Protore	5,340	0.054	5,767
G-6	"	2,587	0.099	5,122
G-9	"	2,505	0.072	3,697
G-B	"	2,419	0.05	2,419
G-A	"	16,976	0.05	16,976
Total	"	29,827	0.0566	33,891

In view of the considerable differences between the two stockpile estimates, it is apparent that some clarification is necessary. If you can furnish additional information that would be helpful in settling this matter it will be greatly appreciated. In the meantime we will endeavor to obtain an explanation from the field.

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's reading file
Division file
Economic Geology file
OME file
OME reading file
OME Region III
130

FEJohnson/bih 10/12/67

Vitro MINERALS CORPORATION

90 PARK AVENUE · NEW YORK, N. Y. 10016 · MURRAY HILL 2-5700

ORIGINAL COPY
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October 2, 1967

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

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

No attachments

Dear Mr. Johnson:

In response to your letter of July 25, 1967 regarding the above referenced matter, I am enclosing our check for $281.10 covering the calculated royalty due the Government under article 8 (d) of this exploration contract, for the estimated 498 tons of 0.168 grade Uranium ore stockpiled from the George claims.

I respectfully request that the calculated royalty charge of $430.95 which you claim is due the Government for protore stockpiled from the same claims, be withdrawn. I make this request for the following reasons:

1. When we sold our Uranium properties, including the stockpiled ores thereon, to Federal resources on May 8, 1963 the stockpiled protore was assigned only 'plus' value, as even the higher grade piles of this material could have a potential value only if blended with commercial grade ores.

2. According to the attached copy of a letter from Federal to Mr. J. William Hasler of the U.S.G.S. dated July 11, 1967, (which apparently was the source of your figures on the remaining tonnage, grade, and estimated value of the stockpiled material from the George claims), the lowest grade of ore actually processed since we sold these properties was 777.5965 tons of 0.084% ore milled in June, 1964. You will also notice that no ore has been sent to process since May of 1965. We have been informed that this ore contains sufficient Molybdenum to cause problems in mill processing.

Copy to Region III

3. As stated in the letter from Federal of August 30, 1967, a copy of which is also attached, the tonnage and grade of the remaining stockpiled protore is only estimated, and its value was calculated from a downward extrapolation from the lowest grade of material priced under Circular 5. In view of the fact that Federal have at no time sent ore of as low a grade as 0.065 to process, and because of the milling problems due to its Molybdenum content, I feel assigning any value to this material is extremely questionable.

I therefore respectfully request that the claimed charge of $430.95 for royalty due the Government for this material be withdrawn.

Very truly yours,

Eugene B. Hotchkiss

Eugene B. Hotchkiss
Executive Vice President

EBH:ri
Enc.

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/7		110
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Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
90 Park Avenue
New York, New York 10016

AUG 7 1967

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hotchkiss:

In reply to your letter of August 3, 1967, we are enclosing a copy of MF-200 form of the subject contract which contains Article 8(d) mentioned in our letter of July 25, 1967.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosure

cc: Director's reading file
Division file
Economic Geology file
OME file
OME reading file
OME Region III
130

FEJohnson/bih 8/7/67

23263

Vitro MINERALS CORPORATION

90 PARK AVENUE · NEW YORK, N. Y. 10016 · MURRAY HILL 2-5700

OFFICIAL COPY
O. M. E.
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AUG 8 1967

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August 3, 1967

Mr. Frank E. Johnson, Chief
Office of Minerals Exploration
U. S. Department of the Interior
Washington, D. C.

Dear Frank:

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

I have received your letter of July 25th regarding the above matter, but I am unable to locate a copy of this contract and therefore Article 8(d) to which you refer.

I would very much appreciate your sending me a photostat of the original of this contract so I may refer to this portion.

Sincerely yours,

VITRO MINERALS CORPORATION

E. B. Hotchkiss
Executive Vice President

EBH:bn

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
7/19	Johnson	110
		120
	Long	140
		110
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		120

JUL 25 1967

Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
90 Park Avenue
New York, New York 10016

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hotchkiss:

Under date of May 31, 1966, Federal Resources Corporation reported the following stockpiles of material mined from the property under the subject contract.

George	Tons	Grade
Ore	498	0.168
Protore	17,000	0.065

Your attention is called to Article 8(d) of the exploration contract relating to unsold production. According to Federal-Radorock-Gas Hill Partners, the estimated current value of the stockpiled material is as follows:

Tons	Grade	Dollar Value
498	0.168	$ 5,622
17,000	0.065	28,730

Royalty due the Government on this material is calculated as follows:

	Dollar Value		Government's Royalty	
Tons	Total	Per Ton	Percent	Total Amount
498	$ 5,622	$11.29	5	$281.10
17,000	28,730	1.69	1-1/2	430.95
Total				$712.05

23263

In order that we may close this account, please forward your check in the amount of $712.05, payable to the U. S. Geological Survey.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's reading file
Division file
Economic Geology file
OME docket
OME reading file
OME Region III
130

FEJohnson/bih 7/19/67

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225
Office of Minerals Exploration

OFFICIAL COPY
O. M. E.
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July 14, 1967

Memorandum

To: Chief, OME

From: Field Officer, Region III

Subject: DMEA- 4182 (Uranium)
Vitro Minerals Corporation
George and Ver claims
Fremont County, Wyoming
Contract Idm - E963

Enclosed herewith are copies of two letters from the Vitro Minerals Corporation on their production, which I had requested.

J. William Hasler
Field Officer, Region III
Office of Minerals Exploration

Enclosures

Telephone 13-0192
520 EAST MAIN STREET POST OFFICE BOX 901
RIVERTON, WYOMING

July 11, 1967

Mr. J. William Hasler
United States Department of the Interior
Geological Survey
Federal Center
Denver, Colorado 80225

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E-963

Dear Mr. Hasler:

In reply to your letter of June 27, 1967, we submit the following:

Production (Fed to Process):

Month	Year	Tons	Grade	Pounds U_3O_8
June	1963	2,947.2715	0.228	13,426.13
July	1963	2,567.1740	0.153	7,856.59
August	1963	2,217.6005	0.1277	5,665.13
May	1964	2,495.8690	0.110	5,492.40
June	1964	777.5965	0.084	1,310.14
May	1965	13.4000	0.116	31.00
		11,018.9115		33,781.39

Stockpile (George) @ June 14, 1967 (Estimates): Same as on 4/30/66

Tons	Grade	Dollar Value
498	0.168	$ 5,622
17,000	0.065	28,730

(Dollar Value is calculated on Circular 5)

Federal-Radorock-Gas Hills Partners has not mined any ore from this property and all "Production" has come from ore which was stockpiled prior to May 17, 1963.

Very truly yours,
Federal-Radorock-Gas Hills Partners

Thomas M. Hill
Project Manager

TMH:mr

		Tons	Grade	Pounds U_3O_8
George Pit				
G-4	Ore	4,626	0.266	24,610
G-1	Protore	5,340	0.054	5,767
G-6	"	2,587	0.099	5,122
G-9	"	2,505	0.072	3,607
G-B	"	2,419	0.05	2,419
G-A	"	16,976	0.05	16,976
		29,827	0.0566	33,891

V.3
G-1
S-5

Very truly yours,

Don R. Hill, Director
Mining Division

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION OFFICE
GRAND JUNCTION, COLORADO 81501

OME Region III
RECEIVED
JUL 12 1967
Denver, Colorado

IN REPLY REFER TO: MP:ASJT

July 10, 1967

Mr. J. William Hasler
Field Officer, Region III
Office of Minerals Exploration
U. S. Geological Survey
Federal Center
Denver, Colorado 80225

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver claims
Fremont County, Wyoming
Contract Idm - E963

Dear Mr. Hasler:

As you requested in your letter of June 12, 1967, production from the George and Ver claims is listed below:

To Susquehanna-Western, Inc. Mill at Riverton

Date	Claim	Shipper	Tons	Pounds U_3O_8 in Ore
June 1963	George	Vitro Min. Corp.	2,947.2715	13,426.13
July 1963	"	Federal-Gas Hills Partners	2,567.1740	7,856.59
Aug. 1963	"	"	2,217.6005	5,665.13
May 1964	"	"	2,495.8690	5,492.40
June 1964	"	"	777.5965	1,310.14

To Federal-Radorock-Gas Hills Partners Mill

May 1964	George	Federal-Gas Hills Partners	13.4000	31.00

The mine stockpiles were estimated as of March 31, 1967. We are informed that no mining has been done since that date. Our estimates are as follows:

Office of Minerals Exploration

OFFICIAL COPY
O. M. E.
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JUN 28 1967
INITIALS CODE
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June 27, 1967

Mr. N. W. Stalheim, President
Federal-Radorock-Gas Hills
1370 South Third West
Salt Lake City, Utah 84104

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E-963

Dear Mr. Stalheim:

The royalty payment for the subject contract expired June 14, 1967. Our records indicate that no production has been made from the property from the date of the contract to December 14, 1962 but that production was made in 1963, 1964 and 1965 on which royalty was paid to the Government.

Under date of June 6, 1966, Vitro Minerals Corporation sent us a copy of a report dated May 31, 1966 showing the following stockpiled ore as of April 30, 1966:

George	Tons	Grade
Ore	498	0.168
Protore	17,000	0.065

Our Washington office informs us that on May 17, 1963 the subject mining claims, including a stockpile of uranium ore, was sold to Federal-Radorock-Gas Hills Partners of which Federal Resources Corporation was the managing partner.

Would you please verify production in each year beginning in 1963 through June 14, 1967? Would you please furnish us an estimate of any remaining stockpiled material as of June 14, 1967? We should like to know the tonnage, the grade of ore, and the dollar value of material contained in any stockpile that may concern the subject docket.

cc: Chief, OME
Hasler chron
OME chron
E963

Sincerely yours,

J. William Hasler

J. William Hasler
Field Officer, Region III
Office of Minerals Exploration

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
6/26		110
		220

JUN 26 1967

Memorandum

To: Chief, Branch of Budget and Finance

From: Chief, Office of Minerals Exploration

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Freemont County, Wyoming
Contract Idm-E963

Enclosed is a copy of a memorandum from the Field Officer, Region III, stating that he concurs in the facts as stated in the Report of Royalty Review issued May 1967 on the subject contract. A copy of said report is also enclosed for your files.

FRANK E. JOHNSON

Frank E. Johnson

Enclosure

cc: Director's reading file
Division file
Economic Geology file
OME file
OME reading file
OME Region III
~~130~~
120

FEJohnson/bih 6/26/67

23263

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225

Office of Minerals Exploration

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 23 1967

INITIALS	CODE
gla	120
	110
	120
	320

June 20, 1967

Memorandum

To: Chief, OME

From: Field Officer, Region III

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George & Ver Claims
Fremont County, Wyoming

I have reviewed the Royalty Review issued in May 1967 on the subject contract, and concur in the facts stated in the report.

The Atomic Energy Commission was requested to verify the production in each year beginning 1963 through June 14, 1967, as well as to furnish us with an estimate of any remaining stockpile material as of June 14, 1967. Please refer to my letter dated June 12, 1967 to Mr. Don Hill, Atomic Energy Commission, Grand Junction Operations Office, Grand Junction, Colorado.

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

Office of Minerals Exploration

June 20, 1967

Memorandum

To: Chief, OME

From: Field Officer, Region III

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George & Ver Claims
Fremont County, Wyoming

I have reviewed the Royalty Review issued in May 1967 on the subject contract, and concur in the facts stated in the report.

The Atomic Energy Commission was requested to verify the production in each year beginning 1963 through June 14, 1967, as well as to furnish us with an estimate of any remaining stockile material as of June 14, 1967. Please refer to my letter dated June 12, 1967 to Mr. Don Hill, Atomic Energy Commission, Grand Junction Operations Office, Grand Junction, Colorado.

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME (2)
Hasler chron
OME chron
4182

Office of Minerals Exploration

June 12, 1967

Mr. Don Hill Mining Supervisor
Atomic Energy Commission
Grand Juncation Operations Office
Grand Junction, Colorado 81501

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver claims
Fremont County, Wyoming
Contract Xm - E963

Dear Don:

The royalty repayment for the subject contract expires June 14, 1967. Our records indicate that no production has been made from the property from the date of the contract to December 14, 1962 but that production was made in 1963, 1964 and 1965 on which royalty was paid to the Government.

Under date of June 6, 1966, Vitro Minerals Corporation sent us a copy of a report dated May 31, 1966 showing the following stockpiled ore as of April 30, 1966:

George	Tons	Grade
Ore	498	0.168
Protore	17,000	0.065

Would you please verify production in each year beginning 1963 through June 14, 1967? Would you please furnish us an estimate of any remaining stockpiled material as of June 14, 1967?

Sincerely yours,

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME
Hasler chron
OME chron
E-963

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
6/6		110
		220

JUN 6 1967

Memorandum

To: Field Officer, OME Region III

From: Chief, Office of Minerals Exploration

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Freemont County, Wyoming
Contract Idm-E963

Enclosed for your files is a copy of a Report of Royalty Review issued in May 1967 on the subject contract. This report is for record purposes only and a copy is not furnished the Operator.

If you concur in the facts stated in this report, please furnish a memorandum to this office in duplicate indicating your concurrence. If you do not concur, please return the copy of the report to this office giving your reasons for nonconcurrence.

With respect to the comments concerning the remaining stockpiles of material on the property, we need to have your estimate of the value of such stockpiles as of June 14, 1967.

FRANK E. JOHNSON

Frank E. Johnson

Enclosure

cc: Director's reading file
Division file
Economic Geology file
OME file
OME reading file
~~10~~ 130
120

FEJohnson/bih 6/6/67

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

MAY 31 1967

Memorandum

To: Director, U.S. Geological Survey

From: Assistant Director, Contract and Grant Audit
Audit Operations, Office of Survey and Review

Subject: Royalty Review of Contract IDM-E963
Docket No. DMEA-4182 (Uranium)
Vitro Minerals Corporation (Operator)
George and Ver Claims
Freemont County, Wyoming

Pursuant to a request dated April 4, 1967, from the Chief, Office of Minerals Exploration, we have made a royalty review of Contract IDM-E963, examining the contract and accounting records and files of OME and the Branch of Budget and Finance, U.S. Geological Survey. Four copies of the report of review are attached.

No exceptions have been taken with respect to the royalty settlements received by the Government.

In a memorandum dated May 4, 1967, the Chief, OME, requested that the Field Officer, OME, Region II, Denver, Colorado, check with the Atomic Energy Commission for verification of production from the property through June 14, 1967, the date of expiration of the royalty repayment period. Also, attention was called to the fact that the Operator had reported an inventory of low-grade ore in stockpiles at April 30, 1966, on the value of which the Government has not received its percentage royalty. The Field Officer was requested to furnish an estimate of any remaining stockpiled material as of June 14, 1967.

This review was limited to a determination of the propriety of the royalty settlements actually made. The investigation by the Field Officer may disclose additional royalty due to the Government relating to the value of ore mined prior to June 14, 1967.

Dwight E. Savage
for/ Donald R. Moysey

Enclosures

U.S. GEOLOGICAL SURVEY
JUN 1 3 19 PM 1967
OFFICE OF THE DIRECTOR

177345

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/4		110
5/4/67	Kitkamo	120
		220

MAY 4 1967

Memorandum

To: Field Officer, OME Region III

From: Chief, Office of Minerals Exploration

Subject: DMEA-4182 (Uranium)
Vitro Minerals Coporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

The royalty repayment for the subject contract expires June 14, 1967. Our records indicate that no production had been made from the property from the date of the contract to December 14, 1962, but that production was made in 1963, 1964, and 1965, on which royalty was paid to the Government.

Please check with AEC for verification of production in each year, beginning 1963 through June 14, 1967, about the close of the repayment period.

Under date of June 6, 1966, Vitro Minerals Corporation sent us a copy of a report dated May 31, 1966, showing the following stockpiled ore as of April 30, 1966:

George	Tons	Grade
Ore	498	0.168
Protore	17,000	0.065

Please furnish an estimate of any remaining stockpiled material as of June 14, 1967.

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's reading file
Division file
Economic Geology file
OME file
OME reading file
120-M
120
FEJohnson/bih 5/4/67

23263

4182

INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Deliver *ONLY* to addressee

☒ Show address where delivered

(Additional charges required for these services)

RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE *(must always be filled in)*

E.B. Hotchkiss

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

DATE DELIVERED	SHOW WHERE DELIVERED *(only if requested)*
5-27-66	90 Park Ave N.Y.C. 10016

C55—16—71548-5—F GPO

OFFICIAL BUSINESS

PAYMENT OF POSTAGE, $300

POSTMARK OF DELIVERING OFFICE

INSTRUCTIONS: Fill in items below and complete instructions on other side, if applicable. Moisten gummed ends, attach and hold firmly to back of article. Print on front of article RETURN RECEIPT REQUESTED.

RETURN TO

REGISTERED NO. 500485	NAME OF SENDER U. S. Geological Survey Office of Minerals Exploration
CERTIFIED NO.	STREET AND NO. OR P. O. BOX Dept. of the Interior
INSURED NO.	CITY, STATE, AND ZIP CODE Washington, D. C. 20242

STATION
MURRAY HILL

POD Form 3811 Sep. 1963

C55—16—71548-6—F

220

DMEA 4182

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

May 25, 1966

REGISTERED MAIL
RETURN RECEIPT REQUESTED

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
90 Park Avenue
New York, New York 10016

Dear Mr. Hotchkiss:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

MME Form 63
Revised 7-65

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since **October 12, 1964**, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes [ ] No [X]

2. Since **October 12, 1964**, has there been any production from the land subject to the contract? Yes [ ] No [X]

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes [ ] No [ ]

   If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name Eugene B. Hotchkiss Title Executive Vice President

Address 90 Park Ave., New York, N.Y. 10016 Date June 6, 1966

Vitro MINERALS CORPORATION

90 PARK AVENUE · NEW YORK, N. Y. 10016 · MURRAY HILL 2-5700

June 6, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 8 1966

INITIALS	CODE
6/8/66	120
JD	110
HK	120K
RMA	120S
	220

Mr. Frank E. Johnson
Chief, Office of Minerals Exploration
United States Department of the Interior
Geological Survey
Washington, D.C. 20242

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Johnson:

In response to your inquiry of May 25th, we are sending you herewith 2 copies of form MME 63 and correspondence with the owners of the subject claims - the Federal Resources Corporation.

Very truly yours,

VITRO MINERALS CORPORATION

Eugene B. Hotchkiss

Eugene B. Hotchkiss
Executive Vice President

EBH/is
enc.

FEDERAL RESOURCES CORPORATION

MANAGING PARTNER FOR
FEDERAL-GAS HILLS PARTNERS
1370 SOUTH THIRD WEST STREET
SALT LAKE CITY 15, UTAH

May 31, 1966

VITRO MINERALS CORPORATION
RECEIVED
JUN 2 1966
E. B. HOTCHKISS
NEW YORK, N. Y.

Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
90 Park Avenue
New York City, New York 10016

Dear Gene:

This letter is to supply you with the information you requested in order to respond to the Office of Minerals Exploration's request on the George and Ver claims in Fremont County, Wyoming.

We have not mined any ore from either the George or Ver claims since October 12, 1964. We are enclosing a Settlement Statement for rock deductions which were made when we processed ore previously. This material was oversize and was set aside until we could obtain a crusher to reduce the material to the size we could handle.

We are carrying the following stockpiles per books as of April 30, 1966:

George	Tons	Grade
Ore	498	0.168
Protore	17,000	0.065

We have not shipped this material to the mill inasmuch as it contains a sufficient amount of molybdenum to be a problem in our process. We plan to utilize this material; however, it will be in small quantities in order to minimize the molybdenum problem.

If there are any other questions, we naturally will be pleased to be of further service.

Very truly yours,

Donald V. Peters
Vice President

DVP:mb

Enclosure

FEDERAL - GAS HILLS PARTNERS

520 EAST MAIN STREET
RIVERTON, WYOMING

LIQUIDATION NO. 6
DATE June 2, 1965
PERIOD May, 1965

SETTLEMENT STATEMENT

SELLER [illegible]
ADDRESS [illegible]

CLAIM George Rock deductions
DISTRICT
A.E.C. LICENSE

SHIPPER'S LOT NO.	WET WEIGHT (LBS.)	% H_2O	DRY WEIGHT (~~LBS.~~ Tons)	SETTLEMENT ASSAYS (%) U_3O_8	$CaCO_3$		CONTENT (~~LBS.~~ Tons) U_3O_8	$CaCO_3$	
			13.400	.116			.0155		
			13.400	.116			.0155		
WET TONS		DRY TONS	13.400	.116			.0155		

ITEM	TONS	POUNDS	UNIT PRICE	AMOUNT
BASE PRICE	13.400	31.00	1.82	56.42
PREMIUM: U_3O_8 IN EXCESS OF 4 LB./TON			0.75	
U_3O_8 IN EXCESS OF 10 LB./TON			0.25	
TOTAL U_3O_8 PAYMENT				56.42
PENALTY: (–)				(0)
TOTAL FOR ORE				56.42
DEVELOPMENT ALLOWANCE			0.50	15.50
HAULAGE ALLOWANCE MILES				
WET TONS @ PER WET TON MILE				
TOTAL ALLOWANCES				15.50
TOTAL GROSS SETTLEMENT				71.92
DEDUCTIONS AND/OR ADJUSTMENTS (–)				(0)
NET SETTLEMENT				71.92

PREPARED [illegible]
CHECKED
APPROVED

NOTE: BUYER'S ASSAYS GOVERN IF SELLER FAILS TO SUBMIT HIS ASSAYS PRIOR TO ACCEPTANCE OF SETTLEMENT PAYMENT. ALL RATES PAID ARE BASED ON U. S. ATOMIC ENERGY COMMISSION PUBLISHED SCHEDULES.

Vitro MINERALS CORPORATION

90 PARK AVENUE · NEW YORK, N. Y. 10016 · MURRAY HILL 2-5700

May 27, 1966

OFFICIAL COPY
RECEIVED
MAY 31 1966
INITIALS | CODE
RMA 120

Mr. Frank E. Johnson
Chief, Office of Minerals Exploration
United States Department of the Interior
Geological Survey
Washington, D.C. 20242

Re: DMEA - 4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Johnson:

We have received your second request dated May 25th for information as to the status of the above mentioned property and the production from it during the period of royalty obligation.

As you are aware from our previous correspondence on this matter, we sold this property to Federal-Radorock-Gas Hills Partners on May 17, 1963 and any production from this property since that time obviously would have been by and for the account of the purchasing company. We have written Federal-Radorock-Gas Hills Partners for the information you have requested and will forward it to you as soon as we have received it from them.

MME Form 63 May 6 yrs

Very truly yours,

VITRO MINERALS CORPORATION

Eugene B. Hotchkiss

Eugene B. Hotchkiss
Executive Vice President

EBH/is
cc: Mr. Donald V. Peters
Federal-Radorock-Gas Hills Partners

For May 1967
MME Form 63

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
11/19	Fisher	800
11/19	Murphy	120M
	GCS	120
11/19	Johnson	110
		100
		220

NOV 2 0 1964

Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
90 Park Avenue
New York, New York 10016

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Hotchkiss:

Thanks for your letter dated November 16, 1964, explaining that the royalty payment related to ore which was stockpiled prior to May 17, 1963, and included in the sale of certain mining properties to Federal-Radorock-Gas Hills Partners on that date. This is the first information we had regarding any production and stockpiling of ore by your company.

I gather from your letter that approximately 23,562 tons of ore were in the stockpile, that royalty has now been computed and paid on approximately 11,000 tons, and that royalty will be calculated and paid on the remainder when the ore has been weighed and assayed.

It appears that the computation of value of the ore and the royalty payable on the basis of AEC Circular No. 5 is fair and equitable and such basis of computation is acceptable to the Government with respect to the stockpiled ore.

When Federal-Radorock-Gas Hills Partners start mining from the property we will expect the royalty to be computed on the value of "yellow cake".

Sincerely yours,

George Fumich, Jr.

Acting Director

cc: Federal-Radorock-Gas Hills Partners
520 East Main Street
Riverton, Wyoming

CEFisher/ama 11-19-64

cc: Docket
Director's Reading File
CA & A Division
Region III (w/cy of inc. ltr.)

23263

Vitro MINERALS CORPORATION

90 PARK AVENUE · NEW YORK, N. Y. 10016 · MURRAY HILL 2-5700

November 16, 1964

Mr. George Fumich, Jr.
United States Department of the Interior
Office of Minerals Exploration
Washington 25, D.C.

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 19 1964

DATE	INITIALS	CODE
11/19	GEF	800
		120
		120

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Fumich:

Your letter of November 5th to Mr. L. B. Grube, Assistant Controller of Vitro Minerals Corporation, acknowledging payment of $3,781.03 representing a royalty payment on uranium ore produced from property covered by the above referenced exploration contract, indicates a misunderstanding regarding the date of the production of this ore.

All uranium ore that had been produced from this property was mined prior to May 17, 1963 - the date of our sale of our mining properties to Federal-Radorock-Gas Hills Partners. As of the date of this agreement all of the ore we had previously mined and stockpiled was sold to Federal for a lump sum which had to be arbitrarily arrived at because neither exact assays nor tonnages were available at that time. Included in this stockpile was approximately 2,965 tons of ore of an assumed grade of .18% U_3O_8 or better, and approximately 20,597 tons of ore running less than .10% U_3O_8 produced from the George #5 claims subject to the DMEA loan referenced above.

Because of our obligation to pay the Government a royalty on a percentage basis of the gross proceeds from the production that was sold, we could not calculate the proceeds nor, hence, the amount of the royalty, until

(cont'd)

Vitro MINERALS CORPORATION

To: Mr. George Fumich, Jr. November 16, 1964

Federal-Radorock-Gas Hills Partners had weighed and assayed this ore and submitted the data necessary from these measurements to permit calculation of the royalty. That is why we obtained from them settlement sheets which we believed to be the correct basis for establishing the amount owing by our company under the subject DMEA contract.

As confirmatory evidence of the fact that this ore was produced prior to May 17, 1963, I am attaching a transmittal letter from Federal dated October 12, 1964, which enclosed the copies of the above-mentioned settlement sheets, stating that all ore fed to process came from the stockpile existing at the time of our purchase agreement.

I would appreciate your acknowledgement of the fact that our recent remittance of $3,781.03 has been correctly computed.

Very truly yours,

VITRO MINERALS CORPORATION

Eugene B. Hotchkiss

Eugene B. Hotchkiss
Executive Vice President

EBH/is
enc.
cc: Federal-Radorock-Gas Hills Partners
Mr. L. B. Grube

[illegible]

[illegible]

Mr. Eugene [illegible]
Executive Vice President
Vitro Minerals Corporation
[illegible] Park Avenue
New York City, New York [illegible]

Dear Gene:

We have received correspondence from the CIM (Compos [illegible]) relative to the royalty due under the DMEA-4182 (Grenium) contract applicable to the production from the George and Ver claims in Fremont County, Wyoming. These claims are part of the properties we acquired from Vitro Minerals Corporation in the agreement of May 8, 1963.

For your convenience, we quote the provisions of the character [illegible] agreement (Article Four, page 20): "The Seller will indemnify the buyer against and hold it harmless from any liabilities or [illegible] under the DMEA lease relating to the [illegible] Operation [illegible] Gen. [illegible]

A[illegible] the [illegible] the purchase agreement [illegible] since our acquisition.

We enclose [illegible] fail to process [illegible] which we assume to be [illegible] of [illegible] CIM [illegible].

[illegible] to of further service.

Very truly yours,

[illegible]
[illegible]
[illegible]

[illegible]

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/10	GCS	120
8/11	Johnson	110
"	[illegible]	100
		220
8/11	Murphy	

AUG 12 1964

Mr. Fred Heil
Office Manager
Federal-Radorock-Gas Hills Partners
520 East Main Street
Riverton, Wyoming

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Heil:

In reply to your letter of August 7, 1964, prior to October 15, 1963, information concerning possible production from the subject claims was obtained by either letters from Vitro Minerals Corporation or actual field examinations by DME personnel. On October 15, 1963, the form was first sent to Vitro on which it was noted that the property had been sold on May 17, 1963, to your company. A copy of the form is enclosed.

The Government's contribution under the contract amounted to $25,734.23. No royalty on production has been paid to date, leaving a repayable balance of the same figure.

Sincerely yours,

George C. Selfridge

George C. Selfridge, Chief
Division of Exploration Operations

Enclosure

GCSelfridge/gla (8-10-64)
cc to: Director's Reading File
Region III w/cy incoming letter
Docket
Mr. Selfridge
120M

23263

FEDERAL-RADOROCK-GAS HILLS PARTNERS

520 EAST MAIN STREET · · · · · · RIVERTON, WYOMING

Telephone: ULster 6-9711

August 7, 1964

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 10 1964

DATE	INITIALS	CODE
8/10		800
		120 m
		120
		120 m

Mr. George C. Selfridge, Chief
Division of Exploration Operations
United States Department of the Interior
Office of Minerals Exploration
Washington 25, D.C.

Dear Mr. George C. Selfridge:

We have your letter of July 24, 1964 in reference to DMEA-4182 (Uranium) Vitro Minerals Corporation, George and Ver Claims, Fremont County, Wyoming, Contract Idm-E963, and would appreciate copies of all past data filed on this property. We would appreciate copies of all MME Form 63 Revised 3-62 forms filed on this property as well as how much has been paid on this loan and what is the balance due.

Very truly yours,

Fred Heil
Office Manager

FH:dm

Govt. contribution $25,734.23
Royalty repayments 0
Balance repayable $25,734.23

Talbert
8/10/64

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
7/23	Murphy	120M
7/23	Talbert	800
	Selfridge	120
7/23	[illegible]	110
	[illegible]	100
		220

JUL 24 1964

Federal-Radorock-Gas Hills Partners
1370 South 3rd West Street
Salt Lake City, Utah

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Gentlemen:

Vitro Minerals Corporation has informed this office that the George and Ver claims subordinated under the subject contract were sold to you on May 17, 1963.

Under the terms of the subject exploration contract and the certification of discovery or development issued on September 30, 1957, and in accordance with Article 8 and Amendment No. 2 of the contract, royalty is payable on all minerals produced from these claims from June 14, 1956, to June 14, 1967, or until the sum of $25,734.23 contributed by the Government without interest is fully repaid, whichever occurs first.

Royalty payments should be made in favor of the Office of Minerals Exploration, and should be mailed or delivered to Mr. H. M. Connors, Acting Field Officer, Office of Minerals Exploration, Region III, Bldg. 20, Denver Federal Center, Denver, Colorado, 80225. Each payment should be accompanied by two copies of settlement sheets or other suitable sales evidence showing the name of the purchaser, the quantity and grade of the production sold, the price per unit, and the gross proceeds and allowable deductions therefrom. The purchaser should be notified of the Government's royalty on production and directed to pay the royalty, computed as provided in the contract, directly to the Government.

The Field Officer should be promptly notified upon the commencement of any production, and upon any extended cessation thereof. Production unsold or unused six months after extraction from the ground should be reported promptly to the Field Officer.

43683

The Office of Minerals Exploration is the successor agency to the Defense Minerals Exploration Administration and is responsible for the administration of certified contracts executed by that agency. For this purpose we are enclosing three copies of our MME Form 63 which is self-explanatory. Please complete and return two copies of the form to this office.

For your information we are enclosing a copy of the form used in the subject contract. Your attention is called to Article 8 of the form.

Sincerely yours,

George Fumich, Jr. (gla)

Acting Director

Enclosures

FMMurphy/mm
7/23/64
cc: Director's Reading File
Region III
Docket
120M

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	Fumich	500
2/6	Talbert	800
	Aldridge	120
2/6	Johnson	110
"	Frank	100
		220

FEB 6 1964

Mr. D. R. Pickard
Controller
Vitro Minerals Corporation
Indiana, Pennsylvania

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Xm-8963

Dear Mr. Pickard:

Your notation dated October 22, 1963, concerning the sale of the cited properties was duly received.

Please be advised that under Article 8(b) of the contract your company remains as surety for any royalties which might accrue. Consequently, if the purchaser fails to promptly pay any royalties due the Government, we will look to Vitro for such payment.

Sincerely yours,

George Fumich, Jr.

Acting Director

(RK)

WRGriswold/FEJohnson/mm
2/6/64
cc: Director's Reading File
Region 3 w/cy of Form 63 dated 10/15/63
✓Docket
Code 500

23263

Re: DMEA-418

In view of Vitro's attitude on other contracts, it should be told (without mincing of words) that it remains as surety for payment of royalty.

Talbert
10/23/63

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

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

OCT 15 1963

Mr. D. R. Pickard
Controller
Vitro Minerals Corporation
Indiana, Pennsylvania

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

F. M. Murphy

F. M. Murphy, Acting Chief
Division of Minerals

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 23 1963

DATE	INITIALS	CODE
10/23		800
		~~120~~
10-29		100
		~~110~~
	Murphy	500

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since December 14, 1962, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒ ?

Property was sold on May 17, 1963 to Federal-Radorock-Gas Hills Partners, 1370 South 3rd West Street, Salt Lake City, Utah. We have only one copy of the instrument covering the sale, which is a large bound book containing several hundred pages. We suggest that you have a representative of your office visit us to inspect this instrument.

2. Since December 14, 1962, has there been any production from the land subject to the contract? Yes ☐ No ☒

A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity	Estimated Grade	Location
Ore	Tons		
Concentrates	Tons		
Other	Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☒

A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name [signature] Title Controller

Address 655 Church Street, Indiana, Pa. Date October 22, 1963

4511

10/10/63 - Hold this form until we receive a reply to our letter of 10/11/63.

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

September 11, 1963

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Mr. D. R. Pickard
Controller
Vitro Minerals Corporation
Indiana, Pennsylvania

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

F M Murphy

F. M. Murphy, Acting Chief
Division of Minerals

not signed document?

should get signature.

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 19 1963

DATE	INITIALS	CODE
9/19		800
		120
9/19		160
	Murphy	500

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since December 14, 1962, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes [X] No [ ]

   Sold on 5/17/63 to Federal-Radorock-Gas Hills Partners, 1370 South 3rd West Street, Salt Lake City, Utah

2. Since December 14, 1962, has there been any production from the land subject to the contract? Yes [ ] No [X]

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore Concentrates	2,965	Tons	.18	Fremont County, Wyoming
		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes [ ] No [X]

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name D. R. Pickard Title Controller

Address Vitro Minerals Corporation, Indiana, Pa. Date September 16, 1963

4511

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
10/10	Murphy	500
10/10	on leave	500
	Selfridge	120
10/14	Johnson	110
4	Finch	100
		220

OCT 1 4 1963

Mr. D. R. Pickard
Controller
Vitro Minerals Corporation
Indiana, Pennsylvania

Re: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract Idm-E963

Dear Mr. Pickard:

We are enclosing two new copies of MME Form 63 for execution. Will you personally sign these copies rather than type in your name as was done on the forms you returned September 19, 1963.

Also, will you kindly submit a copy of the instrument covering the sale of the above-referenced claims on May 17, 1963, to Federal-Radereck-Gas Hills Partners.

Sincerely yours,

George Fumich, Jr.

Director

(RF)

Enclosures

FMMurphy/mm
10/10/63
cc: Director's Reading File
Region III w/ cy of 63
Docket
Code 500

43683

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 2 1962

DATE	INITIALS	CODE
8/2	gla	500
		220

Building 20 - Federal Center
Denver 25, Colorado

July 30, 1962

Memorandum

To: Fiscal Section, Division of Administrative Services
Office of the Secretary, Department of the Interior
Washington 25, D. C.

From: Acting Field Officer, OME, Region III

Subject: DMRA-4182 (Uranium)
Contract Em-E963
Vitro Minerals Corporation
(George and Ver Group of Claims)
Fremont County, Wyoming

Attached is the original Report of Royalty Review on the subject contract dated July 25, 1962 covering the period June 18, 1959, through June 14, 1962.

Original signed by

Hugh M. Connors

Attachments
HMC/lm
cc Chief, Division of Field Operations, OME
E. D. Talbert, Acting Chief
Contract Administration and Audit Division
Royalty Corres E963
Chron

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

JUL 27 1962

Memorandum

To: Acting Field Officer, Region III

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Group of Claims
Fremont County, Wyoming
Contract Idm-E963

The original and one copy of a Report of Royalty Review covering the subject contract are enclosed. If you concur in the facts stated therein, please make the following distribution:

(a) Original to the Fiscal Section, Division of Administrative Services, Office of the Secretary, Department of the Interior, Washington 25, D. C.; and

(b) One copy for your files.

This Report of Royalty Review is made for record purposes only; therefore, no copy for the Operator is provided.

As evidence of your concurrence, a copy of your memorandum transmitting the original report to the Fiscal Section should be furnished this Division. If for any reason you do not concur, both copies of the report should be returned to this Division with your comments.

Enclosures

EDTalbert/ama 6-27-62

cc:
Docket
Director's Reading File
CA & A Division
Fiscal Section

4368

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

APR 1 0 1962

Memorandum

To: Chief, Division of Field Operations

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: DMSA-4177 (Zinc)
The New Jersey Zinc Company
Eidson Area
Hawkins County, Tennessee
Contract Idm-E956

Enclosed are the original and two copies of a Report of Royalty Review covering the subject Region IV contract. If you concur in the facts stated therein, please make the following distribution:

(a) Original to the Fiscal Section, Division of Administrative Services, Office of the Secretary; and

(b) Two copies to Region IV files.

This report is for OME record purposes only; therefore, no copy has been provided for the Operator.

As evidence of your concurrence, a copy of your memorandum transmitting the original of the report to the Department's Fiscal Section should be furnished this Division. If for any reason you do not concur, the original and both copies should be returned to this Division with your comments.

Enclosures

EDTalbert/ama 4-10-62

cc:
Docket
Director's Reading File
CA & A Division
Mr. Rothrock

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/23	G	220
		700

JUN 23 1959

Memorandum

To: Mr. Donald T. Finch, OME Auditor

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: Docket No. DMEA-4182 (Uranium)
Vitro Minerals Corporation
Contract No. Idm-8963

Your Report of Royalty Review on the subject contract is acceptable and distribution of the regional copies is authorized.

EDTalbert/ama
June 22, 1959

Copy to: Docket
Director's Reading File
Code 800

43683

AME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/22/59	Murphy	700
1/22	Krause	700
"	Chambers	800
1/23	Selfridge	130
		~~110~~
		~~100~~
1/26	C	220
		700
1/23	Burch	130
"	Nelson	130

JAN 23 1959

Mr. Jesse C. Johnson
Director, Division of Raw Materials
Atomic Energy Commission
Washington 25, D. C.

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Dear Mr. Johnson:

In accordance with our letter of September 30, 1957, we are supplying the following additional information regarding the subject certified project for your records.

The contract, dated June 14, 1956, covered an exploration project estimated to cost $64,816.00, with Government participation amounting to 75 percent, or $48,612.00. Total accepted costs of the project were $34,312.32, of which the Government paid $25,734.23.

The project area included the George Nos. 1 through 7 and the Ver Nos. 1 through 11 unpatented mining claims, situate in secs. 22, 26, and 27, T. 33 N., R. 90 W., 6th P.M., Fremont County, Wyoming. The work completed consisted of the drilling of 406 holes from the surface, aggregating 67,794 feet, designed to explore the underlying Wind River formation of lower Eocene age.

The exploration work resulted in the discovery of uranium mineralization in two distinct zones within the upper Wind River formation. The estimated ore reserves are as follows:

Oxidized zone (7 blocks)

	Overburden feet	Ore Thickness feet	Percent U_3O_8	Short tons
Indicated	43	2.63	0.16	4,025
Inferred	43	2.62	0.15	7,582

43683

Unoxidized zone (27 blocks)

	Overburden feet	Ore Thickness feet	Percent U_3O_8	Short tons
Indicated	176	4.03	0.177	59,485
Inferred	176	3.82	0.187	74,130
Totals and averages			0.173	145,222

Sincerely yours,

Frank E. Johnson (for)

Acting Director

Copy to:
Mr. Elton A. Youngberg
AEC Grand Junction Operations Office

FMMurphy/gla
1-22-59
cc to: Director's Reading File
Frank E. Johnson
Frank D. Lamb, 3608
T. H. Kiilsgaard, 5224
F. M. Murphy
OME Field Team, Region III (2)
Oper Com.

MR. SELFRIDGE:

Does this letter require the "OME successor to DMEA" sentence?

HBerry

[illegible]

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/22/59	Murphy	700
1/22	Kubrate	700
"	Chamlee	800
1/23	Selfridge	180
		~~110~~
		~~100~~
		~~30~~
		220
		700

1/23 Burch (130)
" Nelson (130)

Mr. C. J. Potter, President
Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

JAN 23 1959

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963
George and Ver Claims
Fremont County, Wyoming

Dear Mr. Potter:

Reference is made to our letter of September 30, 1957, enclosing a certification of discovery or development covering the subject property.

At the time of our letter the exact amount contributed by the Government under this project was subject to audit. Subsequently, an audit determined the amount to be $25,734.23 which is repayable by your company through royalty on production. Payments should be made in accordance with the instructions contained in the above-mentioned letter except that checks should be made payable to the Office of Minerals Exploration and sent to the Executive Officer at 224 New Customhouse Building, Denver 2, Colorado.

Sincerely yours,

Frank E. Johnson (fio)

Acting Director

Copies to:
Mr. John E. Bansept, Agent
Box 257, Lander, Wyoming

Fremont Metal and Mining, Inc.
Baldwin Building
310 Main Street
Lander, Wyoming

FMMurphy/gla
1-22-59
cc to: Director's Reading File
Mr. Selfridge
Frank E. Johnson
Frank D. Lamb, Rm. 3608
T. H. Kiilsgaard, Rm. 5224
F. M. Murphy
Div. of Contract Adm. & Audit
OME Field Team, Region III (2)
Oper cum.

43683

Docket copy

Murphy

Project Summary Report

By: F. M. Murphy January 20, 1959

1. Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963

Operator - Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

Operator's Property Rights -

The George Nos. 1 through 7 and the Ver Nos. 1 through 11 unpatented mining claims, situate in secs. 22, 26, and 27, T. 33 N., R. 90 W., 6th P.M., Fremont County, Wyoming.

The Operator is the owner of an undivided half-interest in each group of claims. Consents to lien were signed by the owners of the remaining half of each group as follows:

George group - John E. Bansept, Josephine F. Bansept, Robert Jerome Albert, John Bansept, Sr., George J. Snyder, Emma W. Snyder, and Clark Decker; and

Ver group - by Fremont Metal and Mining, Inc.

2. Contract, dated June 14, 1956.

Amendment No. 1 -

October 18,1956, added two holes in Stage I, with no increase in total estimated cost of contract.

Amendment No. 2, dated January 10, 1957 -

Allowed a suspension of work from November 27, 1956, to March 15, 1957. Also extended completion date to August 14, 1957, and increased the maximum royalty period to 11 years.

Termination Agreement, dated August 21, 1957, by mutual agreement.

Work authorized -

	Stage I No. holes - 64		Stage II No. holes-220		Stage III No. holes - 188	
	Units	Cost	Units	Cost	Units	Cost
Non-core drilling @ $0.70/ft.	10,690	$ 7,483.00	35,360	$24,752.00	30,080	$21,056.00
Standby time @ $10.00/hr.	32	320.00	110	1,100.00	94	940.00
Incidental allowance @ $0.09/ft.	10,690	962.10	35,360	3,182.40	30,080	2,707.20
Analyses for U_3O_8 @ $1.25/sample	250	312.50	850	1,062.50	750	937.50

Estimated Total Cost of Project (rounded) $64,816.00
Government Participation @ 75% $48,612.00

Work Completed -

	Stage I No. holes - 64		Stage II No. holes-175		Stage III No. holes - 167	
	Units	Cost	Units	Cost	Units	Cost
Non-core drilling:						
Stage I @ $0.55/ft.	9,662	$ 5,355.86				
Stage II @ $0.40/ft.			31,665	$12,600.48		
Stage III @ $0.36/ft.					26,437	$9,534.52
Incidental allowance	9,662	869.58	31,665	2,852.55	26,437	2,379.33
Analyses	52	65.00	288	360.00	236	295.00
Totals		$6,290.44		$15,813.03		$12,208.85

Grand total cost. $34,312.32

The project work started July 15, 1956, and terminated effective June 1, 1957.

Final Reports -

Operator's: Received in Region III August 28, 1957.
Field Team's: Received in Washington, January 12, 1959.

3. Audit Report of Review, dated October 17, 1957 -

Total cost as billed by Operator	$35,006.78
Exceptions * (by Finance Officer)	694.56
Total accepted cost	$34,312.32
Government participation @ 75%	$25,734.23

* Some holes were redrilled to greater depths in Stage II. Operator claimed for both original and later redrilling. Only the additional depth drilled was allowed. Also, 91 feet, drilled beyond the potential ore-bearing zone in hole 37-28.5, was disallowed.

4. Certification issued September 30, 1957.

5. Final Field Team report, and Comments -

Excerpts from Joint Final Engineering and Geologic Report by F. B. Moore, USGS, and M. H. Marshall, USBM:

The claims are situated on the western flank of the Gas Hills anticline on a northly-trending slope, at a mean altitude of 6,480 feet and a relief of 120 feet over approximately one mile.

The sedimentary rocks that underlie the property and immediately adjacent areas consist of sandstones, claystones, shale, and conglomerate of the Early Eocene Wind River formation. The Wind River formation was laid down on the rough topography of a deformed and eroded sequence of rocks of Mesozoic age.

The Wind River formation in this area has been divided into two units -- a lower fine-grained facies and an upper coarse-grained facies. Known uranium deposits in the area occur in the lower part of the upper coarse-grained facies. It consists of cross-bedded, medium to coarse-grained arkosic sandstone, conglomerate, and lesser amounts of siltstone, claystone, and shale. The lithology changes rapidly both laterally and vertically; individual sandstone beds thus cannot be traced for a distance of more than a few hundred feet and correlations from one locality to another are virtually impossible. The thickness of the upper unit of the Wind River formation is about 600 feet where the entire unit is present. In the project area the remaining upper unit ranges from 40-60 feet in the northwestern part to 200-250 feet in the southern and eastern parts.

– All exploration was conducted with truck mounted non-core rotary drills. All holes were started with air as the circulating medium. When ground water was encountered in drilling, then water was used as the circulating medium and the holes drilled to target depth.

The DMEA drilling adequately explored the project area. Numerous ore bodies were found but were, in general, small and at depths (150-200 feet) which would make mining uneconomical at this time. However, sufficient amounts of uranium ore were discovered to warrant certification. All ore discovered was in the Upper Wind River formation of which the top two-thirds has been removed by erosion. Within this unit the ore

occurs at several horizons.

In the north half of the property, mineralization occurred in an oxidized zone at depths ranging from 26 feet to 60 feet below the surface. The minerals in the oxidized zone are not in equilibrium; therefore, calculations of ore reserves are based on fluorometric determinations of uranium values.

In the south half of the property mineralization was found in significant quantities below the water table, ranging from 121 feet to 240 feet below the surface in an unoxidized zone. In this zone, equilibrium was not a problem; therefore radiometric probe results were used in calculating ore reserves. The experience of Vitro and Utah Construction Co. (Lucky Mc mine) with open pit mines to the east has shown that probe results are usually below the assay returns of mined material by a ratio of 2 to 1. Therefore, the grade of the following ore reserves may be up to double that actually calculated.

Summary of Ore Reserves

	Overburden feet	Ore Thickness feet	Percent U_3O_8	Short tons
Oxidized zone (7 blocks)				
Indicated	43	2.63	0.16	4,025
Inferred	43	2.62	0.15	7,582
Unoxidized zone (27 blocks)				
Indicated	176	4.03	0.177	59,485
Inferred	176	3.82	0.187	74,130
Totals and averages	-	-	0.173	145,222

There has been no production from the subject claims to date. However, the Operator, at his own expense, is presently drilling the ore bodies discovered in anticipation of exploiting the project area in the near future.

Division of Rare and Miscellaneous Metals:

The Operator in its final report estimated the ore reserves as follows:

Overburden feet	Ore thickness feet	Percent U_3O_8	Tonnage
144	3	0.18	56,000

The overburden of 144 feet is the average over the oxidized and unoxidized ore zones. The operator notes that with ore 3 feet thick and overburden 150 feet thick the stripping ratio is 50:1, and that this ratio prohibits strip mining for ore assaying 0.18% U_3O_8 at the present price of uranium. Also, it notes that underground mining of the material is not considered practical. Under these circumstances, the Operator concludes that although good mineralization was encountered, no commercial ore was discovered under the DMEA program.

The Operator is correct in its conclusions regarding the present commercial value of the ore discovered based on its estimates of the percentage of U_3O_8 in the reserves. However, as mentioned before, the grade of the ore may be double the estimated grade, hence, commercially exploitable at present prices for U_3O_8. This, as well as the significant tonnage of ore discovered, was taken into consideration by DMEA when the project was certified.

F. M. Murphy

F. M. Murphy

DMEA Form 17
Feb. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

M

WORK COMPLETED ANALYSIS

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

Operator: Vitro Minerals Corporation		Actual Cost	X
State: Wyoming		Agreed Unit Cost	
Final Report of Audit		Commodity: Uranium	Docket No. DMEA-4182
Final Report of Review	x		Contract No. Idm-E963

Operation	Authorized by Contract and Amendments		Completed		Net cost after sale of Government Property
	Units	Cost	Units	Cost	
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) rotary non-core	76,130	62,504.00	67,774	33,592.32	33,592.32
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Assays for U_3O_8 @ $1.25/sample		2312.00		720.00	720.00
Totals		$64,816.00		$34,312.32	*$34,312.32

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

~~[illegible]~~

Certified

Prepared by [illegible] Date 11/10/58

31398

(Incomplete)

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
224 New Customhouse
Denver 2, Colorado
January 5, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 12 1959

DATE	INITIALS	CODE
1/12	C	220
1/12	esf	130
1/12	[illegible]	110
1/16	[illegible]	130
1/16	C	220
1/19	Murphy	700

Memorandum

To: Chairman, Operating Committee, OME

From: Field Team, Region III

Subject: Docket No. DMEA 4182 (Uranium) Contract Idm-1963
Vitro Minerals Corporation, (George and Ver claims)
Fremont County, Wyoming - FINAL SUMMARY REPORT

Enclosed are the original and two copies of a Joint Final Engineering and Geologic Report, dated December 23, 1958, by F. B. Moore, Geologist, Geological Survey, and Milton H. Marshall, Mining Engineer, Bureau of Mines, pertaining to work completed under the subject contract. The original and one copy of the Operator's final report were submitted by memorandum of August 30, 1957.

The contract was terminated before completion of all work originally provided for, by a Termination Agreement, dated August 21, 1957, which was made effective June 1, 1957.

Final payment was processed by this office October 29, 1957, in conformance with the Report of Review of reported project costs, by the Contract Administration and Audit Division, OME, dated October 17, 1957.

Exploration work completed consisted of the drilling of 406 holes, aggregating 67,794 feet of non-core drilling. Additional work or service incident to the drilling consisted of chemical analysis of 576 samples for U_3O_8 content, and incidental allowance for 67,794 feet of drilling; all at a total accepted cost of $34,312.32, toward which the Government contributed 75 percent, or $25,734.23.

The exploration work completed resulted in the discovery or development of a significant quantity of uranium ore, on which a Certification of Discovery or Development was issued September 30, 1957.

Enclosures

By J. W. Townsend
J. W. Townsend

By E. N. Harshman
E. N. Harshman

Reviewed by
OME OPERATING COMMITTEE
1-16-59
(Date)

FINAL F.T. REPORT

OME, Reg. III

JAN 5 - 1959

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

OFFICE OF MINERALS EXPLORATION

JOINT FINAL REPORT BY EXAMINING TEAM
REGION III

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 12 1959

DATE	INITIALS	CODE
1/16	JHB	130
		220

DMEA 4182

Contract Idm-E 963

Vitro Minerals Corporation

George and Ver claims

Fremont County, Wyoming

Uranium

Joint Final Engineering and Geologic Report

by

F. B. Moore, Geologist
Geological Survey

Milton H. Marshall, Mining Engineer
Bureau of Mines

December 23, 1958

Reviewed by
OME OPERATING COMMITTEE
1-16-59
(date)

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ILLUSTRATIONS

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1.	Location map, George and Ver claim groups, Vitro Minerals Corporation, Fremont County, Wyoming. DMEA 4182, Contract Idm-E 963	2
2.	Map of George and Ver group showing location of DMEA drill holes, Vitro Minerals Corporation, Fremont County, Wyoming. DMEA 4182	21
3.	Geologic map of part of Gas Hill area, showing location of George and Ver groups of claims, Vitro Minerals Corp., Fremont County, Wyoming	21
4.	Map showing locations of ore reserve blocks, Vitro Minerals Corporation, Fremont County, Wyoming	21
5.	Vertical section A-A' (figure 2), George and Ver claim groups, Gas Hills district, Fremont County, Wyoming	21
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DMEA 4182

CONTRACT Idm-E 963

VITRO MINERALS CORPORATION
GEORGE AND VER CLAIMS
FREMONT COUNTY, WYOMING

INTRODUCTION AND SUMMARY

On February 10, 1956, an application for Government assistance was received from Vitro Minerals Corporation. The applicant proposed to explore a mineralized target area underlying the George and Ver claims for uranium by core and non-core drilling to cost $85,657.00. A field examination was made April 10, 1956. The field examiners recommended a three-stage, non-core drilling program at an estimated total cost of $64,694.50.

The applicant was awarded contract Idm-E 963, dated June 14, 1956, which provided for a three-stage non-core drilling project at an estimated total allowable project cost of $64,816.00, with Government participation at 75 percent or not to exceed $48,612.00.

The project work started July 15, 1956, and terminated effective June 1, 1957. The work resulted in the discovery of a significant quantity of uranium upon which a certification of discovery or development was issued September 30, 1957.

PROPERTY

Ownership

Vitro Minerals Corporation is the owner of an undivided one-half interest in each group of claims with exclusive possession of the premises pursuant to agreements with the other co-owners. Consent to Lien on the George claims Nos. 1 through 7 and on the Ver claims Nos. 1 through 11 were signed by or for the other owners.

The 18 claims, all unpatented lode mining claims, are recorded as follows at the County Recorder's Office, Lander, Wyoming:

Amended Notices of Location

Claim	Book No.	Page No.	Date
George No. 1-7	147	438-444	12/3/55
Ver Nos. 1-11	147	463-473	12/5/55

Location and description

The 18 claims are located in east-central Fremont County, Wyoming (figs. 1 and 2) in the Gas Hills mining district. The claims are in secs. 22, 26, and 27, T. 33 N., R. 90 W., sixth principal meridian. The George group comprise 7 claims. The Ver group comprise 11 claims. The George No. 7 and Ver No. 11 are fractional claims staked to cover a gap between the two groups of claims.

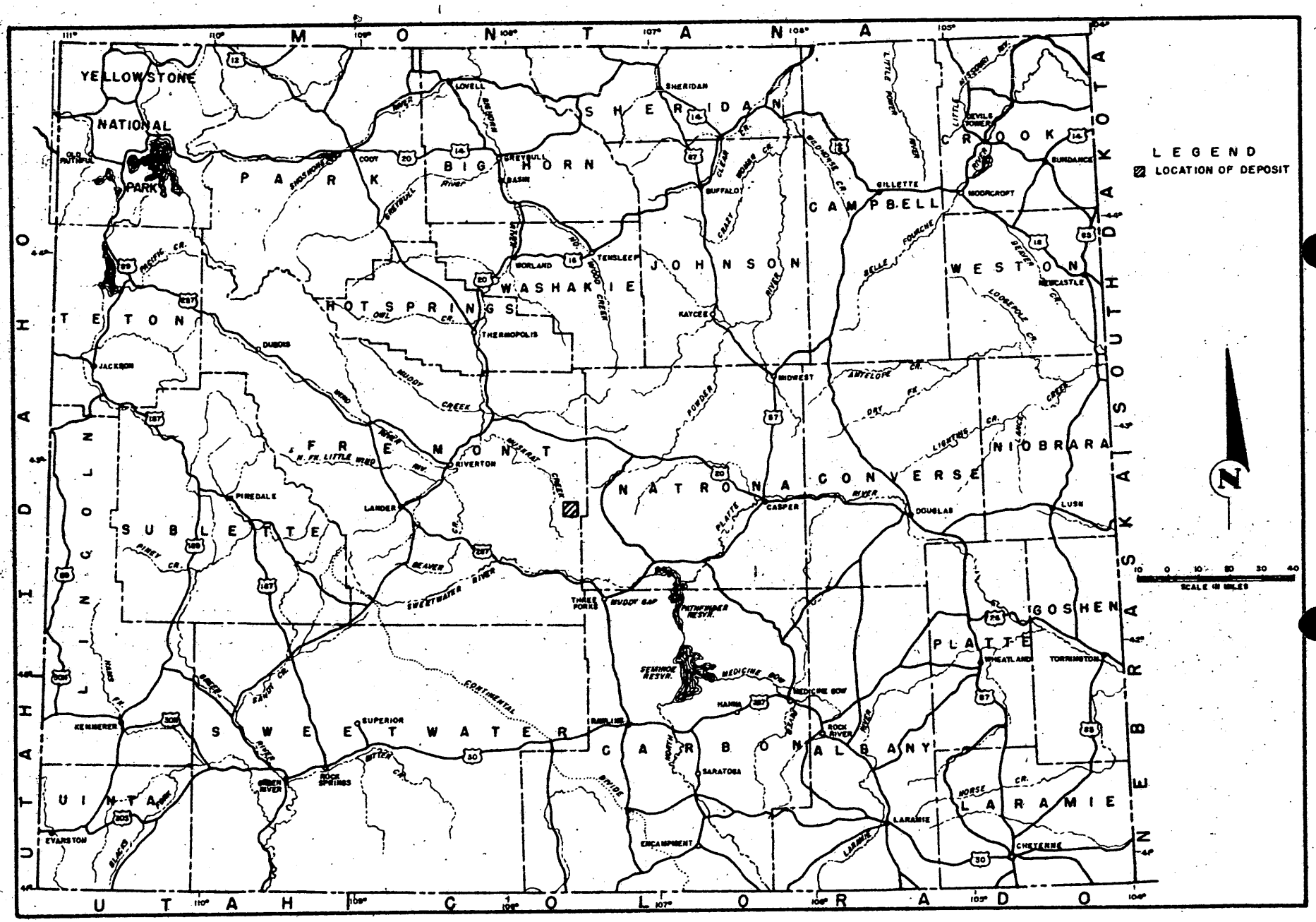

FIGURE 1 - LOCATION MAP, GEORGE AND VER CLAIM GROUPS, VITRO MINERALS CORPORATION, FREMONT COUNTY, WYO. DMEA 4182

The claims are at a mean altitude of 6,480 feet above sea-level with a relief of 120 feet. Vegetation consists of sagebrush, native grasses, and cacti.

Access

The claims are accessible by traveling northeasterly from Jeffry City (located on U. S. Highway 287, 27 miles west of Three Forks, Wyoming) on the newly constructed and graded Lost Creek Road for a distance of 29.0 miles to the Lucky Mc mill, then south on a mine road 0.6 mile to the property, which is bisected by the road.

Climate

Temperatures range from below 0° F in winter to about 90° F in the summer. Although the claims are located in a semi-arid region, local intense rainstorms occurring during the spring and summer months frequently cause severe damage to access roads. Likewise, winter snows accompanied by constant winds result in considerable drifting which make roads in the area temporarily impassable.

Supply

Stock ponds in the vicinity provide limited quantities of water for industrial purposes. Additional industrial water may be obtained from wells ranging from 130 to 180 feet in depth. Domestic water is trucked in from either Moneta, 30 miles northwest, or Jeffry City,

approximately 28 miles southwest of the property. There are no trees in the vicinity suitable for mine timber. Riverton, Wyoming, (58 miles west) is the closest town for obtaining mining supplies.

HISTORY AND PRODUCTION

History

The intensive search for uranium in the Gas Hills district began in 1953 with the discovery of uranium ore near the site of the present Lucky Mc mine. The George Nos. 1-6, and Ver Nos. 1-10 claims were originally located in October and November 1953. The claims were recorded initially November 2, 9, and 12, 1953. George No. 7 and Ver No. 11 fractional claims were located April 21, 1954, and recorded May 3, 1954.

Production

There has been no production from the subject claims to date. However the operator, at his own expense, is presently drilling the ore bodies discovered in anticipation of exploiting the deposit in the near future.

GEOLOGY AND ORE DEPOSITS

Stratigraphy

The sedimentary rocks that underlie the George and Ver groups of claims and the immediately adjacent areas consist of sandstones, claystones, shales, and conglomerates belonging to the Wind River formation of Early Eocene age. The Wind River formation was laid down on the rough topography of a deformed and eroded sequence of rocks of Mesozoic age.

No bedrock is exposed on the applicant's property but, in the pits of Vitro Minerals Corporation and Utah Contruction Company (Lucky Mc mine), respectively, about 2,500 feet and 600 feet east of the east edge of Ver 1 and Ver 2 claims, good exposures of parts of the Wind River formation occur. The Wind River formation has been described in some detail by Zeller and others of the U. S. Geological Survey (1955, p. 14-19), and their report has been drawn upon freely.

The Wind River formation in the Gas Hills area has been divided into two units--a lower fine-grained facies and an upper coarse-grained facies. Known uranium deposits in the area occur in the lower part of the upper coarse-grained facies.

In general, the lower facies consists of fine-grained sandstone, siltstone, claystone, and carbonaceous shale. The color of the unit generally is some shade of gray or grayish green. Zeller records the

thickness of the unit in the Gas Hills area as about 125 feet. The unit is exposed on the north-facing slope in the northwest quarter of section 22 (fig. 3). Because the eroded surface upon which the Wind River formation was deposited rises rapidly to the south and east, the lower facies pinches out in these directions and the upper facies rests directly on the Mesozoic rocks. It is doubtful whether any appreciable thickness of the lower facies underlies the applicant's claims.

The upper facies is the ore-bearing unit in the Gas Hills area. It consists predominantly of crossbedded, medium- to coarse-grained arkosic sandstone, conglomerate, and lesser amounts of siltstone, claystone, and shale. The sandstone beds generally are weakly cemented and appear quite permeable. The lithology changes rapidly, both laterally and vertically; individual beds thus cannot be traced for distances of more than a few hundred feet and correlations from one locality to another are virtually impossible. Zeller gives the thickness of the upper unit of the Wind River as 600 feet where the entire unit is present. In the exploration area the remaining upper unit ranges in thickness from 40-60 feet in the northwestern part to 200-250 feet in the southern and eastern parts.

Structure

The major structure in the area is the Gas Hills anticline (Dutton Basin anticline). The Gas Hills anticline is an asymetric,

northwest-plunging fold, pre-Wind River in age, upon the flanks of which the sediments comprising the Wind River formation were deposited. The applicant's property lies on the western flank of the anticline in an area where the lower Wind River sediments rapidly pinch out against the steeply dipping western limb and the upper Wind River sediments thin toward the crest. The Wind River beds dip at angles of less than 4° to the south and southeast. Post Wind River faulting in the area south of the Gas Hills probably has modified the initial dip of the Wind River formation to some degree. DMEA drilling has indicated the probable presence of several east-trending faults with displacements of 20 to 60 feet (fig. 3). One, called the Lucky Mc fault in this report, is exposed in the Lucky Mc pit to the east.

Uranium deposits

Uranium deposits in the Gas Hills area occur in the lower part of the upper facies of the Wind River formation and are of two common types and one infrequent type. The first type consists of lenses and pods of oxidized uranium minerals occurring as encrustations and interstitial fillings in the friable sandstone and siltstone in the zone of oxidation above the water table. The sandstones associated with the oxidized ore are tan to reddish-brown due to the presence of iron oxides, and they appear quite permeable. It is probably these near-surface deposits of uraniferous material that produce small areas of

anomalous radioactivity on the surface. According to Zeller, meta-autunite is the most common mineral in the oxidized deposits. The oxidized zone extends downward from the surface approximately to the present ground water level which ranges from about 60 to 80 feet below the surface.

The second general type of deposit consists of irregular blankets of uraniferous material at or near the top of the unoxidized zone or at deeper horizons within or overlying claystone layers. Aggregates and disseminations of pyrite, uraninite, and some carbonaceous material are associated with weakly cemented dark-gray or blue-gray coarse-grained sandstone or claystone. The experience of the applicant in the Vitro pit in section 26 has been that the most favorable lithology and richest ore zone is a blue-gray claystone that occurs very close to the top of the unoxidized zone. This relatively impermeable bed, some 15 feet thick, probably controls the level of the ground water table and, consequently, the depth of oxidation at this locality. The impermeable nature of the bed has also provided an effective trap for the solutions that have leached uranium from the overlying permeable beds. In areas where a claystone does not coincide with the top of the unoxidized zone, ore has been found in the sandstone that occupies the same position with respect to the top of the unoxidized zone.

A third, less frequent type of ore occurrence was observed in one of the pits being operated by the applicant. The ore is unoxidized

and in a claystone lens close to the surface within the oxidized zone. This lens is completely surrounded and doubtless underlain by oxidized sandstone beds. The clayey lens presented a barrier to the downward-moving solutions and perhaps held up a very local "perched" water table. Reducing conditions prevailed within the relatively impermeable claystone lens and uranium was precipitated from the downward-moving water and concentrated within the lens.

PROPOSED EXPLORATION

The original application for Government aid dated February 2, 1956, was received February 10, 1956. The applicant first proposed to explore the upper member of the Wind River formation underlying the George and Ver claims by a three-stage core and non-core drilling program estimated to cost $85,217.00. The estimated total cost of the project was increased by the applicant April 2, 1956, to $85,657.00, as the result of a revision of bid costs for drilling. The first stage was to consist of 150 holes spaced on 300-foot centers with an average estimated depth of 120 feet for a total of 18,000 feet. One-fifth of the drilling would be core drilling. Stage II, dependent on the results of Stage I, comprised approximately 240 offset holes totaling 28,800 feet of drilling. One-fifth of the footage would be core drilling. Stage III on 50-foot centers, with one-fourth of the footage cored, comprised 150 holes,

each 100 feet deep, for a total of 15,000 feet. Stage III work was designed to determine whether or not a mineable ore body is present.

RECOMMENDED EXPLORATION

A field examination was made April 10, 1956, by R. E. Davis and M. H. Bergendahl, Geological Survey, and H. F. Robertson and C. M. Harrer, Bureau of Mines. D. L. Walsh accompanied the examiners as representative for the applicant. The Government's field examiners recommended that the project proposal be somewhat modified with a resultant decrease in total cost.

The recommended exploration project consisted of a three-stage non-core drilling program estimated to cost a total of $64,694.50. Stage I comprised 64 holes totaling 10,690 feet. Sixty-two of the holes were to be drilled in the north half of the project area, and two holes were to be drilled in the south half of the project area. Stage II, dependent on the results of Stage I, consisted of drilling conducted in three phases. Phase 1 comprised an estimated 65 holes to be drilled in the south section of area. Phase 2 comprised an estimated 76 offset holes to favorable Stage I holes. Phase 3 comprised an estimated 80 offset holes around favorable Phase 1 holes and the two holes drilled under Stage I in the south half of the project area. Stage III, dependent on results of Stages I and II, was to consist of drilling an estimated 188 holes as offsets to favorable Stage II holes.

SUMMARY OF CONTRACT PROVISIONS

Original provisions

Contract No. Idm-E 963, dated June 14, 1956, provided for a three-stage non-core drilling program at an estimated total allowable cost of $64,816.00 with Government participation at 75 percent or not to exceed $48,612.00.

Stage I consisted of drilling 63 holes estimated to aggregate not more than 10,690 feet. Fifty-eight holes were to penetrate the upper Wind River formation; five holes were to penetrate the entire thickness of Wind River formation. Stage II was divided into three phases. Phase 1 consisted of drilling 64 holes estimated to aggregate not more than 10,400 feet; Phase 2 consisted of drilling 76 holes estimated to total not more than 12,160 feet; and Phase 3 consisted of drilling 80 holes, estimated to total not more than 12,800 feet. Stage III comprised not in excess of 188 holes, totaling not more than 30,080 feet.

Article 3 of the contract stipulated that work was to start on or before July 15, 1956, and be completed by January 1, 1957.

Modifications

The contract was modified by 2 amendments and complemented by 4 work approvals described as follows:

1. Amendment No. 1 -- Effective October 18, 1956, increased the total number of holes to be drilled under Stage I from 63 to 64. The increase was due to increasing the number of holes designed to penetrate only the upper Wind River formation from 58 to 59.

2. Work Approval -- Effective October 19, 1956, approved 64 Stage II, Phase 1 holes not to exceed 12,300 feet of non-core drilling; and 36 Stage II, Phase 2 offset holes aggregating an estimated 3,640 feet.

3. Amendment No. 2 -- Effective January 10, 1957, suspended work from November 27, 1956, to end not later than March 15, 1957, and extended the completion date from January 1, 1957, to August 14, 1957. The royalty payment period was extended from 10 to 11 years.

4. Work Approval -- Effective January 17, 1957, approved 75 Stage II, Phase 3 offset holes, totaling an estimated 15,625 feet of non-core drilling, and approved 95 Stage III offset holes estimated to total 10,595 feet of non-core drilling.

5. Work Approval -- Effective April 24, 1957, approved 73 Stage III offset holes totaling an estimated 15,030 feet of non-core drilling limiting the depth to not less than 10 nor more than 20 feet below the bottom of the mineralized zone.

6. Work Approval Change -- Effective April 24, 1957, rescinded hole depth limitation stipulated in work approval effective April 24, 1957.

Units and costs

The units of work and estimates of costs provided by the contract as specified by subsequent amendments are summarized by Table 1.

SUMMARY OF PROJECT WORK COMPLETED

Work

All exploration was conducted with truck mounted non-core rotary drills. All holes were started with air as the circulating medium. When ground water was encountered in drilling, water was then used as the circulating medium and the holes drilled to target depth.

Stage I work started July 15, 1956, and completed August 27, 1956, with 64 holes drilled (figure 2) for a total footage of 9,753 feet, of which 9,662 feet were acceptable to the Government.

Stage II work was completed in 3 distinct phases. Phase 1 and 2 work was started concurrently October 29, 1956, and ended November 26, 1956. Sixty-four holes totaling 12,255 feet of drilling were completed under Phase 1. Thirty-six holes for a total of 3,665 feet were drilled under Phase 2. Owing to favorable results obtained from drilling Phase 1, permission was granted for the operator to drill Phase 3. Accordingly, 75 offset holes were drilled for a total footage of 15,775 feet.

Results obtained merited work under Stage III and during the period February 25, 1957, through March 5, 1957, ninety-four offset holes were drilled aggregating 10,720 feet of non-core rotary drilling. As results were favorable, the operator was authorized to drill and drilled 73 additional Stage III offset holes, starting April 30, 1957,

and ending May 30, 1957, for a total of an additional 15,717 feet of drilling, finishing contract work. A termination agreement effective June 1, 1957, was signed by the operator and returned to the Government thus terminating work under the contract.

The number of holes drilled and acceptable footages for each stage of work and for the contract are:

Stage	No. holes	Footage
I	64	9,662
II, Phase 1	64	12,255
II, Phase 2	36 175	3,665
II, Phase 3	75	15,775
III	167	26,437
Contract total	406	67,794

Units and costs

The units and costs for each item of work acceptable to the Government are summarized in Table I. All units and costs have been accepted as correct by the Contract Audit and Administration Division, DMEA, and final payment was made to the operator October 31, 1957.

Table 1.--Summary of items, units, and costs of work

Item of work	Provided by Contract			Accepted by Government		
	Units	Cost per unit	Costs	Units	Cost per unit	Costs
Stage I						
Non-core drilling	10,690	$ 0.70	$ 7,483.00	9,662	$ 0.55 *	$ 5,355.86
Standby time	32	10.00	320.00	0	--	0.00
Incidental allowance	10,690	0.09	962.10	9,662	0.09	869.58
Analyses	250	1.25	312.50	52	1.25	65.00
Total			$ 9,077.60			$ 6,290.44
Stage II						
Non-core drilling	35,360	$ 0.70	$24,752.00	31,695	$ 0.40 *	$12,600.48
Standby time	110	10.00	1,100.00	0	--	0.00
Incidental allowance	35,360	0.09	3,182.40	31,695	0.09	2,852.55
Analyses	850	1.25	1,062.50	288	1.25	360.00
Total			$30,096.90			$15,813.03
Stage III						
Non-core drilling	30,080	$ 0.70	$21,056.00	26,437	$ 0.36 *	$ 9,534.52
Standby time	94	10.00	940.00	0	--	0.00
Incidental allowance	30,080	0.90	2,707.20	26,437	0.09	2,379.33
Analyses	750	1.25	937.50	236	1.25	295.00
Total			$25,640.70			$12,208.85
Total estimated costs, project			$64,816.00			---
Total accepted costs, project						$34,312.32
Government participation at 75%			$48,612.00			$25,734.23

* Approximate average cost per foot

GEOLOGIC RESULTS OF EXPLORATION

DMEA exploratory drilling on the George and Ver groups of claims has shown that bodies of ore-grade material are widely scattered in the area but are rather small and discontinuous. The drilling also showed that the ore occurs at deeper horizons than previously thought and is not largely restricted to the top of the unoxidized zone. The best ore bodies found were near the bottom of the upper Wind River formation at a depth of 120-150 feet or well below the top of the unoxidized zone (figs. 5, 6, & 7). Had this horizon coincided with the water table over much of the area, sizeable ore bodies might have been formed especially where optimum conditions prevailed, i. e., where faulting also occurred. This condition is approached in only one area on the two groups of claims. In the southern portion of the George 2 claims and the adjacent part of the George 3 claim the bottom of the upper Wind River formation is 40-70 feet deep or about at water table. A fault (Lucky Mc) trending west from the Lucky Mc pit, cuts across the southern end line of the George 2 claim. Several small discontinuous ore bodies occur in this area.

The Lucky Mc fault on the north (displacement 60 feet down on south side) and a second west-trending fault (displacement 20 feet down on north side) form a graben between coordinates 21 S and 33 S which appears to be a favorable ore structure especially where combined with what may be a southerly-trending channel at coordinate 37 E.

In general the small size and discontinuous character of the ore bodies in the project area probably results from the discontinuous nature of the upper Wind River claystone lenses which form local traps for the deposits.

Favorable places for further prospecting appear to exist in continuing eastward along and north of the Lucky Mc fault from the George 1 and 2 claims, and in following the coordinate 37 S channel (?) southward to intersections with other faults or graben. However, both these areas are outside the claim area controlled by the operator. The program as completed is believed to have adequately explored the George and Ver claim groups although a number of drill holes were bottomed at depths somewhat too shallow.

ORE RESERVES

oxides included

A total of 63,510 short tons of indicated ore and 81,712 short tons of inferred ore was discovered as a result of the exploration program. Mineralization was encountered in two distinct zones within the upper Wind River formation.

In the north half of the property, mineralization occurred in an oxidized zone at depths ranging from 26 feet to 60 feet below the surface. The minerals within the oxidized zone are not in equilibrium; therefore, radiometric probe results were of little value. Experience in the district indicated, however, that reliable determinations of

oxidized minerals could be obtained from fluorometric analyses. Hence, within the oxidized zone, calculation of ore reserves are based on fluorometric determinations.

Mineralization in the south half of the property was found in significant quantities below the water table, ranging from 121 feet to 240 feet below the surface in an unoxidized zone. In this zone equilibrium was not a problem; therefore, radiometric probe results were used in calculating ore reserves. The experience of Vitro and Utah Construction Co. with open pit mines to the east has shown that probe results are usually below the assay returns of mined material by a ratio of about 2 to 1. Therefore, the grade of the following reserve material may be up to double that actually calculated.

Calculations of reserves for the two zones of mineralization by reserve block (fig. 4) are summarized by Table 2.

Table 2.--Summary of ore reserves

Oxidized zone

Block No.	Over-burden	Indicated ore: Thickness (feet)	Indicated ore: Percent U_3O_8	Indicated ore: Short tons	Inferred ore: Thickness (feet)	Inferred ore: Percent U_3O_8	Inferred ore: Short tons
1	55	2.0	0.10	357	2.0	0.10	928
2	32	---	---	---	2.0	0.10	357
3	26	---	---	---	2.0	0.12	357
4	60	2.5	0.11	446	2.5	0.11	1,250
5	59	---	---	---	2.0	0.10	357
6	25	3.3	0.20	1,794	3.3	0.20	3,133
6-A	43	2.0	0.14	1,428	2.0	0.14	1,200
Totals & Averages	43	2.63	0.16	4,025	2.62	0.15	7,582

Unoxidized zone

Block No.	Over-burden	Indicated ore: Thickness (feet)	Indicated ore: Percent U_3O_8	Indicated ore: Short tons	Inferred ore: Thickness (feet)	Inferred ore: Percent U_3O_8	Inferred ore: Short tons
1	80	---	---	---	2.0	0.10	357
2	121	---	---	---	6.0	0.106	1,071
3	248	---	---	---	2.0	0.10	357
4	140	---	---	---	4.0	0.125	714
5	234	---	---	---	2.0	0.10	357
6	215	4.0	0.126	2,857	4.0	0.126	3,057
7	220	5.5	0.187	5,913	5.5	0.187	8,456
8	240	2.0	0.10	536	2.0	0.10	878
9	148	2.7	0.17	2,033	2.7	0.17	2,293
9-A	126	---	---	---	4.0	0.10	714
9-B	163	---	---	---	2.0	0.10	357
10	226	6.0	0.13	2,678	6.0	0.13	3,214
11	203	7.5	0.193	2,009	7.5	0.193	4,634
12	191	---	---	---	3.0	0.106	536
13	127	3.7	0.183	22,613	3.7	0.183	14,296

Table 2.--Summary of ore reserves (continued)

Unoxidized zone

Block No.	Over-burden	Indicated ore Thickness (feet)	Indicated ore Percent U_3O_8	Indicated ore Short tons	Inferred ore Thickness (feet)	Inferred ore Percent U_3O_8	Inferred ore Short tons
13-A	154	---	---	---	4.0	0.11	714
13-B	160	---	---	---	4.0	1.30	714
14	155	---	---	---	2.0	0.12	357
14-A	161	---	---	---	2.0	0.10	357
15	184	2.0	0.12	1,521	2.0	0.12	2,403
16	200	---	---	---	2.0	0.10	357
17	150	4.3	0.129	11,441	4.3	0.129	8,185
17-A	164	2.0	0.205	893	2.0	0.205	12,286
18	214	2.0	0.283	6,991	2.9	0.283	6,395
18-A	162	---	---	---	2.0	0.37	357
18-B	197	---	---	---	2.0	0.12	357
19	176	---	---	---	2.0	0.11	357
Totals & Averages	176	4.03	0.177	59,485	3.82	0.187	74,130

CONCLUSIONS AND RECOMMENDATIONS

DMEA drilling on the George and Ver groups of claims has adequately explored this area. Numerous ore bodies were found but were, in general, small and at depths (150-200 feet) which would make mining uneconomical at this time. However, sufficient amounts of uranium ore were discovered to warrant certification of the project on September 30, 1957.

All ore discovered was in the upper Wind River formation of which the top two-thirds has been removed by erosion. Within this unit the

ore occurs at several horizons. What are believed to be optimum conditions for deposition of uranium, i.e., (1) the coincidence of faulting, the water table, and the bottom of the upper unit or, (2) the intersections of a southerly-trending channel with east-trending faults or graben, occur in two places on the applicant's property both well explored by drilling. Continuations of these favorable areas lie outside the operator's claims; additional exploration on the George and Ver claims with Government assistance is not recommended.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado
June 4, 1958

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DMEA
RECEIVED JUN 6 1958

DATE	INITIALS	CODE
6/6	C	220
		700

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4182 (Uranium), Contract No. Idm-E963, Vitro Minerals Corporation (George and Ver claims), Fremont County, Wyoming

Reference is made to the last paragraph of your letter of May 28, 1958, wherein you request advice as to when you may expect to receive the final Field Team report on the subject project.

Work priority has been given to applications received during the rush period and those that have been held in deferment for some time because of inaccessibility of the project area. Therefore, it is doubtful that the engineering and geologic report and the Field Team final summary report will be available before late in July.

J. W. Townsend

J. W. Townsend

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
June 4, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 6 1958

DATE	INITIALS	CODE
6/6	C.	220
	~~Murphy~~	~~700~~

Memorandum

To: Chairman, Operating Committee

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

Subject: Docket No. DMEA 4182 (Uranium) Contract No. Idm-E963
Vitro Minerals Corporation (George and Ver Claims)
Fremont County, Wyoming

The information regarding production which was requested in the first paragraph of your letter dated May 28, 1958, is being assembled in conjunction with the preparation of the Joint Engineering and Geologic Report on this project. The production data will be forwarded to your office as soon as it becomes available to us.

J. W. Townsend

J. W. Townsend

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/27/58	Murphy	700
"	[illegible]	700
5/28	[illegible]	130
"	[illegible]	110
"	[illegible]	100
[illegible]	[illegible]	220
		700

MAY 28 1958

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

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Dear Mr. Townsend:

The semiannual report for the period July 1 to December 31, 1957, relating to the above-referenced certified contract, has been received. However, it lacks essential information regarding the status of the property with respect to possible production.

Also, will you please advise this office when we may expect to receive the final Field Team report on this project.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

Frank D. Lamb
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

FMMurphy/gla
5-27-58
cc to: Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
Mr. Murphy

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/2/58	Ching	700
"	Murphy	700
"	Ellis	700
5/2	[illegible]	130
"	[illegible]	110
	[illegible]	100
5/2	[illegible]	220
		700

MAY 2 1958

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

Re: Semiannual Reports of Certified Projects for the period July 1 to December 31, 1957

Dear Mr. Harshman:

A review of the following uranium contract dockets reveals that we have not received reports for the period indicated above:

Docket No.	Contract No.	Operator
DMEA-2135	Idm-2381	Sunnyside Uranium Company
DMEA-2573	Idm-8422	Glenn Mining Company
DMEA-2888	Idm-8595	Fred Schwartzwalder
DMEA-4182	Idm-8963	Vitro Minerals Corp.

With reference to Docket No. DMEA-2888, Contract No. Idm-8595, Fred Schwartzwalder, since the account has been settled, it may be difficult for you to get sufficient information from the Operator to be of value in a semi-annual report. Some of the paid-up operators are willing to give us this information and through that we find out whether additional funds have been spent following a DMEA project, additional ore encountered, et cetera. If there is any difficulty in obtaining such information, you need not pursue it further. However, if the information can be obtained, we will appreciate knowing just what the Operator has done by way of additional development and the amount spent for additional equipment.

Sincerely yours,

EWEllis/gla
5-2-58
cc to: Admr.'s Reading File
Operating Committee
Mr. Ching
Mr. Murphy

George C. Selfridge
Chairman, Operating Committee

APPROVED:

Frank D. Lamb
Member, Bureau of Mines

W. P. Williams
Member, Geological Survey

8623

March 13, 1958

Memorandum

To: Wingfield N. Chamberlain
Records Branch

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

Subject: Semiannual Reports of Certified Projects

Reports have been received by this Division on the following projects indicating that the property has been inactive and data have remained unchanged since the last report:

Period January 1 - June 30, 1957

DMRA-4182	Idm-E 963	Vitro Minerals Corporation	Uranium

Period July 1 - December 31, 1957

DMRA-1631	Idm-E 236	Excalibur Uranium Corporation	"
DMRA-1957	Idm-E 397	Ellihill Mining Company	"
DMRA-2328	Idm-E 320	Moreno Uranium Corporation	"
DMRA-2771	Idm-E 577	Gramlich Exploration Company	"
** DMRA-3003	Idm-E 650	Ol Jato Uranium Company	"
DMRA-3078	Idm-E 653	George W. Schweigert	Thorium
DMRA-3620	Idm-E 792	Uranium Prospectors Co.	Uranium
DMRA-3762	Idm-E870	Shannon Oil Company	"

** The mine is presently active. The operator plans to terminate operations in June or July (1958) due to exhaustion of known ore reserves.

/s/ Ernest Wm. Ellis

Ernest Wm. Ellis

FMM
MC
FLK

EXTRA COPY
DATE
RECEIVED FEB 26 19
DATE | | CODE
2/27 | WHS | ~~500~~
2/28 | | 700

224 New Customhouse
Denver 2, Colorado

February 24, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Reports on Terminated Certified Projects in Region III Prior to Final Settlement

dreg kept in mxf

Your office may expect to receive a semiannual report for period January 1, 1957 through June 30, 1957, and semiannually thereafter on the following projects:

CONTRACT	OPERATOR
E-4	Chief Consolidated Mining Company - 500
E-15	Lead Carbonate Mines, Inc. - 500
E-649	Camoose Uranium Mines of America - 700 Knowne
E-879	Uranium King Corporation - 700 Chung
E-963	Vitro Minerals Corporation - 700 Mulgoly

3044
3625
4182

The listed projects are added to those previously requiring a semiannual report in view of your decision concerning such reports for certified projects covered by Docket Nos. DMEA-1 & 1A and DMEA-434.

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

MHM:bh
cc: Roy. Report File General
DMEA/DFC (2)
DMEA/Gr.Jct.
DMEA/SLC
DMEA/TUC
Harshman
Hasler
Emerick
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/22	Talbert	800
10/22	C	220
10/22	~~F. Hay~~	~~700~~

OCT 21 1957

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

Re: Report of Review
Vitro Minerals Corporation
Docket No. DMEA-4182
Contract No. Idm-E963

Dear Mr. Breding:

The recently submitted copies of your Report of Review covering the above-cited project are accepted and normal distribution is authorized.

Sincerely yours,

Jay L. Chambers, Director
Contract Administration
and Audit Division

EDTalbert/wb
October 21, 1957

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 18 1957

DATE	INITIALS	CODE
10/18	gB	220
		800
	TMM	~~900~~

224 New Customhouse
Denver 2, Colorado

October 15, 1957

Memorandum

To: T. A. Christensen

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

Subject: Docket DMEA-4182 (Uranium) Contract Idm-E963, Vitro Minerals Corporation (George and Ver claims) Fremont County, Wyoming

Enclosed is a copy of a MEMORANDUM OF EXPLANATION for the above contract, which clarifies the intent of the parties relative to payment for drilling on an average unit cost basis. Also enclosed is a copy of a relative letter, dated October 11, 1957, from the Chairman, Operating Committee, to the Executive Officer, Region III.

Please place this information with your copy of the contract.

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosures

JDC:jy

cc: Chm. Op. Comm. (2)
Harshman
DMEA,DFC
Townsend
Amend. file, Reg. III
Corresp. file, Reg. III
Chron.

) w/copy of Memo. of Explanation & Chm's. ltr. of 10-11-57

Vitro MINERALS CORPORATION
261 MADISON AVENUE • NEW YORK 16, N. Y. • MURRAY HILL 2-5700

Reply to: Box 729
Indiana, Pennsylvania

October 11, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 14 1957

DATE	INITIALS	CODE
10/15	C	220
	~~[illegible]~~	700

United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Attention: Mr. C. O. Mittendorf, Administrator

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963
George and Ver Claims
Fremont County, Wyoming

Gentlemen:

Receipt is acknowledged of the certification of a discovery or development under an exploration project contract transmitted with your letter of September 30th to Mr. C. J. Potter.

We are today reporting to Mr. William H. King for the first twelve months of the period covered by the agreement. Copy of this report is enclosed herewith.

Very truly yours,

D. L. Richard
Controller

rl

enclosure

VITRO MINERALS CORPORATION
Box 729
Indiana, Pennsylvania

EXTRA COPY
DMEA
RECEIVED
DATE

October 11, 1957

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

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963
George and Ver Claims
Fremont County, Wyoming

Dear Mr. King:

We hereby report that no ore has been mined from the claims covered by the contract noted above for the period from June 14, 1956 to June 14, 1957. Until mining commences on these claims, we will make similar reports to you every 6 months.

Very truly yours,

D. L. Richard
Controller

rl

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10-3	Chambers	800
	Murphy	700
10-4	Kubacke	700
		~~140~~
		~~140~~
10/11	[illegible]	130
"	Johnson	110
"	Whitehead	100
10/11	[illegible]	220
		700

OCT 11 1957

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

INTERIOR DEPT.
OCT 4 - 1957
SOLICITOR

Re: Docket No. DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming
Contract No. Idm-E963

Dear Mr. King:

Please refer to our letter of October 25, 1956, transmitting a "Memorandum of Explanation" in regard to several contracts.

It is necessary to place in the files such a memorandum for Contract No. Idm-E963, Docket No. DMEA-4182, Vitro Minerals Corporation.

We are sending three copies of the Administrator's Memorandum of Explanation to be filed with and become a part of the copy of the contract located with the Finance Officer, the Executive Officer, and other offices of the Region.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JLB)

APPROVED:

P. F. Yopes (JLB)
Member, Bureau of Mines

W. P. Williams (JLB)
Member, Geological Survey

Enclosure

JLChambers/wb
October 3, 1957

Copy to: Docket
Admr. Reading File
Operating Committee
Mr. Kiilsgaard, USGS
Mr. Crawford, USBM
Mr. Chambers
Mr. Brading

RECEIVED
OCT - 7 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

8623

Government copy

Chamber
Murphy
Knowel
Boyer
Thompson
Selfridge
Johnson

EXPLORATION PROJECT CONTRACT
VITRO MINERALS CORPORATION
DOCKET NO. DMEA-4182

MEMORANDUM OF EXPLANATION

Washington, D. C.

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Vitro Minerals Corporation are parties to Exploration Project Contract Idm-E963 (Docket No. DMEA-4182), dated June 14, 1956.

The contract provides that the Government will contribute to the unit costs of drilling performed under independent contracts that do not exceed the estimated costs for each unit (per foot of drilling) set forth in Exhibit "A". The contract provides further that the Government's contribution to costs will be made as they are incurred, based upon monthly vouchers. However, it was the intent of the parties at the time the exploration project contract was negotiated and executed that the unit costs set forth under Category (1) under any stage prescribed in Exhibit "A" represent the maximum average cost per foot of drilling performed and accepted rather than the maximum cost per foot of drilling performed, as evidenced by the Operator's application and the DMEA Field Team's report of examination filed in the contract docket.

The Operator incurred costs on the basis of this understanding and the Government has made payment on the basis of this understanding.

O. Mitchell Dow
Administrator, Defense Minerals
Exploration Administration

Date: OCT 1 1 1957

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10-2	Chambers	800
10/3	B	220
		700

OCT 2 1957

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

Re: Vitro Minerals Corporation
Docket No. DMFA-4182
Contract No. Idm-E963

Dear Mr. Brading:

In reply to your letter of September 30, 1957, regarding the audit of the above-cited project, I am in hardy agreement with your suggestion with one additional point. It would be much better, and I would say almost necessary, to have a copy of the contract between the operator and the independent subcontractor.

I have prepared a "Memorandum of Explanation" which will be sent to the Field Team about October 5th. You will be furnished a copy of this memorandum.

Sincerely yours,

Jay L. Chambers

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

JLChambers/wb
October 2, 1957

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-18	Murphy	700
9-18	Ellis	700
9/24	Rutin	140
9/25	Hoffmeyer	
9-26	Chamberlin	800
9/30	Lodge	130
9/27	Johnson	110
9/30	Rittenhouse	100
9/30	C	220

SEP 30 1957

Mr. C. J. Potter, President
Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-1963
George and Ver Claims
Fremont County, Wyoming

700
9/30 Lamb 130
9/30 Williams 130

Dear Mr. Potter:

Enclosed is a "Certification by the United States of America of a Discovery or Development Under an Exploration Contract." This certification covers all the land described in Article 2 of the subject contract.

By the terms of the Exploration Project Contract, as amended, and of the certification, all minerals mined or produced from June 14, 1956 to June 14, 1967, are subject to the Government's percentage royalty as set forth in the contract until the amount contributed by the Government is repaid.

Payments should be made to Mr. William R. King, Executive Officer, DMEA Field Team, Region III, 224 New Customhouse Building, Denver 2, Colorado. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward the check directly to the Executive Officer. Any bonus payments or allowances received by you from the sale of ore are considered to be a part of the purchase price to which the Government's royalty applies. Royalty payments to the Government should be accompanied by suitable evidence such as copies of settlement sheets, showing quantity and grade of the products sold, the name of the purchaser, and the price and charges, certified to be correct by the purchaser.

You are requested to notify Mr. King of any changes in ownership or production rights that might

8623

have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for an extended period, please notify Mr. King at six-month intervals that no production has been made, when that is the case.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosure

FMMurphy/izm 9-17-57

cc: John E. Bansept, Agent
Fremont Metal & Mining, Inc.
Admr.'s Reading File
F. E. Johnson
Operating Committee
THKiilsgaard, Rm. 5224
Frank D. Lamb, Rm. 3608
DMEA FT Reg. III (2)
Contract Adm. & Audit Div.
Mr. Murphy

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-18	Murphy	700
9-18	Ellis	700
		140
9-26	Chambers	800
9/30	Selfridge	130
9/27	Johnson	110
	Mittendorf	100
		220
		700
9/30	Lamb	130
9/30	Williams	(130)

SEP 30 1957

Mr. Jesse C. Johnson
Director, Division of Raw Materials
Atomic Energy Commission
1717 H Street, N.W., Rm. 800
Washington 25, D. C.

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-2963
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Dear Mr. Johnson:

I am enclosing one copy of a certification of discovery or development relating to the subject exploration contract.

The final report of the Field Team has not been completed. Accordingly, we will supply additional information for your records upon receipt of this report.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

FMMurphy/izm 9-17-57
cc: Mr. Elton A. Youngberg, AEC, G.J. Colo. (w/cc of certification)
Admr.'s Reading File
F. E. Johnson
Operating Committee
Frank D. Lamb, 3608
THKiilsgaard, 5224
FT Reg. 3 (2)
Contract Adm. & Audit Div.
Mr. Murphy

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-18	Murphy	700
9-18	Ellis	700
		140
9-26	Chambers	800
9/30	Selfridge	430
9/30	Johnson	110
30	Mittendorf	00
		220
		700
9/30	Lamb	130
9/30	Williams	130

SEP 30 1957

Mr. John E. Bansept, Agent
Box 257
Lander, Wyoming

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Dear Mr. Bansept:

Enclosed is a copy of a certification of discovery or development, with copy of covering letter to the Operator, which has been issued pursuant to the terms of the above-cited contract.

This correspondence relates to the undated Consent to Lien signed by you and the following: John Bansept, Sr.; Robert Jerome Albert; Clyde Decker; Josephine F. Bansept; George Snyder; and Emma Snyder. The Government's prior lien on the land and upon any production therefrom will continue in existence for the length of time mentioned in the enclosed copy of the letter to the Operator. You and the above-named individuals are obligated during that period to commit no act and to assert no claim in conflict with the Government's rights under this agreement, and to give advance notice of the Government's rights to any transferee or lessee of any part of the signers' interest in the land or the production therefrom.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

Enclosures
cc: Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
Frank D. Lamb, 3608
Contract Adm. & Audit Div.
DMEA FT Reg. III (2)
Mr. Murphy

FMMurphy/izm 9-17-57

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-18	Murphy	700
9-18	Ellis	700
		140
9-20	Chamberlin	800
9/30	Selledge	130
9/27	Johnson	110
30	Mittendorf	100
		220
		700
9/30	Lamb	130
9/30	Kellhaine	130

SEP 30 1957

Fremont Metal and Mining, Inc.
Baldwin Building
310 Main Street
Lander, Wyoming

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Gentlemen:

Enclosed is a copy of a certification of discovery or development, with copy of covering letter to the Operator, which has been issued pursuant to the terms of the above-cited contract.

This correspondence relates to the Consent to Lien signed by Mr. Chas. C. Boripaugh, President, on May 28, 1956. The Government's prior lien on the land and upon any production therefrom will continue in existence for the length of time mentioned in the enclosed copy of the letter to the Operator. Your company is obligated during that period to commit no act and to assert no claim in conflict with the Government's rights under the agreement signed by the president, and to give advance notice of the Government's rights to any transferee or lessee of any part of your interest in the land or the production therefrom.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

Enclosures
FMMurphy/iz, 9-17-57
cc: Admr.'s Reading File
Operating Committee
THKiilsgaard, Rm. 5224
Frank D. Lamb, Rm. 3608
FT Reg. 3 (2)
Contract Adm. & Audit Div.
Mr. Murphy

8623

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 23 1957

DATE	INITIALS	CODE
9-23	C	220
9/23	[illegible]	800
"	Murphy	700

224 New Customhouse
Denver 2, Colorado

September 18, 1957

Memorandum

To: T. H. Brading, DMEA Auditor

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

Subject: Docket No. DMEA 4182 (Uranium), Contract No. Ida-E963, Vitro Minerals Corporation (George and Ver claims), Fremont County, Wyoming

The subject contract was terminated by mutual agreement before completion of all the work provided for, by a TERMINATION AGREEMENT made effective June 1, 1957. A copy of the Termination Agreement is enclosed for your records.

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

Acceptable units of work or services completed on a Fixed Unit Cost basis consist of:

Incidental allowance on the total of 67,794 feet of drilling, and chemical analysis of 576 samples for U_3O_8 content.

The sum of $500.00 was withheld from reimbursement to the Operator in processing the final accounting report, which was for the month of May, 1957.

Original signed by
J. W. TOWNSEND

J. W. Townsend

Enclosure

JWT:prl

cc: Chmn. Op. Comm. (2)
Marshman
Townsend
Corres. file
Chron.

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

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 23 1957

DATE	INITIALS	CODE
9/23	C	220
		700

September 18, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4182 (Uranium), Contract No. Idm-E963, Vitro Minerals Corporation (George and Ver claims), Fremont County, Wyoming

Enclosed are the Government's and Audit copies of the TERMINATION AGREEMENT, which was forwarded by your letter of August 21, 1957 for signature by the Operator.

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

J. W. Townsend

J. W. Townsend

Enclosures

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

August 30, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4182 (Uranium), Contract No. Idm-E763, Vitro Minerals Corporation (George and Ver claims), Fremont County, Wyoming

Enclosed are the original and one copy of a final report submitted by the Operator pertaining to work completed under the subject contract.

The Termination Agreement forwarded by your letter of August 21, 1957 has been forwarded on to the Operator for signature.

E. N. Harshman

E. N. Harshman

Enclosures

OPS. FINAL REPORT.

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 3 1957

DATE	INITIALS	CODE
9/3	G	220
9/9	UG	800
/11	FMM	700

Vitro MINERALS CORPORATION
600 W. 33rd SO. ST. • P. O. BOX 67 • SOUTH SALT LAKE • TELEPHONE IN 7-5414

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 3 1957

DATE	INITIALS	CODE

August 26, 1957

DMEA
DEPARTMENT OF THE INTERIOR
AUG 28 1957
REGION III
DENVER, COLORADO

Mr. John F. Shaw
U. S. BUREAU OF MINES
Room 137, Building 20
Denver Federal Center
Denver 2, Colorado

Re: Docket No. DMEA 4182, Uranium
Contract No. Idm-E963
Vitro Minerals Corporation
(George and Ver Claims)
Fremont County, Wyoming

Dear Mr. Shaw:

We are herewith transmitting original and four copies of the following items:

1. Final narrative report and ore estimates.

2. Form 104, Operator's Monthly Report and Voucher: This report covers all of the work authorized and completed under this contract.

3. Form 104A, Operator's Unit Cost and Progress Report: This report covers all of the work authorized and completed under this contract.

4. Final DMEA Map, scale one inch = one foot, in two parts: This Map shows the location of the drill holes and assay results and estimated ore reserves found under this contract. in map envelope

This final report completes our work requirements under the DMEA contract. I would like to take this opportunity to thank you and your associates for the kind consideration you have shown us.

Very truly yours,

VITRO MINERALS CORPORATION

RECEIVED
27 1957
BUREAU OF MINES
Experiment Station
Golden, Colorado

C. H. Smith

C. H. SMITH
Exploration Manager

CHS:bas

Encl.

FINAL REPORT

OFFICIAL FILE COPY
D M E A
RECEIVED SEP 3 1957
DATE | INITIALS | CODE

Docket No. DMEA 4182 (Uranium)
Contract No. I dm E 963
Vitro Minerals Corporation
(George and Ver Claims)
Fremont County, Wyoming

The following paragraphs relate the findings of the DMEA drilling on the George and Ver groups under the subject contract. A large part (see map) of the area is mineralized, but no commercial ore bodies were discovered. The map included with this report shows all holes drilled. The map also gives complete probe and assay data. Areas where mineralization is extensive and high enough to be considered potential ore reserve are outlined on the map as well as discussed in this report.

In the South halves of George 2 and 3, good radioactivity was found. Most of the mineralization is in oxidized sandstone and is out of equalibrium to the extent that a 2.10% radiometric will not assay chemically over 0.10% U_3O_8 (see hole 20.5 - 16.5). The mineralization in this area occurs near the oxidized-unoxidized contact and, as stated previously, occurs for the most part in oxidized sandstone. I n two holes however, (15.25-15 and 20.5-17.25) mineralization occurs at the contact in unoxidized sediments. This mineralization appears to be in equalibrium. Radioactivity and assays are 0.10% U_3O_8 or better in these holes and at depths (55 to 60 feet) where economical mining may be feasible. These holes are isolated and as individual holes with no ore shows in offset holes do not constitute commercial ore bodies. I t appears that in this area, the mineralization in the unoxidized sediments is spotty, and commercial ore bodies, if present, will have to be drilled on very closely spaced holes (25' centers) to determine the extent of the ore. It is also apparent that commercial ore is not likely to occur in the oxidized sandstone because of disequalibrium of the mineralization.

O n George 4 and 5, and Ver 3 and 4, a large north-south trending area of mineralization has been outlined (see map). For purposes of reserve calculations, the area was divided into four zones of mineralization. These zones along with tonnage, grade, depth of overburden, and average thickness of ore are shown in the table below. Grade and thickness were determined by interpretation of probe readings only. The ore is assumed to be in equalibrium. Core samples will be required to verify grade if mining is deemed feasible.

ZONE	ELEVATION	TONNAGE	GRADE	OVERBURDEN	AVE. THICKNESS
1	6397-6421	5,000 ton	0.17% U_3O_8	34'	2'
2	6319-6341	27,000	0.16	124	3½
3	6290-6310	16,000	0.16	156	3
4	6262-6281	8,000	0.30	191	2½
Weighted totals		56,000 tons	0.18% U_3O_8	144'	3'

Reserve figures were derived by using a density figure of 15 cubic feet per ton and assigning each hole an area of influence of 37½' on all sides of the hole.

Zone 1 is partly in oxidized sediments andprobably out of equalibrium. Core samples will be necessary before mineability can be determined. Zones 2, 3, and 4 are unoxidized horizons and are assumed to be in equalibrium. Again, core samples will be required in the event that mining is considered feasible. Average thickness of mineralization is 3 feet; grade averages 0.18% U_3O_8; overburden averages 150'. This presents a stripping ratio of 50:1 for 0.18% ore. Strip mining under these circumstances is not possible with the present price of U_3O_8. Also, underground mining of this material is not considered practical.

The area described in the previous paragraph is the only one found where a continuous horizon can be traced between three or more holes.

It is concluded that although good mineralization was encountered, no commercial ore was discovered under the DMEA drilling on the George and Ver claims.

Sincerely,

R. D. Adamson

R. D. Adamson
Division Geologist

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

RECEIVED

Budget Bureau No. 42-R1036.5

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

Month of Final, 1957 Docket No. DMEA 4182 Contract No. Idm - E963
Operator's Name VITRO MINERALS CORPORATION Minerals Uranium
Address Box 67, South Salt Lake City, Utah
Contract Amount, $ 64,816.00 Government Participation: 75 % Amount, $ 48,612.00

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		27,490.86	27,490.86			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis		720.00	720.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Incidentals		6,101.46	6,101.46			
TOTALS		34,312.32	34,312.32			

DMEA
ARTMENT OF THE INTERIOR
AUG 28 1957
REGION III
DENVER, COLORADO

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

Date August 8, 1957 Payee VITRO MINERALS CORPORATION

Per J. O. Horton Title Ass't Secretary

*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:

$

Signature
(Authorized Certifying Officer)

Date Vou. No.
(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. ..... in accordance with the terms of the contract.

Signature ..... Title ..... Date .....

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

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.

GPO 872893

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 Final 1957 Docket No. DMEA 4182 Contract No. Idm - E963

Operator's Name VITRO MINERALS CORPORATION Minerals Uranium

Address Box 67, South Salt Lake City, Utah

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~~ Drilling	ft.			5,355.86	9,662	0.55	9,662	0.70
~~Crosscutting~~ Incid. Allow.	ft.			869.58	9,662	0.09	9,662	0.09
~~Raising~~ Analysis	spl.			65.00	52	1.25	250	1.25
~~Shafts~~								
~~Winzes~~ STAGE II				12,600.48	31,665	0.40	37,215	0.70
~~Drilling: Core~~ Drilling	ft.			2,852.55	31,665	0.09	37,215	0.09
~~Churn~~ Incid. Al.	ft.			360.00	288	1.25	850	1.25
~~Auger~~ Analyses	spl.							
~~Stripping~~ STAGE III								
~~Trenching~~ Drilling	ft.			9,534.52	26,437	0.36	29,253	0.70
~~Test Pits~~ Incid. Allow.	ft.			2,379.33	26,437	0.09	29,253	0.09
~~Roads and Trails~~ Analyses	spl.			295.00	236	1.25	750	1.25
Total Distributed Costs				34,312.32				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								64,816.00
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 Aug. 8, 1957 Operator VITRO MINERALS CORPORATION

Per J. O. Horton Title Ass't Secretary

J. O. Horton

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

(Instructions on reverse)

Remarks:

(For Government use only)

DMEA
DEPARTMENT OF THE INTERIOR
AUG 28 1957
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

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/20	Murphy	700
8/20	Ellis	700
8-20	Chambers	800
8/21	Fed	130
"	Johnson	110
		~~100~~
		~~[illegible]~~
8/22	C	220
		700

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

AUG 21 1957

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Dear Mr. King:

Enclosed are the original and four copies of a proposed Termination Agreement, signed by the Administrator for the Government. Also enclosed are two extra copies for Field Team use.

We note in your memorandum, dated August 5, 1957, that the field examiners will recommend a certification of the project. Therefore, it is suggested that the Final Field Team Report covering the subject contract be submitted as soon as possible, in order that such certification may be prepared.

If you and the Operator find the proposed Termination Agreement in order, please have an authorized representative of the corporation sign the original and all copies. Thereafter, kindly distribute the copies in the usual manner.

If any part of the proposed agreement does not meet with your approval and the Operator's, then the original and all copies, including the extra copies, are to be returned to this office with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures
APPROVED:

P. F. Yopes
Member, Bureau of Mines

W. P. Williams
Member, Geological Survey

FMMurphy/izm 8-20-57
cc to: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKillsgaard, 5224

8623

DRAFT - 8-7-57
FMMurphy/izm

TERMINATION AGREEMENT

It is agreed this _____ day of _____, 1957 between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Vitro Minerals Corporation, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-E963, Docket No. DMEA-4182, dated June 14, 1956, as amended, hereinafter called the "Contract," that:

1. Effective August 1, 1957, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated;
2. The Government shall contribute to allowable costs incurred prior to said effective date;
3. Any work or operations prosecuted or costs incurred by the Operator beginning with said effective date, except as otherwise provided in this termination agreement, shall be for the sole account of the Operator without contribution by the Government;
4. All rights of the Government provided for in the contract with respect to a certification of discovery or development and a percentage royalty and lien for its payment are preserved; and
5. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this termination agreement.

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

THE UNITED STATES OF AMERICA

BY: _____
Administrator, Defense Minerals Exploration Administration

_____
Vitro Minerals Corporation
By: _____

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

August 5, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 7 1957

DATE	INITIALS	CODE
8/7	P.K.	220
"	FMM	700

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA-4182 (Uranium) Contract No. Idm-E963, Vitro Minerals Corporation (George and Ver claims) Fremont County, Wyoming

Enclosed is the following material pertaining to termination of the subject contract before completion of all the work provided for:

1. Original and two copies of the Operator's request, dated July 30, 1957.
2. Original and two copies of a joint memorandum, dated August 1, 1957, from E. N. Harshman, Geologist, Geological Survey, and E. O. Binyon, Mining Engineer, Bureau of Mines.

The field examiners recommend termination of the contract in its present status, in which this office concurs. The field examiners also state that a Certification of Discovery or Development will be recommended as a result of the exploration work completed.

Records in this office indicate that the last work performed under the contract was on May 15, 1957.

E. N. Harshman

E. N. Harshman

Enclosures

Vitro MINERALS CORPORATION
600 W. 33rd SO. ST. • P. O. BOX 67 • SOUTH SALT LAKE • TELEPHONE IN 7-5414

DMEA
DEPARTMENT OF THE INTERIOR
JUL 31 1957
REGION III
DENVER, COLORADO

July 30, 1957

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

Re: Docket No. DMEA 4182 (uranium)
Contract No. Idm - E963
Vitro Minerals Corporation
(George and Ver Claims)
Fremont County, Wyoming

Dear Mr. King:

This letter is intended to be a formal request for termination of the above referred to contract.

As all currently approved work has been completed, it is requested that the contract be terminated without requiring performance of the balance of work as outlined in the contract.

It is my understanding that the termination contract will be sent to us for examination and execution.

Very truly yours,

VITRO MINERALS CORPORATION

C. H. Smith

C. H. SMITH
Exploration Manager

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 7 1957

DATE	INITIALS	CODE

CHS:bas

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REGION III

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

Building 20
Denver Federal Center
Denver 2, Colorado
August 1, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman
E. O. Binyon

Subject: Docket DMEA 4182 (Uranium) Contract Idm-E963, Vitro Minerals Corporation (George and Ver claims) Fremont County, Wyoming -- Termination of the contract and Certification of a Discovery and Development

Termination of the contract was discussed with R. D. Adamson, geologist for the Corporation, on July 24, 1957. Mr. Adamson stated that the operator's final report is being prepared and from this it is assumed that the drilling under the contract was completed with the work covered by the May 1957 operator's reports.

Further drilling under the contract would not be to the advantage of the Government or the operator and termination by mutual consent is recommended.

A Certification of a Discovery or Development will be recommended on basis of the ore discovered by contract drilling.

E. N. Harshman

E. N. Harshman

E. O. Binyon

E. O. Binyon

EOB/mw
cc: 9
Idm-E963
chron

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 7 1957

DATE	INITIALS	CODE

EXTRA COPY DMEA RECEIVED JUL 24 1957		
DATE	[illegible]	CODE
7/24	[illegible]	110
"	~~FAAM~~	~~700~~

224 New Customhouse
Denver 2, Colorado

July 22, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4182 (Uranium) Contract Idm-E963
Vitro Minerals Corporation (George and Ver claims)
Fremont County, Wyoming

Enclosed are two copies of the Operator's Narrative report for May, 1957.

Please attach copies of the Narrative report to the two copies of Form MF-104, Operator's Monthly Report and Voucher, for May, 1957, which was forwarded to you July 17, 1957, by this office.

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

Enclosures

JDC:hmh
cc: DMEA, DFC)
MF-104 file, Reg. III) w/copy of
Corres. file, Reg. III) Narrative Report
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
JUL 12 1957
REGION III
DENVER, COLORADO

NARRATIVE REPORT

Stage III, Part 2

This report covers the work completed in May 1957. Work begain 30 March and concluded 15 May 1957. Also, a brief summary of results of the entire DMEA drilling under subject contract is included in this report. A reserve estimate is made although no commercial ore bodies were discovered.

A total of seventy-three (73) drill holes were completed under authorization of Stage III, part 2. Average depth of the holes was 215 feet for a total footage of 15,717 feet. The results of this drilling are summarized in the following table:

No significant mineralization	25 holes
Less than 0.10% U_3O_8	40 holes
0.10% to 0.20% U_3O_8	6 holes
Greater than 0.20% U_3O_8	2 holes

Two enclosed tables show the depth, thickness, grade, and rock type of the mineralization and compare flourometric assays and radiometric readings of the drill cuttings.

Twelve of the holes drilled encountered mineralization of high enough grade and thickness to be considered as potential commercial ore. The grade and thickness was determined by interpretation of probe readings only. The mineralization is assumed to be in equilibrium. Ten of these holes are located in a north-south trending zone of mineralization on Ver 3 and 4. (Holes designated by an asterisk * in Table I mark the significantly mineralized holes.) Radioactivity in these holes ranged from .08% to .80% U_3O_8 with an average of about 0.17%. The thickness of the mineralization averages 2 feet. The other two mineralized holes are offsets to hole 29.5-39. The count occurs from 140 feet to 200 feet below the surface.

The following paragraph briefly summarize the findings of the DMEA drilling on the George and Ver groups. A large part (see map) of the area is mineralized, but no commercial ore was discovered. In the south halves of George 2 and 3, good radioactivity was found. However, most of this mineralization is in oxidized sandstone and is out of equilibrium to the extent that a 2.10% probe reading will not assay over 0.10% U_3O_8. (See hole 20.5-16.5) Mineralization occurs in this area at or near the oxidized-unoxidized contact. In two holes (15.25-15 and 20.5-17.25) good mineralization occurs at the contact in unoxidized sediments. The count and the assays are 0.10% U_3O_8 or better in these holes. These are isolated holes and do not constitute commerical ore. It appears that in this area the mineralization in the unoxidized sediments is spotty, and commercial ore bodies, if present, will have to be drilled on very closely spaced holes to determine their extent.

On George 4 and 5 and Ver 3 and 4, a large north-south trending area of mineralization has been outlined. (See map) For purposes of tentative reserve calculations, the area was divided into four zones of mineralization. These zones along with tonnage, grade, depth of overburden, and average thickness are shown in the table below. Grade and thickness were determined by probe readings only. The ore is assumed to be in equilibrium. Core samples will be required to verify grade if mining is deemed feasible.

ZONE	ELEVATION	TONNAGE	GRADE	OVERBURDEN	AVERAGE THICKNESS
1	6397-6421	5,000 ton	0.17% U3O8	34 feet	2 feet
2	6341-6319	27,000	0.16	124	3½
3	6310-6290	13,000	0.16	156	3
4	6281-6262	8,500	0.30	191	2½
	TOTAL	53,500 ton	0.18%	133 feet	3 feet

Zone 1 is partly in oxidized sandstone and probably out of equilibrium. Core samples will be necessary before mineability can be determined. No commercial assays were obtained from this zone.

Zones 2, 3 and 4 are in unoxidized sediments and may be assumed to be in equilibrium. Core samples will be necessary to determine the nature of the ore. The thickness of the mineralization average 3 feet; grade averages 0.20% U3O8; overburden average 150 feet. This presents a stripping ratio of better than 50 to one. Strip mining under these circumstances is not feasible. Also, underground mining of this material is not considered practical.

It is concluded that although good mineralization was encountered, no commercial ore was discovered under the DMEA drilling on the George and Ver claims.

Sincerely,

R. D. Adamson

R. D. Adamson
Ass't Division Geologist

224 New Customhouse
Denver 2, Colorado

July 15, 1957

DMEA
RECEIVED
DATE
7/17 P.K.
7/17 220
800
700

Memorandum

To: E. N. Karshman
DMEA/DFC (Bingon)

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4182 (Uranium), Contract No. 14m-2963, Vitro Minerals Corporation (George and Ver claims), Fremont County, Wyoming

Comments in both the Operator's and the engineer's narrative reports, forwarded in conjunction with work reported on Form MP-104 for the month of May, 1957 indicate that it may not be desirable to perform additional work under the Contract.

If that is the case, please submit a joint report containing your recommendations relative to the matter. Also, include recommendations relative to the issuing of a Certification of Discovery or Development as a result of the exploration work performed to date.

Original signed by
W. H. KING

W. H. King

JWT:prl

cc: Chmn. Op. Comm. - 2
Townsend
Corres. file
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 17 1957

DATE		CODE
7/17	P.K.	220
7/17	[illegible]	800
		700

224 New Customhouse
Denver 2, Colorado

July 15, 1957

Mr. J. O. Norton
Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

Re: Docket No. DMEA 4182 (Uranium)
Contract No. Idm-2965
Vitro Minerals Corporation
(George and Ver claims)
Fremont County, Wyoming

Dear Mr. Norton:

Form MF-104, Operator's Monthly Report and Voucher for May, 1957 has been received in this office and is being processed for payment. As all currently approved work has been completed, an amount of $500.00 is withheld from reimbursement to you pending resolution of the following matters which are prerequisite to closing the account:

1. Execution by the parties to the contract of a suitable agreement to terminate the contract in its present status without requiring performance of the balance of work outlined in the contract. The request for termination must originate from Vitro Minerals Corporation.

2. Rendering by Vitro Minerals Corporation to the Government a final report in conformance with Article 7(c) of the contract form.

3. Release to this office of an Audit Report or Report of Review of the reported project costs by the Contract Administration and Audit Division, DMEA.

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

Very truly yours,
Original signed by
W. H. KING

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

JDC:prl
cc: Chan.Op.Comm.-2
Harshman
DMEA/DFC
Townsend
Corres. file

cc: Mr. David L. Welsh
Riverton, Wyoming

Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 11 1957

DATE	INITIALS	CODE
7 11	C	220
7/11	[illegible]	800
"	Murphy	700

224 New Customhouse
Denver 2, Colorado

July 9, 1957

Mr. R. D. Adamson
Vitro Minerals Corporation
Riverton, Wyoming

Re: Docket DMEA-4182 (Uranium)
Contract Ida-2963
Vitro Minerals Corporation
(George and Ver claims)
Fremont County, Wyoming

Dear Mr. Adamson:

Enclosed are the original and four copies of your narrative report for May, 1957, which has not been signed. Please sign the original and all copies and return them to this office as soon as possible in order that we may continue to process the voucher for payment.

A review of the narrative report indicates that you have completed all of the work that you desire to perform under the contract. If this is the case you should immediately submit to this office for consideration by the Government, the original and five copies of a request that a suitable agreement be prepared to terminate the contract in its present status without requiring completion of the balance of the work outlined in the contract.

Yours very truly,

Original signed by
W. H. KING

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

Enclosures

cc: Mr. J. O. Horton
P. O. Box 67
South Salt Lake City, Utah

JDC:hmh
cc: Chmn. Op. Comm. (2)
Harshman
DMEA, DFC
Townsend
Cooper
Corres. file, Reg. III
Chron.

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

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 24 1957

DATE	INITIALS	CODE
5/24	JCOL	220
5/22	~~[illegible]~~	700

May 21, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4182 (Uranium), Contract No. Idm-E963, Vitro Minerals Corporation (George and Ver claims), Fremont County, Wyoming

Enclosed are four copies of rescission of a provision in the project work approval issued April 24, 1957.

Also enclosed are four copies of the Operator's letter of May 16, 1957, referring to the matter.

E. N. Harshman

E. N. Harshman

Enclosures

Incl to USGS.

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 24 1957

DATE	INITIALS	CODE

234 New Customhouse
Denver 2, Colorado

May 21, 1957

Mr. C. H. Smith, Division Geologist
Vitro Minerals Corporation
First and Monroe Streets
Riverton, Wyoming

Re: Docket No. DMEA 4182 (Uranium)
Contract No. IAm-E963
Vitro Minerals Corporation
(George and Ver claims)
Fremont County, Wyoming

Dear Mr. Smith:

Reference is made to the second paragraph of project work approval, dated April 24, 1957, which stipulates as follows: "The offset holes will be drilled at least ten (10) feet and not deeper than twenty (20) feet below the bottom of the mineralized zone."

Inasmuch as the mineralized zone in some of the offset holes has been found to exist deeper than twenty (20) feet below the mineralized zone where encountered in the holes being offset, therefore the provision as restated above is rescinded, effective as of April 24, 1957.

Nothing in this change in previously issued project work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Very truly yours,

DMEA Field Team, Region III

By E. W. Hornbaker

E. W. Hornbaker
Acting Executive Officer

JWT:prl
cc: Chem.Op.Comm.-4
Finance Office, Reg. III
Amendment file, Reg. III
Hornbaker
Mansalman-2
Townsend
Corres. file
Chron.

MINERALS CORPORATION
FIRST AND MONROE STREETS • RIVERTON, WYO. • TELEPHONE 52

DMEA
DEPARTMENT OF THE INTERIOR

MAY 20 1957
REGION III
DENVER, COLORADO

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 24 1957

DATE	INITIALS	CODE

May 16, 1957

E. N. Harshman
Acting Exec. Officer
DMEA Field Team, Region 3
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4182 (uranium)
Contract No. Idm-E 963
Vitro Minerals Corporation
(George and Ver Claims)
Fremont County, Wyoming

Dear Mr. Harshman:

In accordance with our telephone conversation of May 14, 1957, we are requesting relief from the drilling depth limit provision in our DMEA Stage III contract dated April 24, 1957. This provision states " the off-set holes will be drilled at least ten (10) feet, and not deeper than twenty (20) feet below the bottom of the mineralized zone".

As you know the mineralization in the Wind River Formation is irregular and may vary ten feet or more over the 75 ft. off-set distance. For example, in hole 29.5-39.0 the base of the mineralized zone was penetrated at 238 ft. , while off-set hole 28.75-39.0 didnot penetrate this same mineralized zone until a depth of 247 ft. was reached. Thus drilling this hole to the original estimated drilling depth of 250 ft. failed to penetrate the mineralized zone the required ten feet. This similiar condition was encountered in twelve other of the holes drilled to date, and would have been true for many more holes had we not increased the estimated drilling depths by ten to fifteen feet. The opposite condition is true when the mineralized zone is equal to or less than the depth found in the hole being off-set.
By increasing the estimated drilling depths we have penetrated the mineralized zone over the twenty feet maximum restriction in eight holes. The excess footage is slight and only amounts to 69 ft. All holes drilled have penetrated the mineralized zone for a minimum of two feet and and only a maximum of 38 ft. below the base of the mineralized zone.

It is apparent that drilling depths of off-set holes have to be determined before they are drilled, and with the irregularity of mineralization, the holes must be drilled deep enough to allow for a possible increase of the depth of the mineralized zone. Conversely, with a decrease of depth to mineralization in an off-set hole, an excessive penetration will result through the mineralization.

We will appreciate any help or suggestions you have concerning this matter.

VITRO MINERALS CORPORATION

C. H. Smith

C. H. Smith, Div. Geologist

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

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DATE	INITIALS	CODE
4/29	C	220
	Murphy	700

April 24, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4182 (Uranium), Contract No. Idm-E963, Vitro Minerals Corporation (George and Ver claims), Fremont County, Wyoming

Enclosed are four copies of project work approval pertaining to Stage III drilling, as issued by the DMEA Field Team, Region III.

Also enclosed are copies of supporting data consisting of two copies of the Operator's request of April 12, 1957, with attached maps, and four copies of a joint memorandum report, dated April 22, 1957, from W. P. Pratt, Geologist, Geological Survey, and E. O. Binyon, Mining Engineer, Bureau of Mines.

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

E. N. Harshman

E. N. Harshman

Enclosures

maps submitted in map pocket

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DMEA
RECEIVED APR 29 1957

DATE	INITIALS	CODE

224 New Customhouse
Denver 2, Colorado

April 24, 1957

Mr. C. E. Smith, Division Geologist
Vitro Minerals Corporation
First and Monroe Streets
Riverton, Wyoming

Re: Docket No. DMEA 4182 (Uranium)
Contract No. Ida-2963
Vitro Minerals Corporation
(George and Ver claims)
Fremont County, Wyoming

Dear Mr. Smith:

In reference to your request of April 12, 1957 for the Government's approval of additional holes to be drilled under Stage III of the Contract, and consistent with provisions in the Contract pertaining thereto, this constitutes the Government's approval for you to drill the following offset holes under the provisions of and in conformance with all requirements in the Contract pertaining to Stage III drilling.

The offset holes will be drilled at least ten (10) feet and not deeper than twenty (20) feet below the bottom of the mineralized zone.

Approved Offset Holes 1/

Holes to be Offset	Approved Offset Holes	Estimated Depth to Base of Ore Zone	Estimated Drilling Depth - Feet
25 - 30	25 - 29.25	146	160
	25.75 - 30		160
	24.25 - 30		160
26.5 - 39	26.5 - 28.25	222	235
	27.25 - 39		235
26.5 - 40.5	26.5 - 39.75	234	245
	27.25 - 40.5		245
	26.5 - 41.25		245
	25.75 - 40.5		245

Holes to be Offset	Approved Offset Holes	Estimated Depth to Base of Ore Zone	Estimated Drilling Depth - Feet
28 - 34.5	28 - 35.25	200	210
28 - 37.5	28 - 36.75	212	225
	28.75 - 37.5		225
	28 - 38.25		225
	27.25 - 37.5		225
29.5 - 28.5	30.25 - 28.5	132	165
	29.5 - 29.25		165
29.5 - 36	30.25 - 36	209	220
	29.5 - 36.75		220
29.5 - 39	29.5 - 38.25	238	250
	30.25 - 39		250
	29.5 - 39.75		250
	28.75 - 39		250
29.5 - 43.5	29.5 - 42.75	232	245
	30.25 - 43.5		245
31 - 30	31 - 29.25	150	160
	31.75 - 30		160
	31 - 30.75		160
	30.25 - 30		160
31 - 37.5	31 - 36.75	224	235
	31.75 - 37.5		235
	31 - 38.25		235
	30.25 - 37.5		235
31 - 42	31 - 41.25	235	245
	31.75 - 42		245
	31 - 42.75		245
	30.25 - 42		245
32.5 - 31.5	32.5 - 30.75	184	195
	33.25 - 31.5		195
	32.5 - 32.25		195
	31.75 - 31.5		195
34 - 30	34.75 - 30	154	165
34 - 32.5	34.75 - 31.5	176	190
	34 - 32.25		190

Holes to be Offset	Approved Offset Holes	Estimated Depth to Base of Ore Zone	Estimated Drilling Depth - Feet
35.5 - 31.5	35.5 - 30.75	183	195
	36.25 - 31.5		195
35.5 - 33	35.5 - 32.25	176	190
	36.25 - 33		190
	35.5 - 33.75		190
	34.75 - 33		190
37 - 33	37 - 32.25	180	195
	37.75 - 33		195
38.5 - 31.5	39.25 - 31.5	180	190
	38.5 - 32.25		190
40 - 28.5	40 - 27.75	165	175
	40.75 - 28.5		175
	40 - 29.25		175
	39.25 - 28.5		175
40 - 30	39.25 - 30	168	180
40 - 31.5	40 - 30.75	185	195
	40.75 - 31.5		195
	40 - 32.25		195
40 - 34.5	40 - 33.75	202	215
	40.75 - 34.5		215
	40 - 33.25		215
	39.25 - 34.5		215
41.5 - 30	41.5 - 29.25	178	190
	42.25 - 30		190
	41.5 - 30.75		190
	40.75 - 30		190
41.5 - 33	41.5 - 32.25	199	210
	42.25 - 33		210
	41.5 - 33.75		210
	40.75 - 33		210
Totals	73		15,030

1/ The coordinate locations of approved offset holes are in reference to the coordinates on the map, "Figure 2," attached to the Contract. The first number of each hole is in reference to the coordinate numbers at the top of the map and the second number is in reference to the numbers on the left side of the map.

Nothing in this work approval shall be construed to increase the total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Very truly yours,

DRRA Field Team, Region III

By E. N. Harshman

E. N. Harshman
Acting Executive Officer

JWT:prl

cc: Chairman, Op. Comm. (4)
Finance Office, Reg. III
Amendment file, Reg. III
Harshman (2)
Shaw (2)
Townsend
Corres. file
Chron.

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REGION III

DMEA
DEPARTMENT OF THE INTERIOR

APR 23 1957
REGION III
DENVER, COLORADO

Building 20
Denver Federal Center
Denver 2, Colorado
April 22, 1957

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

Through: E. N. Hawkinson
John F. Shea

From: W. P. Pratt
E. O. Bingen

Subject: Docket No. DMEA A182 (Brunton), Contract No. Ida-8963, Vitro Minerals Corporation, (Energy and Ver claims), Fremont County, Wyoming.

In a letter dated April 12, 1957, the applicant requested 20,945 feet of offset drilling under Part 2 of Stage III of subject contract. We have evaluated each of the requested offset holes in the light of thickness and grade of the mineralized zone penetrated by the hole being offset and by adjacent holes, and have recommended only those offsets which we believe can be justified on this basis. In general, we have eliminated offsets where the adjacent holes give reasonable evidence that the grade or thickness or both are decreasing toward the offset. The requested offset at 36.5 - 38.5 was eliminated because it is between two holes of good grade and thickness, and appears to be in the nature of blocking out rather than exploring.

The requested depths of the offsets do not follow a consistent rule: some are only as deep as the mineralized zone in the hole being offset, and some exceed this depth by as much as 50 feet. Although a dip of 3° would change the elevation only 4 feet in a horizontal distance of 75 feet (the spacing of the offsets), we have arbitrarily recommended that the offsets be drilled at least 30 feet deeper than the mineralized zone. Where this results in an irregular depth, e. g. 156, we have rounded to the next multiple of 5 or 160. The recommended offsets total 15,030 feet in 73 holes.

A list of requested and recommended offsets is attached. For locations, depths, grades, and thicknesses, reference is made to maps accompanying the applicant's letter of April 12, 1957.

E. N. Hawkinson
for Walden P. Pratt, geologist

Albert Kornelman for
E. O. Bingen, mining engineer

WPP:jc

cc: 9 - Ida-8963 - Hawkinson - Green.

Hole to be drilled	Offsets recommended	Depth recommended	Offsets recommended	Depth to base of sea sand	Depth recommended
25-30 *	N	150	25 - 29.25	146	160
	E	150	25.75 - 30		160
	S	150	—		
	W	150	24.25 — 30		160
25-49	N	250			
	E	250			
	S	250			
	W	250			
26.5 - 39	N	250	26.5 - 38.25	222	235
	E	250	27.25 - 39		235
	W	250	—		
26.5 - 40.5	N	250	26.5 - 39.75	234	245
	E	250	27.25 - 40.5		245
	S	250	26.5 - 41.25		245
	W	250	25.75 - 40.5		245
28 - 34.5	N	250	—		
	E	250	—		
	S	250	28 - 35.25	200	210
	W	250	—		
28 - 37.5	N	250	28 - 36.75	212	225
	E	250	28.75 - 27.5		225
	S	250	28 - 38.25		225
	W	250	27.28 - 37.5		225
29.5 - 28.5	N	160			
	E	160	30.25 - 28.5	152	165
	S	160	29.5 - 29.25		165
	W	160			
29.5 - 31.5	N	185	—		
	E	185	—		
	S	185	—		
	W	185	—		
29.5 - 36	N	250			
	E	250	30.25 - 36	209	220
	S	250	29.5 - 36.75		220
	W	250			
29.5 - 39	N	250	29.5 - 38.25	238	250
	E	250	30.25 - 39		250
	S	250	29.5 - 39.75		250
	W	250	28.75 - 39		250

Hole to be offset	Offsets requested	Depth requested	Offsets recommended	Depth to base of ore zone	Depth recommended
29.5 - 43.5	N	240	29.5 - 42.75	232	245
	E	240	30.25 - 43.5		245
	S	240			
	W	240			
31-30	N	170	31 - 29.25	150	160
	E	170	31.75 - 30		160
	S	170	31 - 30.75		160
	W	170	30.25 - 30		160
31 - 37.5	N	250	31 - 26.75	224	235
	E	250	31.75 - 37.5		235
	S	250	31 - 38.25		235
	W	250	30.25 - 37.5		235
31 - 42	N	240	31 - 41.25	235	245
	E	240	31.75 - 42		245
	S	240	31 - 42.75		245
	W	240	30.25 - 42		245
32.5 - 30	N	170	—		
	E	170	—		
32.5 - 31.5	N	190	32.5 - 30.75	184	195
	E	190	33.25 - 31.5		195
	S	190	32.5 - 32.25		195
	W	190	31.75 - 31.5		195
34 - 28.5	N	170	—		
	S	170	—		
	W	170	—		
34 - 30	E	180	34.75 - 30	154	165
34 - 32.5	N	195	—		
	E	195	34.75 --31.5	176	190
	S	195	34 - 32.25		190
35.5 - 31.5	N	190	35.5 - 30.75	183	195
	E	190	36.25 - 31.5		195
35.5 - 33	N	190	35.5 - 32.25	176	190
	E	190	36.25 - 33		190
	S	190	35.5 - 33.75		190
	W	190	34.75 - 33		190

Hole to be offset	Offsets requested	Depth requested	Offsets recommended	Depth to base of ore zone	Depth recommended
37 - 33	N	180	37 - 32.25	182	195
	E	180	37.75 - 33		195
	S	180	—		
38.5 - 31.5	N	190			
	E	190	39.25 - 31.5	180	190
	S	190	38.5 - 32.25		190
	W	190			
40 - 28.5	N	170	40 —27.75	166	175
	E	170	40.75 - 28.5		175
	S	170	40 - 29.25		175
	W	170	39.25 - 28.5		175
40 - 30	W	170	39.25 - 30	168	180
40 - 32.5	N	190	40 - 30.75	185	195
	E	190	40.75 - 32.5		195
	S	190	40 - 32.25		195
40 - 34.5	N	210	40 —33.75	202	215
	E	210	40.75 - 34.5		215
	S	210	40 - 35.25		215
	W	210	39.25 - 34.5		215
41.5 - 30	N	180	41.5 - 29.25	178	190
	E	180	42.25 - 30		190
	S	180	41.5 - 30.75		190
	W	180	40.75 - 30		190
41.5 - 33	N	205	41.5 - 32.25	199	210
	E	205	42.25 - 33		210
	S	205	41.5 - 33.75		210
	W	205	40.75 - 33		210
			Total		15,050 feet

* First coordinate refers to distance east of origin, second to distance north.

9 1957

Riverton, Wyoming
April 12, 1957

Mr. V. H. Brown, Director
D R A Field Team
[illegible]
Denver 2, Colorado

Subject: D R A Mill (Uranium)
Contract No. [illegible]
[illegible] Corporation
(Sunset and Tor Claims)
Fremont County, Wyoming

Dear Mr. Brown:

Transmitted herewith I am sending you a map showing the results of drilling to date under the D R A Contract.

The footwall area is outlined with the red dashed line. In this area several zones of mineralization are indicated.

As per the contract, I am preparing the final part of Stage III. The holes will be drilled on 75-foot centers, in efforts to holes drilled in the previous stages which showed results in assuming to be considered significant.

Total estimated footage under this contract is 76,125 ft., of this amount 53,400 ft. has been drilled leaving a total footage of 22,725 ft. available under part 2 stage III.

The table below lists the holes drilling efforts and the efforts with indicated drilling depths.

Stage III Part 2 Stage III, Part 1(2)
[illegible] Drilling

Hole No.	Drilled	Estimated Depth of Hole
[illegible]	[illegible]	[illegible]
	0-25 - 2	[illegible]
	[illegible] - 5	[illegible]
	[illegible] - [illegible]	[illegible]
	[illegible] - [illegible]	[illegible]

[illegible]

Date of the Attack	City and Point	Estimated Depth of Water [illegible]
[illegible]	[illegible]	[illegible]

Hole to be Offset	Offset Holes	Estimated Depth Of Hole - Feet
38.5 - 31.5	37.75 - 31.5	190'
	38.5 - 30.75	190'
	38.5 - 32.25	190'
	39.25 - 31.5	190'
40 - 28.5	39.25 - 28.5	170'
	40 - 27.75	170'
	40 - 29.25	170'
	40.75 - 28.5	170'
40 - 30	39.25 - 30	170'
40 - 31.5	40 - 30.75	190'
	40 - 32.25	190'
	40.75 - 31.5	190'
40 - 34.5	39.25 - 34.5	210'
	40 - 33.75	210'
	40 - 35.25	210'
	40.75 - 34.5	210'
41.5 - 30	40.75 - 30	180'
	41.5 - 29.25	180'
	41.5 - 30.75	180'
	42.25 - 30	180'
41.5 - 33	40.75 - 33	205'
	41.5 - 32.25	205'
	41.5 - 33.75	205'
	42.25 - 33	205'
	101	20,945

The coordinate location of holes are in reference to the coordinates on the enclosed map. Proposed holes are marked on the map by a red cross.

Very truly yours,

Vitro Minerals Corporation

G. H. Smith

G. H. Smith, Div. Geologist

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

224 New Customhouse
Denver 2, Colorado

February 1, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4182 (Uranium), Contract No. Idm-E963, Vitro Minerals Corporation (George and Vir claims), Fremont County, Wyoming.

Enclosed are four copies of approval from the DMEA Field Team, Region III, for drilling under Stage II, Phase (3), and Stage III of the Contract.

Also enclosed are two copies of the Operator's request for approval of the drilling and four copies of a joint memorandum report, dated January 25, 1957, from E. N. Harshman, Geologist, Geological Survey, and E. O. Binyon, Mining Engineer, Bureau of Mines, relative to the work approval.

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

W. M. Traver

W. M. Traver

Enclosures

Map submitted in envelope pocket

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

224 New Customhouse
Denver 2, Colorado

January 31, 1957

Official

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DATE	INITIALS	CODE

Mr. David L. Welsh, Geologist
Wyoming Division
Vitro Minerals Corporation
First and Monroe Streets
Riverton, Wyoming

Re: Docket No. DMEA 4182 (Uranium)
Contract No. Idm-2963
Vitro Minerals Corporation
(George and Vir claims)
Fremont County, Wyoming

Dear Mr. Welsh:

Reference is made to your letter of December 13, 1956, wherein you request the Government's approval for drilling under Stage II, Phase (3), and Stage III of the Contract.

Stage II, Phase (3), of the Contract provides for offset drill holes not primary grid holes. Therefore, your request for approval of drilling additional primary grid holes as outlined under category (B) of your request is denied.

Confirmation of verbal approval on January 17, 1957, for drilling Stage II, Phase (3) (Category (A) of your request) and for drilling under Stage III is as follows:

Offset Drilling under Stage II, Phase (3)
on 190-Foot Minimum Spacing

Coordinate Locations of Holes 1/

Hole to be Offset	Approved Offset Holes	Estimated Depth of Hole - Feet
10-36	8.5 - 36	145
	10 - 34.5	145
	10 - 37.5	145
	11.5 - 36	145

Hole to be Offset	Approved Offset Holes	Estimated Depth of Hole - Feet
19-37.5	17.5 - 37.5	185
	19 - 36	185
	19 - 39	185
	20.5 - 37.5	185
20-45	20.5 - 45	210
	20 - 43.5	210
	20 - 46.5	210
	23.5 - 45	210
22-48	20.5 - 48	170
	20 - 49.5	170
	23.5 - 48	170
23-28.5	23.5 - 28.5	150
	20 - 30	150
	26.5 - 28.5	150
23-34.5	23.5 - 34.5	230
	20 - 33	230
	23 - 36	230
	26.5 - 34.5	230
23-40.5	23.5 - 40.5	210
	20 - 38	210
	26.5 - 40.5	210
23-43.5	23.5 - 43.5	260
	23 - 42	260
	23 - 45	260
	26.5 - 43.5	260
23-49.5	23.5 - 49.5	260
	23 - 48	260
	23 - 51	260
	26.5 - 49.5	260
26-36	26.5 - 36	230
	28 - 34.5	250
	29.5 - 36	230
26-39	26.5 - 39	270
	28 - 37.5	270
	28 - 40.5	270
	29.5 - 39	270

	Hole to be Offset	Approved Offset Holes	Estimated Depth of Hole - Feet
	28-45	26.5 - 45	250
		28 - 43.5	250
		29.5 - 45	250
	26-48	26.5 - 48	170
		28 -46.5	170
		28 - 49.5	170
		29.5 - 48	170
	31-28.5	29.5 - 28.5	170
		31 - 27	170
		32.5 - 28.5	170
	31-31.5	29.5 - 31.5	195
		31 - 30	195
		31 -33	195
		32.5 - 31.5	195
	31-43.5	29.5 - 43.5	255
		31 - 42	255
		31 - 45	255
		32.5 - 43.5	255
	34-30	32.5 - 30	180
		34 - 28.5	180
		35.5 - 30	180
	34-33	32.5 - 33	210
		34 - 31.5	210
		34 - 34.5	210
		35.5 - 33	210
	37-31.5	35.5 - 31.5	185
		37 - 33	185
		38.5 - 31.5	185
	40-30	38.5 - 30	185
		40 - 28.5	185
		40 - 31.5	185
		41.5 - 30	185
	40-33	38.5 - 33	180
		40 - 34.5	180
		41.5 - 33	180
Total	21 holes	75 holes	15,625

Offset Drilling under Stage III on 75-Foot Minimum Spacing

Coordinate Locations of Holes 1/

Hole to be Offset	Approved Offset Holes	Estimated Depth of Hole - Feet
16-15	15.25 - 15	80
	16 - 14.25	80
	16.75 - 15	80
16-16.5	15.25 - 16.5	85
	16 - 15.75	85
	16 - 17.25	85
	16.75 - 16.5	85
17.5-15	17.5 - 14.25	60
	17.5 - 15.75	60
	18.25 - 15	60
17.5-16.5	17.5 - 17.25	60
	18.25 - 16.5	60
17.5-19.5	16.75 - 19.5	100
	17.5 - 18.75	100
	17.5 - 20.25	100
	18.25 - 19.5	100
19-16.5	19 - 15.75	50
19-18	18.25 - 18	100
	19 - 17.25	100
	19 -18.75	100
	19.75 - 18	100
19-19.5	19.75 - 19.5	100
	19 - 20.25	100
19-21	18.25 - 21	100
	19 - 21.75	100
	19.75 - 21	100
20.5-16.5	19.75 - 16.5	80
	20.5 - 15.75	80
	20.5 - 17.25	80
	21.25 - 16.5	80

Hole to be Offset	Approved Offset Holes	Estimated Depth of Hole - Feet
20.5-19.5	20.5 -18.75	95
	20.5 - 20.25	95
	21.25 - 19.5	95
22-15	21.25 - 15	70
	22 - 14.25	70
	22 - 15.75	70
	22.75 - 15	70
22-16.5	22.75 - 16.5	70
	22 - 17.25	70
22-27	22 - 26.25	145
	22 - 27.75	145
	22.75 - 27	145
23.5-15	23.5 - 14.25	70
	23.5 - 15.75	70
	24.25 - 15	70
23.5-25.5	22.75 - 25.5	170
	23.5 - 24.75	170
	23.5 - 26.25	170
	24.25 - 25.5	170
23.5-27	23.5 - 27.75	145
	24.25 - 27	145
25-22.5	24.25 - 22.5	45
	25 - 22.75	45
	25 - 23.25	45
	25.75 - 22.5	45
25-25.5	25 - 24.75	65
25-27	25 - 26.25	85
	25.75 - 27	85
	25 - 27.75	85
26.5-25.5	26.5 - 24.75	160
	25.75 - 25.5.	160
	26.5 - 26.25	160
35.5-25.5	34.75 - 25.5	145
	35.5 - 24.75	145
	35.5 - 26.25	145

Hole to be offset	Approved Offset Holes	Estimated Depth of Hole - Feet
35.5-28.5	34.75 - 28.5	170
	35.5 - 27.75	170
	35.5 - 29.25	170
37-21	36.25 - 21	65
	37 - 20.25	65
	37.75 - 21	65
37-22.5	36.25 - 22.5	65
	37 - 21.75	65
	37.75 - 22.5	65
37-24	36.25 - 24	140
	37 - 23.25	140
	37.75 - 24	140
37-25.5	36.25 - 25.5	165
	37 - 24.75	165
	37.75 - 25.5	165
37-27	36.25 - 27	175
	37 - 26.25	175
	37.75 - 27	175
37-28.5	36.25 - 28.5	180
	37 - 27.75	180
	37.75 - 28.5	180
37-30	37 - 29.25	185
	37 - 30.75	185
	36.25 - 30	185
	37.75 - 30	185
38.5-25.5	38.5 - 24.75	135
	38.5 - 26.25	135
38.5-28.5	38.5 - 27.75	180
	38.5 - 29.25	180
Total 38 holes	94 holes	10,395 feet

Footnote 1/ The coordinate locations of holes are in reference to the coordinates on the map, Figure 2, attached to the Contract. The first number of each hole is in reference to the coordinate numbers at the top of the map, and the second number of the hole is in reference to the numbers at the left side of the map.

Nothing in this confirmation of work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the final unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Very truly yours,

NYA Field Team, Region III

W. M. Weaver

W. M. Weaver

E. H. Hardeman

E. H. Hardeman

JWT:prl

cc: Chairman, Op. Comm. (4)
Finance Office, Reg. III
Assistant file, Reg. III
Hardeman (2)
Shaw (2)
Townsend
Current file
Chron.

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DEPARTMENT OF THE INTERIOR
JAN 30 1957
REGION III
DENVER, COLORADO

Building 20
Denver Federal Center
Denver 2, Colorado

REGION III

January 25, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III
Through: John F. Shaw
Supervising, Mining Engineer

From: E. N. Herzbaum and E. O. Bingen

Subject: Docket DMEA 4182 (Uranium) Contract Idm-2963 Vitro Minerals Corporation (George and Vir claims) Fremont County, Wyoming. Recommendations for Stage II - Phase III and Stage III drilling under the contract.

In a letter dated December 13, 1956 the operator requested approval of drilling 3 separate groups of holes. One group of 35 holes with the total footage of 7,000 feet is to be drilled under Stage II - Phase 3, and is to complete the widely spaced grid pattern. The second group is offset drilling at 150-foot spacing around holes drilled under Stage II - Phase 1, and includes 96 holes with a total aggregate footage of 19,085 feet. The third group consists of 137 holes with a total footage of 15,795 feet to be drilled at 75-foot spacing around mineralized holes of both Stage I and Stage II - Phase 2. This group is to be drilled under Stage III.

From a review of the drilling completed to date, it is concluded that the proposed drilling plan should be modified, and it is recommended that the modified drilling program as outlined below be approved.

1) Completion of widely spaced grid pattern.(Stage II-Phase 3. Actually, Stage I and Stage II-Phase 1) No holes to be drilled. These holes are considered a part of Stage I and Stage II-Phase 1 drilling, and should have been requested and included as a part of the widely spaced drilling.

2) Stage II - Phase 3: Offset drilling at 150 foot spacing around mineralized holes drilled under Stage II - Phase 1.

The following holes are to be drilled.

Hole No. (To be offset)	Offset Holes Hole No.	Depth feet
10-36	8.5 - 36	145
	10 - 34.5	145
	10 - 37.5	145
	11.5 - 36	145
19-37.5	17.5 - 37.5	185
	19 - 36	185
	19 - 39	185
	20.5 - 37.5	185
22-45	20.5 - 45	210
	22 - 43.5	210
	22 - 46.5	210
	23.5 - 45	210
22-48	20.5 - 48	170
	22 — 49.5	170
	23.5 - 48	170
25--28.5	23.5 - 28.5	150
	25 - 30	150
	26.5 - 28.5	150
25-34.5	23.5 - 34.5	250
	25 - 33	250
	25 - 36	250
	26.5 - 34.5	250
25-40.5	23.5 - 40.5	240
	25 --39	240
	26.5 - 40.5	240
25 - 43.5	23.5 - 43.5	260
	25 - 42	260
	25 - 45	260
	26.5 - 43.5	260
25-49.5	23.5 - 49.5	260
	25 - 48	260
	25 - 51	260
	26.5 - 49.5	260
28-36	26.5 - 36	250
	28 -34.5	250
	29.5 - 36	250

Hole No. (To be offset)	Offset Holes Hole No.	Depth feet
28-39	26.5 - 39	250
	28 - 37.5	250
	28 - 40.5	250
	29.5 - 39	250
28-45	26.5 - 45	250
	28 - 43.5	250
	29.5 - 45	250
28-48	26.5 - 48	170
	28 - 46.5	170
	28 - 49.5	170
	29.5 - 48	170
31-28.5	29.5 - 28.5	170
	31 - 27	170
	32.5 - 28.5	170
31-31.5	29.5 - 31.5	195
	31 - 30	195
	31 - 33	195
	32.5 - 31.5	195
31-43.5	29.5 - 43.5	255
	31 - 42	255
	31 - 45	255
	32.5 - 43.5	255
34-30	32.5 - 30	180
	34 - ~~31.5~~ 28.5	180
	35.5 - 30	180
34-33	32.5 - 33	210
	34 - 31.5	210
	34 - 34.5	210
	35.5 - 33	210
37-31.5	35.5 - 31.5	185
	37 - 33	185
	38.5 - 31.5	185
40-30	38.5 - 30	185
	40 - 28.5	185
	40 - 31.5	185
	41.5 - 30	185

Hole No. (To be offset)	Offset Holes Hole No.	Depth Feet
40-33	38.5 - 33	180
	40 - 34.5	180
	41.5 - 33	180
Total 21 holes	75 holes	15,625

Stage III Offset drilling 75 feet spacing around mineralized holes drilled in previous stages.

The following holes are to be drilled.

Hole No. (To be offset)	Offset Holes Hole No.	Depth feet
16-15	15.25 - 15	80
	16 - 14.25	80
	16.75 - 15	80
16-16.5	15.25 - 16.5	85
	16 - 15.75	85
	16 - 17.25	85
	16.75 - 16.5	85
17.5-15	17.5 - 14.25	60
	17.5 - 15.75	60
	18.25 - 15	60
17.5-16.5	17.5 - 17.25	60
	18.25 - 16.5	60
17.5-19.5	16.75 - 19.5	100
	17.5 - 18.75	100
	17.5 - 20.25	100
	18.25 - 19.5	100
19-16.5	19 - 15.75	50
19-18	18.25 - 18	100
	19 - 17.25	100
	19 - 18.75	100
	19.75 - 18	100
19-19.5	19.75 - 19.5	100
	19 - 20.25	100

Hole No. (To be offset)	Offset Holes Hole No.	Depth Feet
19-21	18.25 - 21	100
	19 - 21.75	100
	19.75 - 21	100
20.5-16.5	19.75 - 16.5	80
	20.5 - 15.75	80
	20.5 - 17.25	80
	21.25 - 16.5	80
20.5-19.5	20.5 - 18.75	95
	20.5 - 20.25	95
	21.25 - 19.5	95
22-15.	21.25 - 15	70
	22 - 14.25	70
	22 - 15.75	70
	22.75 --15	70
22-16.5	22.75 - 16.5	70
	22 --17.25	70
22-27	22 - 26.25	145
	22 - 27.75	145
	22.75 - 27	145
23.5-15	23.5 - 14.25	70
	23.5 - 15.75	70
	24.25 - 15	70
23.5-25.5	22.75 - 25.5	170
	23.5 - 24.75	170
	23.5 - 26.25	170
	24.25 - 25.5	170
23.5-27	23.5 - 27.75	145
	24.25 - 27	145
25-22.5	24.25 - 22.5	45
	25 - 21.75	45
	25 - 23.25	45
	25.75 - 22.5	45
25-25.5	25 - 24.75	65

Hole No. (To be offset)	Offset Holes Hole No.	Depth Feet
25-27	25 - 26.25	85
	25.75 - 27	85
	25 - 27.75	85
26.5-25.5	26.5 - 24.75	160
	25.75 - 25.5	160
	26.5 - 26.25	160
35.5-25.5	34.75 - 25.5	145
	35.5 - 24.75	145
	35.5 - 26.25	145
35.5-28.5	34.75 - 28.5	170
	35.5 - 27.75	170
	35.5 - 29.25	170
37-21	36.25 - 21	65
	37 - 20.25	65
	37.75 - 21	65
37-22.5	36.25 - 22.5	85
	37 - 21.75	85
	37.75 - 22.5	85
37-24	36.25 - 24	140
	37 - 23.25	140
	37.75 - 24	140
37-25.5	36.25 - 25.5	165
	37 - 24.75	165
	37.75 - 25.5	165
37-27	36.25 - 27	175
	37 - 26.25	175
	37.75 - 27	175
37-28.5	36.25 - 28.5	180
	37 - 27.75	180
	37.75 - 28.5	180
37-30	37 - 29.25	185
	37 - 30.75	185
	36.25 - 30	185
	37.75 - 30	185

Hole No. (To be offset)	Offset Holes Hole No.	Depth Feet
38.5-25.5	38.5 - 24.75	135
	38.5 - 26.25	135
38.5-28.5	38.5 - 27.75	180
	38.5 - 29.25	180
Total 32 holes	94 holes	10,595 feet

The holes are numbered from co-ordinates on the map accompanying the operator's request. The first number of each hole number is read from left to the right and the second number of the hole is read down the map.

E O Binyon
E. O. Binyon
Mining Engineer

E. M. Harshman
E. M. Harshman
Member Field Team

EOB:jg

cc: 9
DMEA 4182
Harshman
Chron.

Vitro MINERALS CORPORATION
FIRST AND MONROE STREETS • RIVERTON, WYO. • TELEPHONE 5XX
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13 December 1956

DMEA
DEPARTMENT OF THE INTERIOR
DEC 17 1956
REGION III
DENVER, COLORADO

Mr. W. M. Traver
Executive Officer, D.M.E.A.
Field Team, Region III
Room 224, New Customhouse
Denver, 2, Colorado

Re: Docket DMEA 4182 (Uranium)
Contract Idm E 963
VITRO MINERALS ~~CORPORATION~~
Fremont County, Wyoming

Approval Stage II Phase 3 and Stage III Partial

Dear Mr. Traver:

Five copies of this letter and its enclosures constitute our request for approval from your office for the work we propose to perform under Phase 3 of Stage II and under the first part of Stage III of the above contract on our George and Ver claims.

The enclosures are:

(1) Lists for proposed holes under Stage II Phase 3 and under Stage III (partial list) which summarize information concerning the mineralization in holes for which offset drilling is proposed.

(2) Map, scale 1" = 200', showing the positions of all mineralized holes and the locations of the proposed offset drilling for Stage II Phase 3 and Stage III first part.

Today we are also forwarding a copy of this letter to Mr. John F. Shaw along with our November report to him which describes the results of drilling phases 1 and 2, Stage II. We have also forwarded a request this week to your office for an extension on the completion date for the contract. It is anticipated that drilling opprations can be resumed on or before March 15th, 1957. Summaries of the results of drilling including maps, lithologic, radiometric assay, and cost data as well as logs for individual holes have been submitted with the three progress reports to Mr. Shaw's office.

Proposed Drilling Stage II Phase 3

The proposed drilling for Phase 3 Stage II is listed below in two catagories (a) and (b). A total of 163 holes, totaling 25,683 feet of drilling has been completed to date; this includes all of Stage I and Stage II, all of Phases 1 and 2. The same portion of the contract originally allowed 203 holes totaling 33,250 feet of drilling.

Stage II Phase 3 in exhibit 'A' calls for 80 holes and 12,800 feet of drilling. A total of 131 holes and 26,085 feet of drilling are proposed for Stage II Phase 3. It is proposed that the 7,5~~8~~7 feet and 40 holes allowed in excess of the requirements for the work already completed should be utilized to cover part of the planned 13,285 feet and 51 holes in excess. The remainer should be taken from Stage III allowances.

(A) For the first part of Stage II Phase 3 we propose the 96 holes listed in enclosure (1) as 150 foot offset centers, to be drilled for a total of 19,085 feet.

(B) For the second part of Stage II Phase 3 we propose to drill 35 holes, listed in enclosure (1) as 300 foot grid-spaced holes for a total of 7000 feet of drilling. These holes would serve to complete the 300 foot grid pattern on the George and Ver claims. It is estimated that nearly 30% of the area of the George and Ver claims have been excluded from this DMEA exploration program. If 100' margins were strictly observed with respect to the outside claim boundaries less than 1% of the area needed to be left out. The excluded area from exploration totals 100 acres, or the equivalent of five claims in size. In view of the recent ore discoveries made on neighboring adjacent claims we believe that some of the areas closer to the margins of the block are equally desireable hunting grounds for larger ore bodies.

Proposed Drilling Stage III (Partial)

The enclosed list of 75' offsets for well-mineralized holes encountered especially in Stage I drilling area, itemizes 137 holes totaling 15,705 feet of drilling. It seems probable that several one thousand ton ore bodies can be developed at 50 feet depth in the vicinity of the south half of George 2 claim with Stage III drilling. An excess of around 8000 feet remains for completion of Stage III.

Very truly yours,

David L. Welsh

David L. Welsh
Geologist, Wyoming Division

DLW:mb

PROPOSED DRILLING STAGE II PHASE 3. COMPLETION OF OF WIDE SPACED GRID PATTERN.

HOLE NO	HOLE NO	HOLE NO
4 - 30	31 - 19.5	47 - 25
7 - 10.5	34 - 18	49 - 34.5
7 - 19.5	34 - 42	50 - 23.6
7 - 34.5	34 - 48	52 - 33
10 - 39	35.8 - 17.2	53 - 22.2
19 - 46	37 - 19.5	55 - 22.5
22 - 51	37 - 40.5	55 - 31.5
25 - 4.5	40 - 27	56 - 24.5
25 - 52.5	40 - 39	57 - 27
28 - 15	43 - 37.5	58 - 30
28 - 18	44 - 26.5	
28 - 51		
31 - 19.5	46 - 36	

35 HOLES - FOOTAGE: 7,000 Feet.

GEORGE & VER STAGE II PHASE 3 PROPOSED DMEA DRILLING

Hole No. (to be offset)	Surface Elevation	Total Depth	Deepest Mineral. Zone	Datum of Mineralized Zone	Offset Holes Proposed Hole No.	Offset Holes Proposed Depth
7-28.5	6484'	120'	120'	6364'	5.5-28.5	130'
					7-27	130'
					7-30	130'
					8.5-28.5	130'
10-36	6514'	170'	135'	6379'	8.5-36	145'
					10-34.5	145'
					10-37.5	145'
					11.5-36	145'
13-40.5	6524'	170'	170'	6354'	11.5-40.5	180'
					13-39	180'
					13-42	180'
					14.5-40.5	180'
15-30	6498'	170'	170'	6328'	14.5-30	180'
					16-28.5	180'
					16-31.5	180'
					17.5-30	180'
16-33	6515'	170'	170'	6345'	14.5-33	180'
					16-34.5	180'
					17.5-33	180'
16-36	6505'	170'	110'	6395'	14.5-36	120'
					17.5-36	120'
16-39	6506'	170'	170'	6336'	14.5-39	180'
					16-37.5	180'
					16-40.5	180'
					17.5-39	
19-37.5	6495'	170'	170'	6325'	17.5-37.5	185'
					19-36	185'
					19-39	185'
					20.5-37.5	185'
22-45	6517'	250'	185'	6332'	20.5-45	210'
					22-43.5	210'
					22-46.5	210'
					23.5-45	210'
22-48	6517'	250'	165'	6352'	20.5-48	170'
					22-49.5	170'
					23.5-48	170'
25-28.5	6493'	170'	145'	6348'	23.5-28.5	150'
					25-30	150'
					26.5-28.5	150'
25-34.5	6484'	240'	240'	6244'	23.5-34.5	250'
					25-33	250'
					25-36	250'
					26.5-34.5	250'
25-40.5	6513'	250'	235'	6278'	23.5-40.5	240'
					25-39	240'
					26.5-40.5	240'
25-43.5	6505'	250'	255'	6250'	23.5-43.5	260'
					25-42	260'
					25-45	260'
					26.5-43.5	260'
28-36		255'	240'	6256'	26.5-36	250'
	6496'				28-34.5	250'
(In first report.)					29.5-36	250'

GEORGE & VER STAGE II PHASE 3 PROPOSED DMEA DRILLING

Hole No. (to be offset)	Surface Elevation	Total Depth	Deepest Mineral. Zone	Datum Mineralized Zone	Offset Holes Proposed Hole No.	Offset Holes Proposed Depth
28-39	6502'	240'	245'	6257'	26.5-39	250'
					28-37.5	250'
					28-40.5	250'
					29.5-39	250'
28-45	6487'	250'	240'	6247'	26.5-45	250'
					28-43.5	250'
					29.5-45	250'
28-48	6490'	250'	165'	6325'	26.5-48	170'
					28-46.5	170'
					28-49.5	170'
					29.5-48	170'
31-28.5	6493'	170'	165'	6328'	29.5-28.5	170'
					31-27	170'
					32.5-28.5	170'
31-31.5	6512'	200'	185'	6327'	29.5-31.5	195'
					31-30	195'
					31-33	195'
					32.5-31.5	195'
31-43.5	6510'	250'	240'	6270'	29.5-43.5	255'
					31-42	255'
					31-45	255'
					32.5-43.5	255'
34-30	6478'	170'	165'	6313'	32.5-30	180'
					34-31.5	180'
					35.5-30	180'
34-33	6500'	200'	205'	6295'	32.5-33	210'
					34-31.5	210'
					34-34.5	210'
					35.5-33	210'
37-31.5	6473'	170'	180'	6293'	35.5-31.5	185'
					37-33	185'
					38.5-31.5	185'
40-30	6457'	170'	180'	6277'	38.5-30	185'
					40-28.5	185'
					40-31.5	185'
					41.5-30	185'
40-33	6463'	170'	175'	6288'	38.5-33	180'
					40-34.5	180'
					41.5-33	180'
25-49.5	6498'	255'	242'	6256'	23.5-49.5	260'
					25-48	260'
					25-51	260'
					26.5-49.5	260'

Total Holes 96

Total Footage 19,085'

GEORGE & VER STAGE III PART 1 PROPOSED DMEA DRILLING

Hole No. (to be offset)	Surface elevation	Total Depth	Deepest Mineral. Zone	Datum of Mineralized Zone	Offset Holes Proposed Hole No.	Offset Holes Proposed Depth
7-13.5	6503'	130'	75'	6428'	6.25-13.5	90'
					7-12.75	90'
					7-14.25	90'
					7.75-13.5	90'
13-22.5	6494'	130'	105'	6389'	12.25-22.5	115'
					13-21.75	115'
					13-23.25	115'
					13.75-22.5	115'
14.5-15	6482'	70'	70'	6412'	13.75-15	80'
					14.5-14.25	80'
					14.5-15.75	80'
					15.25-15	80'
16-15	6479'	120'	65'	6414'	16-14.25	80'
					16.75-15	80'
16-16.5	6475'	70'	80'	6395'	15.25-16.5	85'
					16-15.75	85'
					16-17.25	85'
					16.75-16.5	85'
17.5-15	6466'	70'	50'	6416'	17.5-14.25	60'
					17.5-15.75	60'
					18.25-15	60'
17.5-16.5	6468'	50'	50'	6418'	17.5-17.25	60'
					18.25-16.5	60'
17.5-19.5	6490'	90'	90'	6400'	16.75-19.5	100'
					17.5-18.75	100'
					17.5-20.25	100'
					18.25-19.5	100'
19-15	6461'	50'	40'	6421'	19-14.25	50'
					19.75-15	50'
19-16.5	6472'	120'	45'	6427'	19-15.75	50'
19-18	6478'	90'	90'	6388'	18.25-18	100'
					19-17.25	100'
					19-18.75	100'
					19.75-18	100'
19-19.5	6490'	150'	90'	6400'	19-20.25	100'
19-21	6494'	90'	90'	6404'	18.25-21	100'
					19-21.75	100'
					19.75-21	100'
20.5-16.5	6477'	70'	70'	6407'	19.75-16.5	80'
					20.5-15.75	80'
					20.5-17.25	80'
					21.25-16.5	80'
20.5-19.5	6491'	90'	85'	6406'	20.5-18.75	95'
					20.5-20.25	95'
					21.25-19.5	95'
22-15	6470'	120'	50'	6420'	21.25-15	70'
					22-14.25	70'
					22-15.75	70'
					22.75-15	70'
22-16.5	6479'	65'	60'	6419'	21.25-16.5	70'
					22-17.25	70'
					22.75-16.5	70'
22-27	6484'	180'	132'	6352'	21.25-27	145'
					22-26.25	145'
					22-27.75	145'
					22.75-27	145'

GEORGE & VER STAGE III PART 1 PROPOSED DMEA DRILLING

Hole No. (to be offset)	Surface Elevation	Total Depth	Deepest Mineral Zone	Datum Mineralization Zone	Offset Holes Proposed Hole No.	Offset Holes Proposed Depth
23.5-15	6479'	65'	60'	6419'	23.5-14.25	70'
					23.5-15.75	70'
					24.25-15	70'
23.5-25.5	6477'	170'	160'	6317'	22.75-25.5	170'
					23.5-24.75	170'
					23.5-26.25	170'
					24.25-25.5	170'
23.5-27	6486'	135'	135'	6351'	23.5-27.75	145'
					24.25-27	145'
25-10.5	6451'	110'	45'	6406'	24.25-10.5	55'
					25-9.75	55'
					25-11.25	55'
					25.75-10.5	55'
25-22.5	6469'	165'	35'	6434'	24.25-22.5	45'
					25-21.75	45'
					25-23.25	45'
					25.75-22.5	45'
25-25.5	6483'	180'	55'	6428'	25-24.75	65'
25-27	6489'	170'	75'	6414'	25-26.25	85'
					25.75-27	85'
25-28.5	6493'	170'	140'	6353'	24.25-28.5	150'
					25-27.75	150'
					25-29.25	150'
					25.75-28.5	150'
26.5-25.5	6487'	170'	150'	6337'	25.75-25.5	160'
					26.5-24.75	160'
					26.5-26.25	160'
					27.25-25.5	160'
#345 28.55-16.9	6457'	40'	45'	6412'	27.80-16.9	55'
					28.55-17.65	55'
35.5-25.5	6451'	135'	135'	6316'	34.75-25.5	145'
					35.5-24.75	145'
					35.5-26.25	145'
35.5-28.5	6467'	170'	160'	6307'	34.75-28.5	170'
					35.5-27.75	170'
					35.5-29.25	170'
37-21	6445'	55'	55'	6390'	36.25-21	65'
					37-20.25	65'
					37.75-21	65'
37-22.5	6447'	165'	75'	6372'	36.25-22.5	85'
					37-21.75	85'
					37.75-22.5	85'
37-24	6450'	135'	130'	6320'	36.25-24	140'
					37-23.25	140'
					37.75-24	140'
37-25.5	6451'	165'	155'	6296'	36.25-25.5	165'
					37-24.75	165'
					37.75-25.5	165'
37-27	6451'	170'	165'	6286'	36.25-27	175'
					37-26.25	175'
					37.75-27	175'
37-28.5	6458'	255'	170'	6288'	36.25-28.5	180'
					37-27.75	180'
					37.75-28.5	180'

GEORGE & VER STAGE III PART 1, PROPOSED DMEA DRILLING

Hole No. (to be offset)	Surface Elevation	Total Depth	Deepest Mineral. Zone	Datum Mineralized Zone	Offset Holes Proposed Hole No.	Offset Holes Proposed Depth
37-30	6465'	170'	175'	6290'	36.25-30	185'
					37-29.25	185'
					37.75-30	185'
38.5-25.5	6452'	135'	125'	6327'	38.5-24.75	135'
					38.5-26.25	135'
					39.25-25.5	135'
38.5-28.5	6455'	170'	170'	6285'	38.5-27.75	180'
					38.5-29.25	180'
					39.25-28.5	180'
43-28.5	6480'	255'	200'	6280'	42.25-28.5	210'
					43-27.75	210'
					43-29.25	210'
					43.75-28.5	210'
46-27	6505'	180'	120'	6385'	45.25-27	130'
					46-26.25	130'
					46-27.75	130'
					46.75-27	130'
49-25.5	6508'	150'	130'	6378'	48.25-25.5	140'
					49-24.75	140'
					49-26.25	140'
					49.75-25.5	140'
53.85-21.5 (#144)	6497'	84'	80'	6417'	53.85-22.25	90'
54.55-20.80 (#136)	6500'	78'	80'	6420'	54.55-21.55	90'
55-25.5	6514'	150'	140'	6374'	54.25-25.5	150'
					55-24.75	150'
					55-26.25	150'
					55.75-25.5	150'

Total Holes 137

Total Footage 15,705'

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

224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 14 1957

DATE	INITIALS	CODE
		130657
	G.	225

January 10, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4182 (Uranium), Contract No. Idm-E963, Vitro Minerals Corporation, (George and Ver claims), Fremont County, Wyoming

Enclosed are the Government's, Division, and Docket copies of Amendment No. 2 to Contract No. Idm-E963, which was prepared in Washington and forwarded by your letter of December 28, 1956, for signature by the Operator and this office.

The Amendment provides for a recess of operations from November 27, 1956 to not later than March 15, 1957, extends the date fixed for completion of the work to August 14, 1957, and extends the maximum period for royalty payments and lien for payment thereof to eleven years from the date of the Contract.

Also enclosed are four sets of data relative to the Amendment, consisting of the Operator's letters of December 12 and December 14, 1956.

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

E. N. Harshman

E. N. Harshman

VITRO MINERALS CORPORATION
1st and Monroe
Riverton, Wyoming

Official

EXTRA COPY DMEA RECEIVED JAN 14 1957		
DATE	INITIALS	CODE
1/14	rw	220

[illegible] December 1956

DMEA
DEPARTMENT OF THE INTERIOR
DEC 17 1956
REGION III
DENVER, COLORADO

Mr. W.W. Traver
Executive Officer, DMEA
Field Team, Region III
[illegible]
Denver 2, Colorado

Re: Docket No. DMEA [illegible]
(Uranium) Contract No.
I-[illegible] Vitro Minerals
Corporation (Sparrow and
Ver Claims, Fremont
County, Wyoming

Dear Mr. Traver:

This letter replies to your letter, dated December 12, 1956, wherein you requested certain information for preparing a suitable instrument for extending the completion date for work under the Contract to July 15, 1957.

The last work performed under the Contract was the completion of reports on December 14, 1956. The last drilling was completed on November 26, 1956.

Drilling operations will be resumed in the Spring on or before March 15, 1957.

Very truly yours,

David L. Welch
DAVID L. WELCH
GEOLOGIST, MINING DIVISION

DLW:ers

cc:
J. D. Horton
Gen Manager
Salt Lake City, Utah

Enclosed - Original & 5 copies.

DMEA
DEPARTMENT OF THE INTERIOR

DEC 12 1956
REGION III
DENVER, COLORADO

12 December 1956

EXTRA COPY
DMEA
RECEIVED JAN 14 1957

DATE	INITIALS	CODE

MR. W. W. TRAVER
EXECUTIVE OFFICER, DMEA
FIELD TEAM, REGION III
UNITED STATES DEPARTMENT OF THE INTERIOR
ROOM 224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

Re: Your Letter December 7, 1956
Docket DMEA-4132 (Uranium)
Contract I4r-5963
George and Var Claims
Fremont County, Wyoming

Dear Mr. Traver:

It will be impossible for reasons beyond our control to complete all the approved work under Contract I4r-5963 by January 1, 1957. This letter requests consideration by the Government of our need to extend the completion date to July 15, 1957.

In support of this request, the following tabulation shows the work already finished, and estimations of the drilling remaining to complete the contract:

	Stage and Phase	Footage	Holes	Contract Footage Allowed	Holes
	Stage I	9,753	63	10,690	63
Completed	Stage II Phase 1	12,270	64	10,400	64
Drilling-------	Stage II Phase 2	3,660	36	12,160	76
Projected	Stage II Phase 3	18,230	93	12,800	80
Drilling-------	Stage III	32,277	215	30,080	188
		76,190	471	76,130	471

Winter weather conditions make it seem unlikely that the projected drilling on this contract can commence before spring. At that time, the proposed drilling may take two to three months for completion.

Con't letter dtd 12 Dec 56 from Vitro Min Corp
to Mr. [illegible] Thayer

Results of the last drilling completed are being forwarded to Mr. Shaw under separate cover. These results, we believe, are very encouraging.

A request for approval of the projected drilling is also ready for forwarding to your office.

Very truly yours,

David L. Welsh

DAVID L. WELSH
WYOMING DIVISION GEOLOGIST

DLW:mfo

cc:
J.C.Horton
Gen Manager
Salt Lake City, Utah

Enclosed Orignal and 5 copies

700

FILE COPY

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

DEC 28 1956

Mr. [illegible] M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-1963
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Dear Mr. Traver:

With reference to your December 19, 1956 teletype and our reply of the 21st., we are enclosing the original and seven copies of the subject proposed amendment. The extra two copies are for Field Team use.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

Frank D. Lamb (GCS)
Member, Bureau of Mines

N. E. Nelson (GCS)
Member, Geological Survey

FMMurphy/izm 12-27-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

Department of the Interior

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

DMEA
14X1401(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to the Office of the Secy.)

FILE COPY
Surname:
Murphy
Ellis
Mitchenoy
Selfridge

TELETYPE

DEC 21 1956

W. M. TRAVER, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REAUTT DECEMBER 19, DOCKET 4182, IDM-4963, VITRO MINERALS CORPORATION. WILL PREPARE RECOMMENDED AMENDMENT FOR YOUR SIGNATURE.

George C. Selfridge
CHAIRMAN, OPERATING COMMITTEE

FMMurphy/izm 12-20-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
Confirmation Copy to Region III
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

Mr. George Selfridge

DN 235 BUR MINES 12-19-56 8-57

CHAIRMAN, OPERATING COMMITTEE, DMEA

RE DOCKET DMEA 4182, CONTRACT IDM-E963, VITRO MINERALS CORP.
OPERATOR REQUESTS APPROVAL FOR RECESS OF OPERATIONS BECAUSE OF ADVERSE WINTER WEATHER CONDITIONS FROM NOVEMBER 27,1956, TO ON OR BEFORE MARCH 15,1957, AND EXTENSION OF COMPLETION DATE TO ~~JULY 15,1957~~. AUG. 1, 1957
PREPARATION OF SUTIABLE AMENDMENT RECOMMENDED. PLEASE TELETYPE ADVICE AS TO HOW WE SHOULD PROCEED.

W M TRAVER

RECEIVED
DEC 19 1956
D.M.E.A.

Denver Colo.

DEC 19 12 46 PM '56

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

224 New Customhouse
Denver 2, Colorado

December 12, 1956

Mr. David L. Welsh
Wyoming Division Geologist
Vitro Minerals Corporation
Riverton, Wyoming

Re: Docket No. DMEA 4182 (Uranium)
Contract No. Idm-E963
Vitro Minerals Corporation
(George and Vir claims)
Fremont County, Wyoming

Dear Mr. Welsh:

Reference is made to your letter, dated December 12, 1956, wherein you advise that because of winter weather conditions it seems unlikely that additional drilling can be commenced before Spring, and in conjunction therewith request an extension of the completion date for work under the Contract to July 15, 1957.

If operations under the Contract are to be suspended which will involve an extension of the date fixed for completion of the project work, it will be necessary that the Government and the Operator execute an agreement establishing the period within which operations will be suspended.

In that regard, in conjunction with preparing a suitable instrument, please supply the following information by return mail:

1. The date the last work was performed under the Contract.

2. The date on or before which operations will be resumed in the Spring.

Very truly yours,

Original signed by
W. M. TRAVER

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

JWT:prl
cc: Chairman, Op. Comm. (2)) w/copy of
Harshman) Operator's
Shaw) letter of
Corres. file) Dec. 12.

cc: Mr. J. O. Horton
Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah
Townsend
Chron.

Vitro MINERALS CORPORATION
FIRST AND MONROE STREETS • RIVERTON, WYO. • TELEPHONE 521

12 December 1956

DMEA
DEPARTMENT OF THE INTERIOR
DEC 12 1956
REGION III
DENVER, COLORADO

MR. W.M. TRAVER
EXECUTIVE OFFICER, DMEA
FIELD TEAM, REGION III
UNITED STATES DEPARTMENT OF THE INTERIOR
ROOM 224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

Re: Your Letter December 7, 1956
Docket DMEA-4182 (Uranium)
Contract Idm-E963
George and Ver Claims
Fremont County, Wyoming

Dear Mr. Traver:

It will be impossible for reasons beyond our control to complete all the approved work under Contract Idm-E963 by January 1, 1957. This letter requests consideration by the Government of our need to extend the completion date to July 15, 1957.

In support of this request, the following tabulation shows the work already finished, and estimations of the drilling remaining to complete the contract:

	Stage and Phase	Footage	Holes	Contract Footage Allowed	Holes
	Stage I	9,753	63	10,690	63
Completed	Stage II Phase 1	12,270	64	10,400	64
Drilling-------	Stage II Phase 2	3,660	36	12,160	76
Projected	Stage II Phase 3	18,230	93	12,800	80
Drilling-------	Stage III	32,227	215	30,080	188
		76,130	471	76,130	471

Winter weather conditions make it seem unlikely that the projected drilling on this contract can commence before spring. At that time, the proposed drilling may take two to three months for completion.

Con't Letter dtd 12 Dec 56 from Vitro Min Corp
to Mr. W.M.Traver

Results of the last drilling completed are being forwarded to Mr. Shaw under separate cover. These results, we believe, are very encouraging.

A request for approval of the projected drilling is also ready for forwarding to your office.

Very truly yours,

David L. Welsh

DAVID L. WELSH
WYOMING DIVISION GEOLOGIST

DLW:efp

cc:
J.O.Horton
Gen Manager
Salt Lake City, Utah

Enclosed Orignal and 5 copies

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

294 New Customhouse
Denver 2, Colorado

December 7, 1956

Mr. J. O. Horton
Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

Re: Docket DMEA-4182 (Uranium)
Contract Idm-E963
Vitro Minerals Corporation
(George and Ver claims)
Fremont County, Wyoming

Dear Mr. Horton:

The completion date for all approved work under Contract Idm-E963 is January 1, 1957. If for reasons beyond your control you will be unable to complete all of the work by January 1, 1957, you should immediately submit for consideration by the Government a request for extension of the completion date for such specific additional time as will be required.

The original and five copies of such requests are required by this office.

Very truly yours,

Original signed by
W. M. TRAVER

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

Copy to:
D. L. Walsh
Riverton, Wyoming

JDC:jy
cc: Chm. Op. Comm. (2)
Harshman
Shaw (2)
Townsend
Corresp. E963
Chron.

RECEIVED
DEC 10 1956

October 30, 1956

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare and Miscellaneous Metals Division

Subject: Amendment to contract

Mr. Murphy has reviewed and approved Amendment No. 1, dated October 18, 1956, to Contract No. Lbm-2963, Docket No. DMEA-1182, Vitro Minerals Corporation, and has indicated that no further review is required by the Legal Division.

Grace L. Ault

Date October 29, 1956

Commodity Uranium

To: Mr. Murphy

Docket No. DMA-4182 - Vitro Minerals Corporation

Contract No. Idm-E 963

Attached is Amendment No. 1, dated October 18, 1956

TO BE REVIEWED.

Approved Murphy

Other action None

Please return this slip to me for my records.

Grace Ault

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

RECEIVED
OCT 29 1956

224 New Customhouse
Denver 2, Colorado

October 25, 1956

Memorandum

To: Chairman, Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4182 (Uranium) Contract Idm-E963
Vitro Minerals Corporation (George and Ver Claims)
Fremont County, Wyoming

Enclosed are the original and two copies of Amendment No. 1 to Contract Idm-E963 which has been executed under authority delegated to this office, to modify the description of the work to be performed under Stage I of the contract.

Also enclosed are four copies of a memorandum, dated October 19, 1956, from E. O. Binyon, Mining Engineer, Bureau of Mines, pertaining to the necessity for the Amendment.

map "Figure 2" attached to the contract shows 64 holes to be drilled under Stage I; while, however, the recitation in Exhibit "A" states 63 holes will be drilled.

Inasmuch as the Operator, in good faith, drilled all 64 holes at the locations indicated on the map; therefore, the Amendment has been executed to change the recitation in Exhibit "A" so that the number of holes to be drilled will correspond to the number of holes indicated on the map.

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

W. M. Traver

W. M. Traver

RECEIVED
OCT 29 1956

REGION III

Memorandum

Building 20
Denver Federal Center
Denver 2, Colorado
October 19, 1956

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: E. O. Binyon

Subject: Docket DMEA 4132 (Uranium) Contract Idm-E963, Vitro Minerals Corporation (George and Ver claims group) Fremont County, Wyoming. —Amendment of Contract

According to the wording of the first paragraph under Stage I Exhibit A of the Contract, it seems to stipulate that 63 holes with an aggregate total footage of 10,690 are to be drilled under Stage I. However, if the average depth of 160 feet (Exhibit A, General Provisions, paragraph 1) is used for the 58 holes (single circle on map) and an average depth of 250 feet for the 5 holes (double circle on map), the total aggregate footage should be 10,530 feet or 160 feet less than the 10,690 stipulated. The Contract map shows 59 single circled holes (depth 160) and 5 double circled holes (250) or a total aggregate footage of 10,690 feet, indicating that possibly 64 holes are to be drilled under Stage I.

The operator apparently has used the Contract map for a layout of Stage I drilling and in good faith has drilled 64 holes with an aggregate total depth of 9,753 feet as reported in the monthly reports for July and August, 1956. The drilling covered by these reports has conformed to all terms of the contract as interpreted from the Contract map and total footage authorized.

In order that the wording of the Contract, the total footage for Stage I and the number of holes on the Contract map, shall conform, it is recommended that the Contract be amended and that "63 holes" in line 1 of paragraph 1 under Stage I Exhibit A be changed to 64 holes and the "58 holes" in line 9 of the same paragraph be changed to 59 holes.

It is also recommended that the amendment be made effective as of the date of the Contract.

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

cc: 9
Idm-E963
Chron

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

RECEIVED
OCT 25 1956

224 New Customhouse
Denver 2, Colorado

October 23, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4182 (Uranium), Contract No. Idm-E963
Vitro Minerals Corporation (George and Ver claims),
Fremont County, Wyoming

Enclosed are four copies of confirmation of project work approval issued by the DMEA Field Team, Region III.

Also enclosed are two copies of the Operator's request of October 13, 1956, with attached data, and four copies of a joint memorandum report, dated October 22, 1956, from E. N. Harshman, Geologist, Geological Survey, also a member of the DMEA Field Team, Region III, and E. O. Binyon, Mining Engineer, Bureau of Mines.

W. M. Traver
W. M. Traver

Enclosures

Maps submitted:
Enclosure 1 } - in envelope pocket
Enclosure 4 }

RECEIVED
OCT 25 1956

224 New Customhouse
Denver 2, Colorado

October 23, 1956

Mr. J. G. Norton, General Manager
Vitro Minerals Corporation
P. O. Box 67
South Salt Lake
Salt Lake City, Utah

Re: Docket No. DMEA 4182 (Uranium)
Contract No. Idm-E963
Vitro Minerals Corporation
(George and Ver claims)
Fremont County, Wyoming

Dear Mr. Norton:

In reference to the request by D. L. Welsh, Wyoming Division Geologist, Vitro Minerals Corporation, dated October 13, 1956, this confirms the Government's approval by telephone on October 19, 1956, for Vitro Minerals Corporation to perform the following Stage II, Phase (1) and Stage II Phase (2) drilling under Contract No. Idm-E963:

Stage II, Phase (1) - 64 Holes

Stage II, Phase (1) drilling may be performed as outlined in the contract at the locations indicated by the small triangle symbol on the map, "Figure 2" attached to the contract, except that the southwesterly hole shown on the Ver - 5 claim at coordinates 10-39 will not be drilled.

It is estimated that approximately 1,900 feet in addition to the 10,400 feet estimated for Stage II, Phase (1) may be required to complete the 64 holes to their objectives. Therefore, consistent with the provisions in the contract relative to transfer of required footage to complete approved holes, the necessary additional footage may be obtained by transfer to Stage II, Phase (1) of the footage unexpended under Stage I and the balance required from the footage apportioned to Stage III.

Stage II, Phase (2) - 36 Holes Offsetting Stage I Holes

Coordinate Location of Stage I Holes to be Offset	Coordinate Location of Approved Stage II, Phase (2) Offset Holes	Estimated Depth
16-15	14.5 - 15.	70
	16 - 13.5	70
	16 - 16.5	70
	17.5 - 15.	70
19 - 16.5	17. - 16.5	50
	19 - 15	50
	20.5 - 16.5	50
19 - 19.5	17.5 - 19.5	90
	19 - 18	90
	19 - 21	90
	20.5 - 19.5	90
22 - 15	20.5 - 15	65
	22 - 13.5	65
	22 - 16.5	65
	23.5 - 15	65
25 - 22.5	23.5 - 22.5	40
	25 - 21	40
	26.5 - 22.5	40
25 - 25.5	23.5 - 25.5	170
	25 -24	170
	25 - 27	170
	26.5 - 25.5	170
22 - 27	20.5 - 27	135
	22 - 25.5	135
	22 - 28.5	135
	23.5 - 27	135
37 - 22.5	35.5 - 22.5	55
	37 - 21	55
	38.5 - 22.5	55
37 - 25.5	35.5 - 25.5	135
	37 - 24	135
	38.5 - 25.5	135
37 - 28.5	35.5 - 28.5	170
	37 - 27	170
	37 - 30	170
	38.5 - 28.5	170
Totals 36 holes		3640 ft. estimated aggregate

Nothing in this confirmation of work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Very truly yours,

DMEA Field Team, Region III

W. M. Traver

E. N. Marshman

JWT:prl

cc: Chairman, Op. Comm. (4)
Finance Office, Reg. III
Amendment file, Reg. III
Marshman
Shaw
Townsend
Corres. file
Chron.

RECEIVED
OCT 25 1956

REGION III

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

Building 20
Denver Federal Center
Denver 2, Colorado
October 22, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: E. N. Harshman
R. O. Binyon

Subject: Docket DMEA 4182 (Uranium) Contract Idm-8963, Vitro Minerals Corporation (George and Var claims group) Fremont County, Wyo. -- Request for Stage II drilling

The operator, in a letter of transmittal for the August 1956 monthly reports covering the drilling that completed Stage I of the contract, included a request for blanket approval of Stage II. As this did not outline the work project in detail and did not include any supporting data he was advised to submit a formal request and to include all available information in support of the request.

In a letter to W. M. Traver, Executive Officer, dated October 13 the operator requested approval of Stage II, Phase 1 (Grid drilling) and a part of the offset drilling as authorized under Stage II, Phase 2 of the contract to offset mineralized holes of Stage I. For Phase 1, an additional 1843 feet will be required and a transfer of footages from Stage I and Stage II, Phase 2, to make up the increase in total footage, is also requested.

Under Stage I which was completed August 27, a total of 10,690 feet in 64 holes were authorized by the contract (amended); however, of the authorized footage, only 9,753 feet were used in the 64 holes drilled to explore the northern half of the property and there by 937 feet remain under Stage I and are available for transfer.

As outlined by the operator, the location of Stage II, Phase 1 holes being down dip of the Wind River formation will increase the depth of the holes to an estimated average depth of 191.3 feet, or 31.3 feet, over the average depth of 160 feet used in calculation of the 10,400 feet authorized for Phase 1 drilling. For 64 holes with an average depth of 191.3 feet, the total footage to be drilled under Stage II, Phase 1 (Grid drilling) is 12,243 feet or 1843 feet over the authorized maximum of 10,400 feet for Phase 1 of Stage II. (In the operator's request he shows 12,344 feet for 64 holes which is in error).

It is recommended that hole No. 10 - 39 on the Ver 5 claim not be drilled, and that Stage II, Phase 1 (Grid drilling) be approved for drilling 64 holes to an average depth of 192 feet or a maximum total footage of 12,300 feet (rounded) which is 1980 feet more than the 10,400 feet authorized for Phase 1 under Stage II. It is suggested that this additional 1980 feet required for completion of Stage II, Phase 1 drilling as outlined above, be obtained by a transfer of the 937 feet authorized but not drilled and remaining under Stage I to Phase 1 of Stage II and that the additional 963 feet required be transferred from Stage II, Phase 2 to Stage II, Phase 1 to bring the total attainable footage for this Phase to 12,300 feet.

From a study of the data submitted in support of the request for approval of Stage II, Phase 2 drilling for offsetting mineralized holes of Stage I, it is concluded that the operator's proposed program should be modified.

The modified program is to include drilling of 36 offset holes averaging 101 feet in depth, or a total of 3640 feet, around 10 of the 15 holes proposed by the operator. The holes to be offset and the offset holes with depths and mineralized area are:

Phase I Holes	Offset Holes	Depth feet	Mineralized Area
16-15	14.5-15	70	2
	16-13.5	70	2
	16-16.5	70	2
	17.5-15	70	2
19-16.5	17-16.5	50	2
	19-15	50	2
	20.5-16.5	50	2
19-19.5	17.5-19.5	90	2
	19-18	90	2
	19-21	90	2
	20.5-19.5	90	2
22-15	20.5-15	65	2
	22-13.5	65	2
	22-16.5	65	2
	23.5-15	65	2
25-22.5	23.5-22.5	40	2
	25-21	40	2
	26.5-22.5	40	2
25-25.5	23.5-25.5	170	2
	25-24	170	2
	25-27	170	2
	26.5-25.5	170	2

22-27	20.5-27	135	2
	22-25.5	135	2
	22-25.5	135	2
	23.5-27	135	2
37-22.5	35.5-22.5	55	3
	37-22	55	3
	38.5-22.5	55	3
37-25.5	35.5-25.5	135	3
	37-24	135	3
	38.5-25.5	135	3
37-28.5	35.5-28.5	170	3
	37-27	170	3
	37-30	170	3
	38.5-28.5	170	3
Totals 36 holes		3640 feet	

In summary the drilling under Stage II, Phase 1 and Phase 2 recommended for approval is:

Stage II
Phase 1

	Total Footage
64 holes at 192 feet (All holes as shown on contract map except Hole Nos. 10-39 Var 5 claim which is not to be drilled)	12,300 feet

Footage allowed by contract 10,400 feet
Stage I footage remaining to be transferred 937 feet
Footage to be transferred from Stage II, Phase 2 963 feet
12,300 feet

Stage II
Phase 2 (Offset drilling)
36 holes at 101 feet 3640 feet (rounded)

Offset drilling around the mineralized holes in Areas 1, 4, 5, and 6, and the offset holes for Hole No. 23-10.5 in Area 2 are not recommended for approval for the reasons as noted below:

Hole No.	Area	Remarks
7-13.5	1	Too low grade and surrounded by blank holes
32-30	4	Some fair grade results but surrounded by blank holes - drilling dependent on Stage II results

28-36	5	Very low grade at depths 200 and 230 feet, and drilling dependent on results of Stage II
25-49.5	6	Low grade at depth 240, drilling dependent on Stage II results
25-10.5	2	Very low grade and surrounded by blank holes

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R. O. Bingen
Mining Engineer

E. M. Hawkman
E. M. Hawkman
Member Field Team

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Jan-1963
Check
EMHawkman

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[illegible] Radiation Monitoring [illegible]

Sample No.	Depth	Radiometric	Nitro Fluorometric Assay	Hole No.	Field
[illegible]-1	1[illegible]-1[illegible]	.14	.015	[illegible]7-[illegible]	Geor e 5
[illegible]-2	1[illegible]-1[illegible]	.10	.012	"	"
[illegible]-3	1[illegible]-1[illegible]	.03	.013	"	"
[illegible]-4	1[illegible]-1[illegible]	.05	.007	"	"
[illegible]-5	1[illegible]-1[illegible]	.04	.010	"	"
[illegible]-6	[illegible]-[illegible]	.11	.00[illegible]	[illegible]-2[illegible]	Geor e 4
[illegible]-7	[illegible]-[illegible]	.10	.00[illegible]	[illegible]-[illegible]	"
[illegible]-8	[illegible]-[illegible]	.10	.007	"	"
[illegible]-9	[illegible]-[illegible]	.0[illegible]	.003	[illegible]-10	Geor e 4
[illegible]-10	[illegible]-[illegible]	.08	.007	[illegible]-1[illegible]	"
[illegible]-11	[illegible]-[illegible]	.07	.012	"	"
[illegible]-12	[illegible]-[illegible]	.0[illegible]	.00[illegible]	"	"
[illegible]-13	[illegible]-[illegible]	.0[illegible]	.010	1[illegible]-1[illegible]	"
[illegible]-14	[illegible]-[illegible]	.10	.015	[illegible]	"
[illegible]-15	[illegible]-[illegible]	.03	.0[illegible]3	"	"
[illegible]-20	[illegible]-[illegible]	.03	.00[illegible]	7-1[illegible]	Geor e 0
[illegible]-21	[illegible]-70	.02	.007	"	"
[illegible]-22	70-72	.03	.005	"	"
[illegible]-23	7[illegible]-74	.03	.007	"	"
[illegible]-24	[illegible]-[illegible]	.05	.00[illegible]	[illegible]-1[illegible]	Geor e 2
[illegible]-25	[illegible]-[illegible]	.05	.014	"	"
[illegible]-26	4[illegible]-[illegible]	.04	.00[illegible]	"	"
[illegible]-27	[illegible]-[illegible]	.0[illegible]	.0[illegible]5	"	"
[illegible]-28	[illegible]-[illegible]	.00	.015	[illegible]-18	"
[illegible]-29	[illegible]-[illegible]	.00	.00[illegible]5	[illegible]-1[illegible].6	Geor e 7
[illegible]-30	[illegible]-[illegible]	.00	.00[illegible]4	"	"
[illegible]-31	[illegible]-[illegible]	.02	.010	"	"
[illegible]-32	1[illegible]-1[illegible]	.03	.007	[illegible]-27	Ver 10
[illegible]-33	1[illegible]-1[illegible]	.02	.010	"	"
[illegible]-34	[illegible]-[illegible]	.03	.014	1[illegible]-1[illegible]	Geor e 3
[illegible]-35	[illegible]-[illegible]	.00	.009	"	"
[illegible]-36	[illegible]-[illegible]	.01	.009	1[illegible]-1[illegible]	"
[illegible]-37	4[illegible]-[illegible]	.03	.019	1[illegible]-1[illegible].6	Geor e 2
[illegible]-38	[illegible]-[illegible]	.05	.004	1[illegible]-1[illegible].6	"
[illegible]-39	[illegible]-[illegible]	.03	.019	"	"
[illegible]-40	[illegible]-[illegible]	.06	.00[illegible]	"	"
[illegible]-41	80-82	.01	.018	"	"
[illegible]-42	74-76	.03	.011	1[illegible]-2[illegible].6	Geor e 7
[illegible]-43	[illegible]-[illegible]	.00	.013	"	"
[illegible]-44	[illegible]-[illegible]	.04	.019	"	"
[illegible]-45	1[illegible]-1[illegible]	.03	.008	[illegible]-1[illegible]	Geor e 2
[illegible]-46	[illegible]-[illegible]	.04	.00[illegible]	"	"
[illegible]-47	[illegible]-[illegible]	.03	.007	"	"
[illegible]-48	[illegible]-[illegible]	.08	.012	[illegible]-[illegible]	Ver 10
[illegible]-49	[illegible]-[illegible]	.05	.00[illegible]	"	"
[illegible]-50	[illegible]-[illegible]	.03	.001	[illegible]-10.6	Geor e 1
[illegible]-51	[illegible]-[illegible]	.04	.014	[illegible]-2[illegible].6	Geor e 4
[illegible]-52	[illegible]-[illegible]	.04	.010	"	"
[illegible]-53	[illegible]-[illegible]	.03	.011	"	"
[illegible]-54	[illegible]-[illegible]	.04	.012	"	"
[illegible]-55	[illegible]-[illegible]	.03	.013	"	"
[illegible]-56	[illegible]-[illegible]	.03	.011	"	"

R. D. Adamson
[illegible] Adamson
[illegible] District Geologist

Enclosure 2

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PRELIMINARY INTERPRETATION OF RADIOMETRIC LOGS

VITRO'S GRONEE & VAN OSTA DRILLING

Mineralized

HOLE	DEPTH	DATUM	HOLE PROBE (Babble Model 6 OA)	SAMPLE PROBE (Babble Model 6 OA)
7-13.5	66'	6437	65'-76' .02-.03%eU3O8 at contact between orange sandstone & blue-green sandstone.	None over .03% eU3O8 Assays: 66'-68'-.042; 68'-70'-.007; 70'-72'-.005; 72'-74'-.007.
7-16.5	78'	6420	78'-88' .01-.02 at contact of orange sandstone & green-gray sandstone.	None over .02
7-26.5	--	--	Anomalous readings up to .02	None over .02
10-12	81'	6421	81' .02 blue-green sandstone below green claystone.	None over .01
10-15	--	--	Anomalous readings up to .02	Nil
10-18	67'	6434	67' Up to .03 in thick sandstone	None over .01
10-21	--	--	Anomalous readings up to .02	None over .01
10-24	4'	6480	4'-6' .03 light brown to buff sandstone	None over .01
	100'	6384	.03 at contact between buff sandstone and green-gray sandstone.	Nil - Poor Samples Water drilling.
13-10.5	34'	6448	.02 gray sandstone with some green claystone	None over .01
13-13.5	78'	6407	.02 green sandstone below green claystone	None over .01
13-16.5	--	--	Anomalous readings up to .02	None over .01
13-19.5	--	--	Anomalous readings up to .02	None over .01
13-22.5	102'	6392	102'-110' Up to .08 sandstone lenses within green claystone	None over .02 - Poor Samples; Water drilling
13-26.5	--	--	Anomalous readings up to .02	Nil
16-9	22'	6444	.04 Claystone Lense in Orange Sandstone	None over .01
	70'	6397	68'-70' .03 at contact between gray sandstone & black sandy claystone	Nil - Poor Samples Water Drilling

Preliminary Interpretation of Radiometric Logs
Vitro's George & Ver [illegible] Drilling - Page 2.

HOLE	DEPTH	RADIO	HOLE PROPS. (Middle Model GCOA)	SAMPLE PROPS. (Middle Model GCOA)
16-12	42'	0321	.03 in sandstone below green claystone and above black claystone	None over .02
	72'	0331	.02 at contact between green sandstone and green & brown claystone	None over .01
16-15	63'	0420	.12 at contact between orange-brown sandstone & yellow-green sandstone	None over .03 Assay: 58'-64' .014
	61'	0418	.02 at contact between gray-green sandstone & blue-green claystone	None over .03 Assay: 56'-66' .020
16-18	50'	0425	.03 at contact between orange sandstone & blue-green claystone	None over .01 Assay: 50'-53' .005
16-21	--	--	Anomalous readings up to .02	None over .01
16-27	32' 162'	0346 0344	.01 in orange sandstone .05 clayey green sandstone	None over .02 Fill - Poor Samples Water Drilling
19-7.5	34'	0414	.05 at contact between orange sandstone & green and brown claystone	None over .02
19-10.5	--	--	Anomalous readings up to .02	Fill
19-13.5	63'	0334	.04 green sandstone with some green claystone	None over .01
19-16.5	20'	0443	.18 in orange sandstone underlying a brown claystone	.08 Assay: 26'-32' .007 28'-30' .012
	36'	0438	.03 in claystone overlying orange sandstone	.03 Assay: 36'-38' .009
	42'	0430	.03 in claystone lense	.03 Assay: 44'-46' .010
19-19.5	61'	0429	.10 at contact between orange sandstone & green claystone	.08 Assay: 58'-64' .024 64'-66' .019
	82'	0407	.10 green-blue sandstone between two strata of claystone	.10 Assay: 78'-80' .025 80'-82' .018

Preliminary Interpretation of Radiometric Logs
Vitro's Deep Well Test Drilling - Page 3.

Hole	Depth	Date	Field Logs (Mable Model 500A)	Vitro Logs (Mable Model 500A)
19-22.5	62'	0412	.04 in blue-green claystone & sandstone immediately above water table	None over .08 Assay: 74'-76' .011 80'-82' .013 82'-84' .019
19-20.5	140'	0500	.04 at contact between gray sandstone and green sandstone	None over .01 Poor Samples - Water Drilling
22-6	--	--	Anomalous readings up to .03	None over .03
22-8	--	--	Anomalous readings up to .02	Nil
22-12	10'	0423	.02 at contact between red-brown sandstone & green claystone	.04 Assay: 16'-18' .028 20'-22' .035 32'-34' .037
	50'	0434	.01 at contact between green sandstone & green claystone	Nil - Poor Samples Water Drilling
22-15	16'	0454	.00 clayey orange sandstone	None over .02
	32'	0426	.02 at contact between orange sandstone & light blue claystone	.08 Assays: 40'-42' .009 44'-46' .014 48'-50' .006
	50'	0414	.01 in dark brown carbonaceous claystone	None over .04 Assay: 58'-60' .030
22-18	44'	0447	.03 in buff sandstone with some blue claystone	None over .01
	60'	0427	.03 at contact between buff sandstone & light blue claystone	None over .05 Assay: 58'-60' .019
	80'	0400	.03 in clayey sandstone	Nil - Poor Samples Water Drilling
22-24	34'	0447	.03 blue-gray claystone lense	None over .04 Assays: 34'-36' .013 38'-40' .006
	120'	0331	.04 in green sandstone underlying green claystone	None over .02
	125'	0343	.03 in green sandstone overlying green claystone	None over .02

Preliminary interpretation of radiometric logs
Vitro's Geopro & Ver D ZA drilling - Page 4.

Depth	Length	Depth	Gamma Log (Gamma Log Model 6.0a)	Gamma Log (Gamma Log Model 6.0a)
[illegible]-[illegible]7	1[illegible]4'	[illegible]	[illegible].1[illegible] in clayey gray sandstone	None over .02 - Water Drilling Assays: 1[illegible]0'-1[illegible]' .[illegible]7 1[illegible]'-1[illegible]' .010
[illegible]5-7.0	--	--	.11	None over .01
[illegible].0-10.0	37'	[illegible]414	.0[illegible] at contact between blue-green sandstone & dark brown claystone	None over .03 Assay: [illegible]'-[illegible]' .[illegible]51
[illegible]0-13.5	--	--	Anomalous readings up to .0[illegible]	None over .01
[illegible]0-16.5	--	--	Anomalous readings up to .0[illegible]	None over .02
[illegible]-19.5	30'	[illegible]449	.04 at contact between orange sandstone & brown sandstone	Nil - Poor [illegible] log Water drilling
	14'	[illegible]420	.0[illegible] clayey sandstone	Nil - Poor Samples Water drilling Assays: [illegible]'-[illegible]' .[illegible]3 [illegible]'-[illegible]' .004 [illegible]'-[illegible]' .010
	74'	[illegible]	.04 clayey sandstone	Nil - Poor [illegible] log Water drilling
[illegible]-[illegible].8	11'	[illegible]	[illegible]1'-[illegible]' .08 interbedded sandstone & claystone	.04-.11 Assays: [illegible]'-[illegible]' .014 [illegible]'-[illegible]' .010 [illegible]'-[illegible]' .010 [illegible]'-[illegible]' .012 [illegible]'-30' .032 [illegible]'-[illegible]' .013 [illegible]'-[illegible]' .011
[illegible]-[illegible].0	46'	[illegible]437	[illegible]'-[illegible]' in claystone black & brown underlain orange sandstone. Abundant marcasite	.10 Assays: [illegible]'-[illegible]' .[illegible] [illegible]'-[illegible]' .037
	132'	[illegible]301	.04 clayey sandstone	None over .02
	164'	[illegible]310	.0[illegible] at contact between green sandstone & green claystone	Nil - Poor Samples Water drilling
[illegible]-40.0	[illegible]40'	[illegible]	[illegible]'-[illegible]' .0[illegible]-.07 at contact between sandstone & claystone	Nil - Water drilling
[illegible].0-[illegible].0	--	--	Nil	None over .02

HOLE	DEPTH	DATE	GAMMA PROBE (Cable Model 6.0A)	GAMMA PROBE (Cable Model 6.0A)
26-21	93'	6571	90'-93' .03 at contact between green sandstone & green claystone	None over .01
23-24	90'	6384	.03 clayey sandstone	None over .01
	110'	6386	.03 clayey sandstone	None over .01
18-17	40'	6430	.03 clayey sandstone	None over .01
	116'	6382	.03 clayey sandstone	None over .01
28-36	20'	6470	20'-22' .04 at contact between sandstone and silty sandstone	.03
	30'	6460	30'-38' .05 siltstone lense in sandstone	.01
	204'	6282	204'-200' .07 sandstone with thin claystone lenses	Nil - Water drilling
	230'	6260	230'-232' .06 sandstone with thin claystone lenses immediately above very hard sandstone	Nil - Water drilling
31-22.5	115'	6304	.03 clayey sandstone and abundant carbon	Nil
31-22.5	125'	6340	.03 clayey sandstone	Nil - Poor Sample Water drilling
34-21	--	--	Anomalous readings up to .21	None over .03
34-24	114'	6342	.09 clayey sandstone; abundant pyrite	None over .01 Poor Sample. Water drilling
34-17	34'	6403	.02 clayey sandstone; some pyrite	Nil. Poor Sample Water drilling
	130'	6317	.04 claystone lense in sandstone	None over .02
37-22.5	33'	6411	33'-44' .09-.15 (Probably rough steel) at contact light gray sandstone and orange sandstone.	.02-.05 Water drilling
37-15.5	120'	6331	120'-130' .10-.32 at contact between gray sandstone and black sandstone	.04-.14 Water drilling Decay: 120'-122' .015 122'-124' .019 124'-126' .013 126'-128' .007 128'-130' .010

Preliminary Interpretation of Radiometric Logs
Vitro's George & Ver [illegible] Drilling - Page 6.

HOLE	DEPTH	MASS	[illegible] PROBE (Battle Model 600A)	[illegible] PROBE (Battle Model 600A)
37-28.6	150'	0502	100'-150' .20-.40 at contact between light green sandstone & light tan sandstone. (The probing indicated two peaks of .40 & .28 with average of .28.)	Oil - Water drilling
43-28.6	--	--	Anomalous readings up to .03	None over .02
46-27	--	--	Anomalous readings up to .01	None over .03
49-[illegible].5	--	--	Anomalous readings up to .02	None over .03
[illegible]-[illegible].5	--	--	Anomalous readings up to .01	None over .01
[illegible]-24	--	--	Anomalous readings up to .02	None over .01
52-27	--	--	Anomalous readings up to .02	None over .01
[illegible]-[illegible]	150'	0507	100'-150' .10 claystone lenses in sandstone	.01 Water drilling
55-28.5	--	--	Anomalous readings up to .01	None over .02
56-28.5	--	--	Anomalous readings up to .02	None over .01

[illegible]
VITRO [illegible] CORPORATION

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D. L. Welsh, Division Geologist

R. D. Adamson
R. D. Adamson, Oil & Gas District Geologist

Proposed Drilling Under MIAC II, Phase 1

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Hole No.	Surface Elevation	Depth	Hole No.	Surface Elevation	Depth
6-17	5476	110'	10-37.5	5408	240'
7-26.5	5506	110	10-40.5	5013	250
7-31.5	5497	100	10-43.5	5405	170
10-7	5435	110	10-46.5	5050	100
10-20	5490	100	10-[illegible]	5473	170
10-23	5505	170	20-[illegible]	5485	240
10-26	5514	170	20-[illegible]	5502	240
10-30	5524	170	20-[illegible]	5408	200
10-34.5	5507	170	20-[illegible]	5477	200
10-31.5	5505	170	20-[illegible]	5497	250
13-24.5	5510	170	31-26.5	5498	170
13-27.5	5511	170	31-31.5	5518	200
13-40.5	5524	170	31-34.5	5530	240
16-30	5490	170	31-37.5	5530	240
16-33	5510	170	31-40.5	5511	200
16-36	5505	170	31-43.5	5515	200
16-39	5503	170	31-46.5	5517	200
19-28.5	5491	170	34-33	5470	170
19-31.5	5500	170	34-33	[illegible]	200
19-34.5	5502	170	34-34	5430	200
19-37.5	5490	170	34-39	5477	200
19-40.5	5501	170	37-31.5	5473	170
19-43.5	5515	200	37-34.5	5482	170
22-30	5513	170	37-37.5	5472	170
22-33	5504	200	40-30	5457	170
22-36	5506	200	40-33	5458	170
22-39	5500	200	40-36	5457	170
22-42	5505	200	40-31.5	5471	170
22-45	5517	200	40-34.5	[illegible]	170
22-48	5517	200	40-30	[illegible]	110
25-28.5	5495	170	40-33	5484	170
25-31.5	5501	200	40-31.5	5440	150
25-34.5	5504	240			

60 - Total No. of holes
12,430' - Total footage
101.3' - Average feet per hole

SUBMITTED TO ED COMMITTEE
VIEWED IN BOLD OF PROBATION

D. L. Welch

D. L. Welch, Division Geologist

Proposed Drilling Under [illegible] II, [illegible] 8

[illegible] I Holes [illegible]					[illegible] Holes	
Hole No.	Surface elevation	Depth	Amount Mineralized Zone	Estimated elevation of lowest mineralization	Hole No.	Depth
7-13.5	6503	120'	60'	6437	5.0-13.5	60'
					7-12	60
					7-10	60
					5.0-13.0	60
10-20	6470	100	61	6410	14.0-10	70
					16-13.5	70
					15-13.5	70
					17.0-15	70
15-16.5	6473	100	63	6410	17.5-15.5	60
					15-10	60
					20.5-16.5	60
15-20.5	6470	100	61	6410	17.5-19.0	60
					19-18	60
					15-21	60
					20.5-19.5	60
20-15	6470	100	60	6410	20.5-19	60
					-18.5	60
					22-16.8	60
					23.5-15	60
22-27	6464	100	126	6320	22.5-27	120
					25-25.8	120
					21-27.5	136
					18.5-27	135
30-10.5	6451	120	77	6410	28.5-10.5	45
					25-9	45
					30-13	45
					30.5-20.5	45
35-35.5	6435	154	38	6401	33.5-13.5	40
					36-21	40
					35.5-23.5	40
35-[illegible].5	6435	100	104	6319	33.5-20.5	173
					18-[illegible]	170
					21-27	170
					23.5-[illegible].5	170
35-45.5	6438	100	240	6198	33.5-43.0	200
					35-42	200
					35-41	200
					35.5-45.5	200
38-37	6438	200	200	6238	30.0-33	240
					30-34.5	240
					30-37.5	240
					27.0-33	240

Pr[illegible]osed Drilling Under Stage [illegible], Phase 6 - Page 3.

Stage I Holes to be Offset					Stage II Holes	
Hole No.	Surface Elevation	Depth	Deepest Incrystalized Zone	Total Elevation of Lowest Incrystalization	Hole No.	Depth
37-[illegible].6	[illegible]47	100'	[illegible]	[illegible]11	[illegible].6-[illegible].0 37-[illegible]1 [illegible].0-[illegible].0	[illegible] [illegible] [illegible]
37-[illegible].6	[illegible]451	130	120	[illegible]1	[illegible].6-[illegible].6 37-[illegible] [illegible].0-[illegible].0	130 130 130
37-[illegible].6	0183	200	100	[illegible]08	[illegible].6-[illegible].0 37-37 37-30 [illegible].6-[illegible].0	170 170 170 170
32-[illegible]	0197	100	150	[illegible]47	[illegible].6-[illegible] [illegible]-[illegible].6 [illegible]-31.6 [illegible].0-30	100 100 100 100

15 - Stage I Holes to be Offset
56 - Total Number of Proposed Offset Holes in Stage II, Phase 6
6,700' - Total Footage in Stage II, Phase 6
[illegible].71' - Average Cost Per Hole

[illegible]

D. L. Welsh, Division Geologist

MINERALS CORPORATION
WEST AWS MONROE STREETS ○ RIVERTON, WYO. ○ TELEPHONE

RECEIVED
OCT 25 1956

13 October 1956
CERTIFIED MAIL

DMEA
DEPARTMENT OF THE INTERIOR
OCT 15 1956
REGION III
DENVER, COLORADO

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

Re: Docket DMEA 4182 (Uranium)
Contract Idm-E963
Fremont County, Wyoming
Approval Stage II Drilling Program

Dear Mr. Traver:

This letter constitutes our request for approval from your office for the work we propose to perform under the Stage II drilling program on our George and Ver claims in Fremont County, Wyoming. The two phases for Stage II are outlined below, following a section which supplements geological information given in our original application for the loan, and another section which summarizes the results of Stage I drilling.

We are transmitting herewith the following pertinent items in quintuplicate to your office and a copy of this letter with each of these items to Mr. John F. Shaw at the Federal Center:

1. Map of drilling locations proposed under Stage II Phases (1) and (2).

2. Summary of all assays made for Stage I.

3. Summary of preliminary interpretations of radiometric data on all Stage I holes.

4. Stratigraphic and structural cross-sections for Stage I drilling.

5. Lists of Stage II proposed holes Phases (1) and (2). giving grid coordinates and required depths.

Cost data, lithologic and radiometric logs, and assay certificates pertaining to holes to be offset have already been submitted with the two progress reports for Stage I. All pertinent information from these sources has been summarized within the above mentioned enclosures.

RECEIVED
OCT 25 1956

Supplementary Geological Information

It is necessary at this time to attempt to clear up one issue of geologic interpretation which affects the drilling depth required for particular holes in exploring this ground for uranium. This discussion in no way contradicts the conditions spelled out by the Contract, but provides new information as a basis for applying these conditions. The question to be resolved here is in terminology - whether it is a single horizon, or whether it is a general zone we are testing in the potential uranium bearing Wind River formation on the George and Ver claims.

Development drilling at our mine this summer has shown that we are dealing with a one-hundred foot zone containing several mineralized horizons, and each horizon of the zone is equally promising for occurrences of rich ore deposits. In some places on Vitro's John 2 and 3 claims these horizons may all be ore bearing; one above another, and separated vertically by 20 to 30 feet of shale. The entire zone is classified as unoxidized and lies below the present water table. Within the length of only one claim, variations in the sand content (and consequently ore-potential) of this zone are very great. These deposits were discovered when the "horizon" idea was thrown out and a thorough investigation of a mineralized zone was instigated. Incidentally, no surface anomalies were observed over any of these new discoveries.

The calculated average drilling depths for the various Stages and Phases of the drilling program are not materially affected by this definition of our objective, but the depth requirements for particular holes may deviate considerably from a calculated average depth.

Results of Stage I Drilling

Stage I drilling has delineated six mineralized areas within the George and Ver claims; these areas are outlined in red and numbered on the map (enclosure 1). Enclosures (2) and (3) summarize the assay, lithologic, and radiometric hole probe information for holes located in these areas. The mineralized depths and datum elevations for mineralization are given in enclosure (3).

Areas 1, 4, 5, and 6 are mineralized areas indicated by single holes, for which offsets are proposed. Each of these four holes is partially or wholly isolated from other Stage I holes (see map).

Areas 2 and 3 may be said to be within mineralized trends for which some correlation between the 300-foot centered holes may be possible.

Particularly between the three mineralized holes forming area 3, lithologic correlations are good, and a zone of probable

ore-grade mineralization seems to carry between two of the holes at a depth of 120-156 feet; datum between sea-level elevations 6331 and 6302. Lithologic correlations indicate the possibilities of channeling (see cross sections, enclosure 4) or the possibility of graben faulting following the trend of area 3. The writer considers the latter possibility more plausible. Area 3 is delineated by 300-foot center holes only on its west side; it may continue southward into Stage II Phase 1 area, or to the east claim lines of George 5 and George 6.

Area 2 has been delineated by eight adjacent 300-foot center mineralized holes. In areal extent this is an area of approximately 30 acres. Holes 25-10.5 and 19-16.5 are anomalous in that readings and assays on the sample piles (assays .05 and .04 respectively) were higher than readings on the hole probe. Shallow zones prevail in this area, between depths of 20 and 60 feet. Deeper horizons were encountered in only 2 of the 8 holes; and one of these deep readings indicates probable ore-grade material (hole #22-27 at 124' depth).

Proposed Drilling Stage II Phase 1

It is proposed that 64 (according to the Contract) or 65 (shown on the Government's map) holes should be drilled at the locations already determined. Locations and elevations for these holes have been established on the ground, as shown on the enclosed map. These holes should be drilled to an average depth of 191.3; total footage this phase is 12,435 feet (for 65 holes) or 12,344 feet (for 64 holes). This is 2,035 feet (or 1,944 feet) in excess of the 10,400 feet allowed for Phase 1 of Stage II in the Contract. It is requested that the cost for the 937 feet allowed but not drilled in Stage I be transferred to this Stage and that the remaining footage be taken from the Stage II Phase (2) and Stage III allowances.

The necessity for increasing the average drilling depth for this Phase results from the fact that the Stage II Phase (1) drilling is down dip in the Wind River formation from the Stage I program. The dividing line between the first and second Stages is roughly a strike-line for the Wind River sediments on these claims. The dip is to the south.

Proposed Drilling Stage II Phase 2

It is proposed that 56 offsets for the 15 most significantly mineralized holes drilled under Stage I should be drilled. These should be drilled to a calculated average drilling depth of 121 feet, for a total footage of 6,760 feet. Locations for these holes are shown on the enclosed map. These holes are also listed in enclosure (5), giving their grid coordinates, individual proposed depths, and the depths of the mineralized

zones mentioned above. The locations given for these holes are on not less than approximately 150-foot centers. The choice of the 15 most significantly mineralized holes from Stage I is based on the operator's experience in very successful exploration and mine development drilling on its nearby mine.

We will be very glad to assist in clarifying any matter concerning the enclosed material, and will be happy to provide any additional information you may need.

Yours very truly,

VITRO MINERALS CORPORATION

D. L. Welsh
Wyoming Division Geologist

DLW/ejb

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

RECEIVED
SEP 28 1956

224 New Customhouse
Denver 2, Colorado

September 25, 1956

Mr. J. O. Horton, General Manager
Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

Re: Docket DMEA 4182 (Uranium)
Contract Idm-E963
Vitro Minerals Corporation
George and Ver claims
Fremont County, Wyoming

Dear Mr. Horton:

Form MF-104, Operator's Monthly Report and Voucher, for July, 1956 has been received in this office and is being processed for payment.

The lower 91 feet in Hole No. 37-28.5 is disallowed inasmuch as the hole appears to have been drilled through the entire Wind River sandstone interval, contrary to contract provisions. The disallowed footage begins at 164 feet, the first significant lithologic change below the radioactive zone as recorded by the Babbel probe.

If you have any question regarding the disallowance, please feel free to contact this office.

Very truly yours,

W. M. TRAVER

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

JDC:jy
cc: Corresp. E963
Sec. Op. Comm. (2)
Shaw (2)
Townsend
Chron.

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

RECEIVED
SEP 12 1956

224 New Customhouse
Denver 2, Colorado

September 6, 1956

Mr. J. O. Horton, General Manager
Vitro Minerals Corporation
P. O. Box 67, South Salt Lake
Salt Lake City, Utah

Re: Docket DMEA-4182 (Uranium)
Contract No. Idm-E963
Vitro Minerals Corporation
(George and Ver Claims)
Fremont County, Wyoming

Dear Mr. Horton:

Reference is made to your letter of July 17, 1956, wherein you request a 13¢ per foot increase in the Incidental Allowance provided for in Exhibit "A" of Contract Idm-E963.

Under the circumstances, the unit cost established in the contract for Incidental Allowance is a firm commitment and cannot be changed. Therefore, your request is denied.

Very truly yours,

W. M. TRAVER

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

JWT:bh

cc-Chairman, Op. Comm. (2)
Harshman w/copy Chairman's letter of 9/4/56
Shaw(2) " " " " "
Townsend
Corres. File E-963
Chron.

700

FILE COPY
Surname:

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

SEP - 4 1956

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

Re: Docket No. DMEA-4182 (Uranium)
Contract No. Idm-8963
Vitro Minerals Corporation
George and Ver Claims
Fremont County, Wyoming

Dear Mr. Traver:

This is to acknowledge your memorandum of August 9, 1956, enclosing copies of the Operator's letter of July 17 and E. O. Binyon's memorandum, dated August 8, relating to a proposed amendment to the above-referenced contract providing for an increase in the "incidental allowance per foot of drilling performed."

We note that the Operator requests an increase from the allowed cost of $0.09 per foot of drilling to $0.22, justifying the increase because of the cost of bulldozer work on access roads and the longer period required to perform the drilling under Stage I. However, the Field Team, based on Mr. Binyon's analysis of the costs, recommends an increase to $0.12 per foot of drilling.

A review of the file does not disclose any evidence of a mutual mistake in the cost figures under the contract which the Operator elected to sign and is legally bound to abide by.

Moreover, in our opinion the analysis of the actual costs under Stage I does not present a true breakdown of what the incidental costs will be under Stages II and III in which the drilling footages are about 3 times larger than in Stage I and could be performed with more drills at a faster rate than even the contract anticipates.

In regard to bulldozer work, we note in the Joint Engineering and Geologic Report, dated May 14, 1956, the last paragraph of page 12 states ..."No bulldozer work for drill site preparation will be necessary."

RCS.

In view of the above we can find no justification to increase the present unit cost for the incidental allowance per foot drilled under the contract. Also, it is suggested the Field Team advise the Operator his request for an increase is denied.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

APPROVED:

Frank D. Lamb

Member, Bureau of Mines (GCS)

N. E. Nelson

Member, Geological Survey (GCS)

FMMurphy/izm 8-29-56

cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

Ellis

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

August 28, 1956

Memorandum

To: The File

From: F. M. Murphy, Mining Engineer
Rare and Miscellaneous Metals Division

Subject: Vitro Minerals Corporation
Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963
George and Ver Claims
Fremont County, Wyoming

The Rare and Miscellaneous Metals Division forwarded a proposed Amendment No. 1 to the above contract drafted in accordance with the Field Team's recommendation of August 9, 1956.

In a discussion with Mr.Indritz, the writer was informed that in a legal sense there was no justification for increasing the costs under the contract because there was no evidence of a mutual mistake in drafting or executing the contract. Mr. Murphy requested Mr.Indritz to return the proposed amendment with his comments (see memo, August 27, 1956, from Office of the Solicitor.)

F M Murphy

F. M. Murphy

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

AUG 27 1956

Memorandum

To: The Administrator, DMEA
Attention: Chief, Rare and Miscellaneous Metals Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-4182 (Uranium), Vitro Minerals Corporation
Contract No. Idm-E963 - proposed Amendment No. 1

The proposed Amendment No. 1 would accomplish the following changes in the contract:

1. Provide for 30 hours of bulldozing access roads and drill sites at $12.00 per hour, in each of Stages I, II, and III.

2. Increase the incidental allowance per foot of hole drilled from $0.09 to $0.13.

3. Revise the contract provision for employment of two geologists full time so that one geologist will be employed part time and the other full time.

4. Specify that the unit cost for drilling shall represent the average cost per foot of drilling.

5. Reduce the maximum unit cost of drilling from $0.70 to $0.62 per foot.

It is our opinion that the first two changes would be void for lack of consideration since they will not increase or alter the work to be performed by the Operator under the present contract, but merely increase the amount of the Government's cost under the incidental allowance item. It may be noted that the "incidental allowance" is specifically stated in footnote 1 of Exhibit "A" to include "all costs whatsoever" that are not otherwise included in Exhibit "A". If the Operator must bulldoze access roads and drill sites to perform the drilling, its costs for such bulldozing may be reimbursed only under the item of "incidental allowance." There is no evidence of mutual mistake, since the contractor was aware of the price when it elected to sign the contract and, as a consequence, is legally bound by it. The fact that the work time in Stage I was underestimated by one week

does not provide a basis for increasing the incidental allowance in that stage, or in the other stages.

Ordinarily item 4 above would also be an illegal change. However, the Docket file indicates that the parties had intended that the maximum unit costs would represent the average cost. The form recently devised for amending the contract in such cases could be appropriately used in this case.

Items 3 and 5 above would be proper changes if agreed to by the parties.

The proposed amendment and the Docket file are returned herewith.

Robert P. Dwyer

Attachments

Surname copy

700

Murphy
Ellis

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

August 15, 1956

Memorandum

To: Administrator

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

Subject: Justification of Amendment No. 1
Docket No. DMEA-4182 (Uranium)
Contract No. Idm-E963
Vitro Minerals Corporation
George and Ver claims
Fremont County, Wyoming

In recommending the subject contract the Field Team estimated ~~that~~ the incidental cost per foot drilled at $0.09. This figure was arrived at on the basis that the Stage I work would be completed in two weeks. However, the time required is now estimated at three weeks which increases the cost of supervision.

Based on 3 weeks to complete Stage I the estimated incidental costs are as follows:

Labor, Supervision, and Consultants	$1,140.00
Operating Supplies	55.00
Operating Equipment (depreciation)	54.00
Miscellaneous, accounting, payroll taxes and insurance, contingencies ($68.00)	177.50
	$1,426.50

The incidental cost per foot for drilling 10,690 feet would therefore amount to $0.13 per foot instead of $0.09 per foot.

The Operator requested that the incidental cost be increased from $0.09 to $0.22 per foot of drilling (including bulldozing access roads and drill sites). His figures are based on two full time geologists.

The Field Team submitted two estimates for the incidental cost (not including bulldozer work). One cost based on the supervising geologist working only one week is $0.12/foot, the other, based on the supervising geologist working 3/5 of a month is $0.13/foot. This Division believes the latter figure is the most realistic and therefore used it in the amendment.

In a letter, dated July 17, 1956, addressed to Mr. Traver, the Applicant states that the direct drilling costs would amount to about $0.43 per foot. The estimated cost for drilling under the contract is stated at $0.70 per foot under "Independent Contracts." Therefore, the total cost of the project work would not exceed that of the contract, if an adjustment of the cost of the incidental costs and bulldozer work is granted.

Because an error was made in the estimate of time required to complete the drilling and through an oversight the cost of bulldozing access roads and drill sites was omitted, this Division recommends that the subject amendment to right these errors be approved.

Ernest Wm. Ellis

Ernest Wm. Ellis

FMMurphy/ai
8-15-56
cc to: Docket
Code 700
Mr. Murphy

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

224 New Customhouse
Denver 2, Colorado

August 9, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4182 (Uranium), Contract Idm-E963, Vitro Minerals Corp. (George and Ver claims), Fremont County, Wyoming.

Enclosed is the following material relative to an amendment to the subject contract:

1. The original and three copies of the Operator's request of July 17, 1956.

2. The original and three copies of a memorandum, dated August 8, 1956, from E. O. Binyon, Mining Engineer, Bureau of Mines, relative to the Operator's request.

The Operator requests an amendment to the contract to increase the fixed unit cost of incidental allowance 13 cents a foot, or from 9 cents to 22 cents a foot.

The Operator states that had they not been forced to return the executed copies of the contract to this office prior to the deadline date of June 30, 1956 they would have protested the small amount of the fixed unit costs for incidental allowances.

Based on the analysis provided by the examining engineer, an increase of only three cents a foot is justified, or an increase of the fixed unit cost from 9 cents to 12 cents.

This office concurs in the recommendations of the examining engineer and further recommends that if preparation of an

an amendment of the nature involved is not contrary to DMEA policy that the contract be further amended to revise the requirement for the employment of two geologists full time to the employment of one geologist full time and one geologist part time.

Execution of an amendment to increase the fixed unit costs established in the contract is not within the authority delegated to this office. Therefore the matter is forwarded for your consideration and appropriate action.

W. M. Traver

W. M. Traver

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

BUILDING 20
DENVER FEDERAL CENTER
DENVER 2, COLORADO

August 8, 1956

DMEA
Date Rec'd.
AUG 9 1956
BUREAU OF MINES
Denver, Colorado

Memorandum

To: Executive Officer, Field Team, Region III

Through: John F. Shaw, Superintendent
Denver Experiment Station

From: E. O. Binyon

RECEIVED
AUG 13 1956

Subject: Docket DMEA 4182 (Uranium) Contract Idm-E963, Vitro Minerals Corp., (George and Ver claims) Fremont County, Wyoming--Contract Unit Cost

In reference to your memorandum of July 18 concerning the subject, a review has been made of the cost estimate in the Report of Examination and those presented by the company in their letter dated July 17, 1956.

The cost as estimated by the Bureau's engineer and recommended in the Report of Examination are correct except that three weeks rather than two weeks would probably be required to complete the 10,690 feet of drilling allowed under Stage I.

A breakdown of the Cost for Categories 2 through 7 based on an allowance of 3 weeks for completion of Stage I drilling is as follows:

Labor, Supervision and Consultants

Labor:	2 samplers at $14/day for 15 days each		$ 420.00
Geologists:	1 geologist at $450/mo. for 1 mo.	$450	
	1 geologist at $450/mo. for 3/5 mo.	270	
		$720	
	Total		$1,140.00

Operating Supplies

Sampling supplies, etc.	25.00	
Gas, oil, etc. for 4-WD vehicle, estimated at $0.03 per mile (operation only) for 1,000 miles	30.00	
	$55.00	
Total		55.00

Operating Equipment

Use allowances - 1/60 of $1800 for 2 vehicles		
1 for 3/5 mo.	$18.00	
1 for 1 mo.	30.00	
	48.00	
1 probe at 3/5 mo. of $10.00 (1/60)	6.00	
		$ 54.00

Miscellaneous

Accounting cost	50.00	
Payroll taxes and ins. at 5% of $1,190.00	59.50	
	109.50	
Contingencies, 5% of $1,358.50	68.00(rounded)	
		$177.50
Total Cost Categories 2-7 (Exclusive of Analyses Cost)		$1,426.50

The cost per foot for 10,690 feet allowed for Stage I drilling therefore should be $0.13 per foot instead of the $0.09 allowed in the contract.

In Exhibit "A" of the contract, paragraph 6 of General Provisions under Description of the Work stipulates that two geologists, are to be employed full time in connection with work of the project.

It is believed that the geologic work of the project does not require two geologists full time and it is recommended that the contract be ammended if possible to provide for part time employment of a supervising geologist and full time for a junior or field geologist.

The estimated costs for categories 2-7 using two geologists, 1 part time and 1 full time and 3 weeks as the estimated time for completion of Stage 1 drilling are:

Labor, Supervision and Consultants

Labor:	2 samplers at $14/day for 15 days each	$ 420.00
Geologist:	1 supervising geologist at $600/mo. for 1/4 mo.	150.00
	1 geologist, field at $450/mo. for 1 mo.	450.00
	Total	$1,020.00

Operating Supplies

Sampling supplies, etc.	$ 25.00	
Gas, oil and misc. estimated at $0.03 per mile (operation only) for 700 miles	21.00	
		$ 46.00

Operating Equipment

Use allowance - 1/60 of $1800 for 1 vehicle (4-WD) for 1 month	30.00	
1 probe at $10/mo for 3/5 month	6.00	
		36.00

Miscellaneous

Accounting cost at $50/mo for 1 mo.	50.00	
Payroll taxes and ins. at 5% of $1020	51.00	
Contingencies at 5% of $1203	60.00(rounded)	
		161.00
Total Cost Categories 2 - 7		$1,263.00

For the 10,690 feet of drilling allowed under Stage I the unit cost for Fixed Unit Cost, Categories 2-7, would be $0.12 per foot.

It is believed that $0.12 per foot is a fair estimate of the actual cost that would be incurred for the work under Categories 2-7, exclusive of analyses and it is recommended that $0.12 per foot be allowed.

E. O. Binyon
Mining Engineer

cc 9
ENHarshman
Idm-E963
Chron.

EOB:ph

Vitro MINERALS CORPORATION
600 W. 33rd SO. ST. • P. O. BOX 67 • SOUTH SALT LAKE • TELEPHONE IN 7-5414

RECEIVED
AUG 13 1956

July 17, 1956

DMEA
Date Rec'd.
JUL 18 1956
BUREAU OF MINES
Denver, Colorado

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

Dear Mr. Traver:

Re: Rocket DMEA 4182 Uranium
Contract Idm-E963
Vitro Minerals Corporation
Fremont County, Wyoming

As stated in our telephone conversation of this date, there are certain cost allowances in the above contract with which we are not in agreement. You will recall there was a June 1st deadline, beyond which we could not be sure of getting the above contract approved and it was necessary for us to immediately execute and return the contract to you in its present condition. Due to this time element, we did not take exception to the referred to conditions, as we felt we would rather have the contract in its present form than none at all, and also felt it might be possible to review this matter with you, after the contract had been approved.

We have made a cost analysis of direct drilling costs on our Gunnel and John claims, located from one to two miles southeast of the George and Ver Group, on which the present contract applies. A summary of this cost analysis is set out in the table below. The summary is based on the total of fifteen drill-weeks of operation, over a period of approximately six weeks, with one or two drill weeks of exceptionally high cost not included, because of unusual conditions, which we hope we will not encounter on the George and Ver Claims. Four different drill rigs were used on a contract basis of $15.00 per hour, and an allowance for travel time of 4 hrs. per rig per week at $10.00 per hour. In addition, Vitro paid for bit costs, and miscellaneous items such as bentonite and other mud additives.

Total hours drilling	530.5
Total travel time	52
Total footage drilled	23,908
Drilling cost @ 15.00/hr	7,957.50
Travel cost @ 10.00/hr	520.00
Total bit cost	927.50
Misc. cost (mud additives, etc)	246.00
Total cost	9,651.00
Average cost per foot	.404

You will note that the overall drilling costs per foot average .404 cents. We have had to increase our hourly rate for drill rigs from $15.00 to $16.00 per hour, for the current contract, as rig prices have increased in this area. This increase would raise the .404 cents per foot to approximately .43 cents per foot.

Our incidental field costs, not including direct drilling costs, we estimate to be as shown in the following table:

Estimated costs, three weeks drilling on Stage I
(other than direct drilling costs)

2 geologists	$900.00
2 samplers	420.00
Survey and lay-out work (5 days @ 45/D	225.00
Use of 2 pickups @ 15.00/D	450.00
30 hours road work and location work @ 12.00/hr	360.00
Total	2355.00
Less 9¢/ft allowance	962.00
Costs not covered	1393.00
Footage costs not covered	.13/ft

You will note that the above costs, after deduction of our 9¢ per foot fixed unit cost, total $1,393.00 of expense, for which there is no allowance under Stage I of the contract.

On a footage basis, this $1,393.00, when divided by 10,690 feet of drilling allowed under Stage I, amounts to .13 per foot.

We request that an additional incidental allowance of .13 per foot be granted us under Stage I on this program, with the understanding that only such part of this .13 per foot be allowed that will keep our total costs under the estimated total cost of $9,677.60, per the terms of the contract.

Our estimates of additional costs are based on an assumed period of fifteen working days, or a total time period of three weeks to complete Stage I of this program. Our drilling contractors will bill us on an hourly basis, plus bits, etc., and copies of these bills will, of course, be presented to you with our monthly reports. It is our belief that those costs based on hourly time will be below the limit of .70 per foot when converted to a cost per foot basis, with a sufficient margin to include

our proposed additional allowance of $.3 per foot. Please be assured that it is our intent to handle this program in a forthright manner, with our Vitro share of the expenses being no more and no less than the 25% of the total, to the best of our ability.

We hope this proposal may meet with your approval, and we will be looking forward to hearing from you.

Yours very truly,

VITRO MINERALS CORPORATION

J. C. Horton
General Manager

JCH:dr

cc: John F. Shea
David L. Holch
W. D. Hall

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

RECEIVED
JUL 2 - 1956

224 New Customhouse
Denver 2, Colorado

June 29, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4182 (Uranium), Contract Idm-E963, Vitro Minerals Corporation, Fremont County, Wyoming.

Enclosed are the Government's, Division, and Docket copies of Exploration Project Contract Idm-E963, which were forwarded by the Acting Chairman's letter of June 14, 1956, for signature by the Applicant. The date of July 15, 1956 has been inserted under Article 3 for the date on or before which operations are to be commenced.

Also enclosed are two copies of a letter from this office, dated June 29, 1956, forwarding the Operator's copy of the contract, MF-104 and MF-104A forms, and instructions relative to reporting on work performed under the contract.

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

W. M. Traver

W. M. Traver

Enclosures

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

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

June 29, 1956

RECEIVED
JUL 2 - 1956

Vitro Minerals Corporation
P. O. Box 67
Salt Lake City, Utah

Attention: Mr. J. O. Burton

Re: Docket DMEA 4182 (Uranium)
Contract Idm-2963
Vitro Minerals Corporation
Fremont County, Wyoming

Gentlemen:

Enclosed herewith is your copy of Exploration Project Contract Idm-2963, Docket DMEA 4182.

Also enclosed are six copies of form MF-104, "Operator's Monthly Report and Voucher," and six copies of form MF-104A, "Operator's Unit Cost and Progress Report." At the end of the first calendar month after work is commenced, and monthly thereafter, you are required to submit the original and four copies of each form to Mr. John F. Shaw, U. S. Bureau of Mines, Room 137, Building 20, Denver Federal Center, Denver 2, Colorado. The extra copy is for your records.

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

For your information and in reply to many questions that have been asked, after forms MF-104 and MF-104A are received, an engineer will check progress and approve your accounts, after which they will be sent to the Regional Office, Region III, U. S. Bureau of Mines, 224 New Customhouse, Denver 2, Colorado, for auditing and vouchering. If the

report is in order, a check will be issued by the Treasury Department for the Government's portion of the costs. If you have any difficulty in completing these forms and the reports, please call on Mr. Shaw or this office for assistance.

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

The contract is prepared on form MF-200, and under its provisions and as outlined in Exhibit "A" of the contract, the allowable costs are a combination of actual costs with a maximum unit cost established for work under "Category (1)" and fixed unit costs for performing the remaining items of work or services. Under the provisions of Exhibit "A" the work under "Category (1)" is to be performed by subcontract. The costs recorded under item "(1)" on form MF-104 for such work must be supported each month by a signed copy of the billing from the subcontractor; or, submit for our records a certified copy of the subcontract agreement. Amounts reported on the basis of the "Fixed Unit Costs" require no documentation as they are otherwise verified.

Your requests to this office for work approval, changes in the contract, or any other communication pertaining to operations under the contract, must be in writing, of which please supply the original and five copies, each copy complete with maps or other pertinent data.

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

Your attention is directed to the provision that work under both Stages II and III is contingent upon results of the work completed under the prior Stage and that performance of the work is subject to the prior written approval of the Government.

When the work under a Stage has been completed, you must request approval from this office for the work you propose to perform under the next Stage. Your request for the work approval must be in quadruplicate, each copy complete with a map showing the locations of holes previously drilled and the locations of the holes you propose to drill under the next Stage. Your request should be complete with drill logs, results of radiometric probing, analyses, and any other pertinent data concerned with the prior work which will be of value to the Government in appraising the work performed under the prior Stage.

You should anticipate a suspension of operations between stages of work to enable the Government geologist and engineer to evaluate the results of the work performed and make recommendations to this office relative to the additional work you propose.

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

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

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

Your attention is directed to the provision under Article 3 of the contract form that work must be commenced on or before July 15, 1956. We established that date as we did not receive advice from you as requested in our letter of June 20, 1956.

Very truly yours,

W. M. Trover

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

Enclosures
JWT:prl
cc: Chairman, Oper. Comm. (2)
Finance Office, Region III
Amendment file
Marshman
Shaw
Townsend
Corres. file
Chron.

Mr. George Selfridge
c/o Mr. Mittendorf

RECEIVED
JUN 29 1956

DN 235 BUR MINES 6-29-56 9-29

SEC, OPERATING COMMITTE, DMEA
ATTENTION ADMINISTRATOR C O MITTENDORF

DMEA -4182 CONTRACT IDM E963. ALL COPIES OF CONTRACT PROPERLY EXECUTED RECEIVED TODAY.

W M TRAVER

Denver Colo.

JUN 29 1 42 PM '56

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D.C.

7/3/56

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

RECEIVED
JUL 2 - 1956

224 New Customhouse
Denver 2, Colorado

June 28, 1956

Memorandum

To: Secretary to the Operating Committee
Attention: C. O. Mittendorf, Administrator

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4182 (Uranium) Contract Idm-E963, Vitro Minerals Corporation (George and Ver claims) Fremont County, Wyoming

With reference to the Administrator's teletype of June 25, 1956 concerning Operator's signature on the subject contract, there are enclosed two copies of his telegram of today (requested by this office) confirming the fact that all copies of the contract have been executed and mailed this date, June 28, 1956.

This fulfills the requirement of the teletype.

W. M. Traver

W. M. Traver

Attachments

RECEIVED
JUL 2 - 1956

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

WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

1201

SYMBOLS
DL = Day Letter
NL = Night Letter
LT = International Letter Telegram

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

KF150 PC200

(131)

P INA045 PD=INDIANA PENN 28 110PME=

:W M TRAVER, EXEC OFFICER, DMEA=

:224 NEW CUSTOM HOUSE DVR=

1956 JUN 28 AM 11 40

FIVE COPIES OF CONTRACTS IDM-E-963 HAVE BEEN EXECUTED BY US TODAY AND HAVE BEEN MAILED TO YOU BY SPECIAL DELIVERY CERTIFIED AIR MAIL NUMBER 717295=

:VITRO MINERALS D R PICKARD CONTROLLER=

DMEA
Date Rec'd
JUN 28 1956
BUREAU OF MINES
Denver, Colorado

REGIONAL DIRECTOR'S OFFICE
REGION III
JUN 28 1956
BUREAU OF MINES
DENVER, COLORADO

IDM-E-963 717295=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

Chairman, Operating Committee, DMEA.

RECEIVED
JUL 2 - 1956

COPY

June 26, 1956

D. R. Pickard — Indiana Office

J. O. Horton — Salt Lake City Office

WYOMING DMEA CONTRACT

We are transmitting herewith special delivery, certified air mail five copies of Contract IDM-E-963, Docket No. DMEA 4182, just granted the Vitro Minerals Corporation by the Defense Minerals Exploradion Administration for exploration on our George and Ver claims, Sateco property in Wyoming.

These require the signature of the Secretary of the Company and one other officer, as well as the Corporate seal.

All five copies must be executed and postmarked for return mailing not later than midnight June 30th, or we will not receive this exploration loan. The DMEA office has advised me that they have just heard from Washington that Congress has not extended the DMEA program and no contracts will be approved after the June 30th deadline.

Please send a telegram to Mr. W. M. Traver, Executive Officer, DMEA 224 New Custom House, Denver, Colorado affirming that the contracts have been executed and mailed, as soon as this has been completed.

Please return all five copies to Mr. Traver, address above, by special delivery certified air mail.

Original
COPY Signed by J. O. HORTON

J. O. Horton

JOH:df
Airmail Special Delivery
Certified Mail No. 138271

cc: W. H. Denne, Jr.
W. M. Traver
W. B. Hall

Enclosures

6-26-56

TELETYPE

Dept. of the Interior

Defense Minerals Exploration Adm.

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

Mr. W. M. Irwver, Executive Officer
DMEA Field Team, Region III
Bureau of Mines
224 New Customhouse Building
Denver 2, Colorado

JUN 25 1956

June 25, 1956

4182

Message:

REFERENCE APPROVED CONTRACTS IDM-E-924, 942 and 963, OL JATO URANIUM COMPANY, URANIUM RESEARCH AND DEVELOPMENT COMPANY AND VITRO MINERALS CORPORATION RESPECTIVELY. IF SIGNATURES OF OPERATORS ON CONTRACTS IDM-E-924 AND IDM-E-942 CANNOT BE OBTAINED BEFORE MIDNIGHT JUNE 30, HOLD CONTRACTS IN ABEYANCE UNTIL FURTHER NOTICE. RECORDS INDICATE COPIES OF IDM-E-963 SENT TO OPERATOR FOR SIGNATURE. NOTIFY OPERATOR UNLESS CONTRACT SIGNED BEFORE MIDNIGHT JUNE 30, CONTRACT IS WITHDRAWN. THESE ACTIONS NECESSARY UNTIL CONGRESS ACTS ON PENDING BILL TO EXTEND AUTHORITY OF DMEA.

C. O. Mittendorf

C. O. MITTENDORF
ADMINISTRATOR

REAdams:mm - 6/25/56

Copy to: Administrator
Adm. R. File
Docket IDM-E-963
Confirmation
Chron.
Bureau of Mines, Audit Div., Rm. 2509
Mail & Files

R.C.K

6/22/56 ai

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

RECEIVED
JUN 22 1956

224 New Customhouse
Denver 2, Colorado

June 20, 1956

Via Air Mail
[redacted]

Vitro Minerals Corporation
P. O. Box 67
Salt Lake City, Utah

Re: Docket DMEA 4182 (Uranium) Vitro Minerals Corp.
(George and Ver Claims) Fremont County, Wyoming
Proposed Exploration Project Contract IAm-2963

Gentlemen:

Enclosed are the Government's, Division, Docket, Finance Office, and Field Team copies of a proposed exploration project contract which has been prepared pursuant to your application for Government assistance in exploration work under the DeCunno Minerals Exploration Administration program.

If the contract is satisfactory, all copies are to be signed by an official of Vitro Minerals Corporation authorized to do so, the signer's title inserted, the signatures attested to by the secretary of the corporation, and the corporate seal affixed, after which all copies are to be promptly returned to this office.

When the properly executed copies of the contract have been returned the "Operator's" copy will be forwarded to you, together with forms and instructions relative to reporting on the work performed under the contract.

When the executed copies of the contract are returned, please advise the date on or before which operations will be commenced, for our insertion under Article 3 of the contract form.

Very truly yours,

W. M. TRAVER

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

Encls.
JWT:bh
cc-Chairman, Op. Comm. (2)
Harshman
Shaw
Townsend
Corres. File E-963
Chron.

name copy 700

Murphy
Reilly
Talbot
Jackson
Martin
Mathews

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

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
22d New Customhouse Building
Denver 2, Colorado

JUN 14 1956

Re: Docket No. DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver claims
Fremont County, Wyoming

Dear Mr. Traver:

Enclosed are the original and five copies of a proposed long-form contract between the Government and Vitro Minerals Corporation. Also enclosed are two extra copies of Exhibit "A" and one extra copy of Figure 2 map.

Attached to each contract form MF-200 are Annex I (two pages), a Consent to Lien on the Ver claims Nos. 1 through 11 (two pages), Exhibit "A" (five pages) and a map, Figure 2.

The proposed contract has been signed by the Administrator, subject to the attachment of a Consent to Lien on the George claims Nos. 1 through 7, signed by or for John E. Ramsept, Josephine F. Ramsept, Robert Jerome Albert, John Ramsept, Sr., George J. Snyder, Emma M. Snyder, and Clark Decker. The Washington representative of the Vitro Minerals Corporation has been requested (by telephone) to forward the copies of the Consent to Lien to your office.

If you and the Applicant find the proposed contract in order, please insert in Article 3 of the contract form the date work shall commence, then have an authorized representative of the corporation sign the original and all copies. Thereafter, kindly distribute the copies in the usual manner.

If any part of the proposed contract does not meet with your or the Applicant's approval and cannot be amended within your delegated authority, then the original and all copies, including the

C

extra copies of Exhibit "A," are to be returned to this office with the proposed changes for consideration.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (WS)

Enclosures

APPROVED:

/s/ Robert W. Geehan (SHB)
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey (THB)

FMMurphy/gla
6-12-56
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Murphy

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

JUN 11 1956

Memorandum

To: Administrator, DMEA
Attention: Chief, Rare & Miscellaneous Metals Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-4182 (Uranium)
Vitro Minerals Corporation
Fremont County, Wyoming

Pursuant to your request dated May 31, 1956, we have prepared the attached Contract in satisfactory legal form for execution, subject to the attachment of the Consent to Lien for the George group.

Robert P. Dwyer

4/1/56 gla

IN REPLY REFER TO:

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

June 7, 1956

Re: DMEA 4182
Vitro Minerals Corp.
George and Ver Claims
Fremont Co., Wyoming
Appl. Est. $82,217.00
Recom'd.
Est. 64,694.50
Uranium

Memorandum

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

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

Subject: Review of Field Team report.

The applicant requested assistance in exploring, by core and non core drilling, potential ore-bearing horizons of the Upper Wind River formation. The work proposed by the applicant consists of 61,800 feet of drilling. The examiners and Field Team recommend a 3-Stage, 76,130-foot rotary non-core drilling program, as :

Stage I		
Rotary drilling 10,690 ft. @ $.70 /ft	$ 7,483.00	
Supervision, engineering, probing etc.	1,587.00	
		$9,070.00
Stage II		
Drilling 35,360 feet @ $0.73/ft	25,812.80	
Supervision,etc.	4,243.20	
		30,056.00
Stage III		
Drilling 30,080 ft @ $.73/ft	21,958.40	
Supervision, etc.	3,609.60	
		25,568.00
Totals 76,130 feet		$64,694.50

The applicant has drilled 186 holes on the property to an average depth of 54 feet. Three holes went through mineralized zones, the remainder were barren. It is now believed the holes did not reach the ore horizon. Four anomalies were disclosed by ground isorad survey.

Open pit mining is in progress on the Lucky Mc and Vitro Minerals Corporation properties a short distance to the east of the referenced groups. The proposed exploration of the groups seems justified.

I concur with the recommendation of the examiners and the Field Team.

N. E. Nelson

N. E. Nelson

5/31/56

Propose of contract sent to legal 5/31/56

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

May 31, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Report of Examination, DMEA Docket 4182, Vitro Minerals Corporation (George and Ver claims), Fremont County, Wyoming

I have reviewed the report of examination, DMEA DOCKET 4182, Vitro Minerals Corporation (George and Ver claims), Fremont County, Wyoming, dated May 14 and received in this office May 21, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The examining team conclude that a good possibility exists of finding significant amounts of uranium on the subject property and therefore they recommend for approval an exploration project consisting of 59 drill holes totalling 10,690 feet in Stage I; 221 drill holes totalling 35,360 feet in Stage II; and 188 holes totalling 30,080 feet in Stage III. The total estimated cost of the project would be $64,694.50. Government participation at 75 percent would be $48,520.88.

We concur in the recommendation of the field examiners that the proposed project be given favorable consideration inasmuch as the property shows promise of yielding a deposit similar to those of the Lucky Mc mine and the Vitro mine, both of which are considered significant.

The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

John E. Crawford
John E. Crawford

ROUGH DRAFT
5-31-56
FMMurphy/izm

Docket Copy

MF-200
(Revised June 1954)

Docket No. DMEA 4182

Commodity Uranium

Contract No. Idm-E

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this ..... day of ....., 195...., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Vitro Minerals Corporation, (Delaware), a joint subsidiary of the Vitro Corporation of America (Delaware), and the Rochester and Pittsburgh Coal Company (Incorporated in Pennsylvania),

whose mailing address is P. O. Box 67
South Salt Lake City, Utah,

hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, and Map, Figure 2

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

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

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] Lessee of [5] the entire rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] See Annex I, [7] ....recorded in Book ....., page ....., official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: None

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: Consents to Lien on George claims, Nos. 1 through 7, and Ver claims, Nos 1 through 11, (See Annex I).

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 8, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 8(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Uranium. The work to be performed is described in Exhibit "A." The Operator on or before ..... shall commence the work, and on or before January 1, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A."

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $64,816.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $48,612.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

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

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By .....

.....
(Operator)

By .....

.....

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

.....

[CORPORATE SEAL]

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

ROUGH DRAFT
FMMurphy/izm
5-31-56

EXPLORATION PROJECT CONTRACT
VITRO MINERALS CORPORATION
DOCKET NO. DMEA-4182

ANNEX I

The land referred to in Article 2 of the contract form consists of eighteen (18) unpatented mining claims situated in secs. 22, 26, and 27, T. 33 N., R. 90 W., Sixth Principal Meridian, and are recorded in the Office of the Fremont County Recorder at Lander, Wyoming as follows:

	Original Filing				Amended			Further Amended		
Claim	Book	Page	Re-corded	Dis-covered	Book	Page	Date	Book	Page	Date
George 1	57	1	11/2/53	10/3/53	58	213	8/16/54	147	438	12/3/55
" 2	57	2	"	"	58	214	"	147	439	"
" 3	57	3	"	"	58	215	"	147	440	"
" 4	57	4	"	"	58	216	"	147	441	"
" 5	57	5	"	"	58	217	"	147	442	"
" 6	57	176	11/12/53	11/5/53	65	73	"	147	443	"
" 7	60	553	5/3/54	4/21/54	65	82	"	147	444	"
Ver 1	57	96	11/9/53	11/8/53	65	109	8/18/54	147	463	12/5/55
" 2	57	97	"	"	65	110	"	147	464	"
" 3	57	98	"	"	65	111	"	147	465	"
" 4	57	99	"	"	65	112	"	147	466	"
" 5	57	100	"	"	65	119	"	147	467	"
" 6	57	101	"	"	65	113	"	147	468	"
" 7	57	102	"	"	65	114	"	147	469	"
" 8	57	103	"	"	65	115	"	147	470	"
" 9	57	104	"	"	65	116	"	147	471	"
" 10	57	105	"	"	65	117	"	147	472	"
" 11	60	532	5/3/54	4/21/54	65	118	"	147	473	"

The approximate location of the claims are shown on the map entitled, "Figure 2 - Map of George and Ver Group Showing Location of Proposed Stage I Holes and Part of Proposed Stage II Holes, Vitro Minerals Corporation, Fremont County, Wyo., DMEA-4182", attached hereto and made a part hereof.

Attached hereto are copies of the Owners' Consent to Lien, on the George claims Nos. 1 through 7 signed by John E. Bansept, Josephine F. Bansept, Robert Jerome Albert, John Bansept, Sr., George J. Snyder, Emma W. Snyder, and Clark Decker, and on the Ver claims Nos. 1 through 11 signed by the Fremont Metal and Mining, Inc., a Wyoming Corporation.

EXPLORATION PROJECT CONTRACT
VITRO MINERALS CORPORATION
DOCKET NO. DMEA-4182

EXHIBIT "A"

Description of the Work

General Provisions:

The object of this project is to explore for ore deposits in the potential uranium-bearing Wind River formation of Lower Eocene age which underlies the claims mentioned in Annex I. The exploratory work shall consist of dry non-core or rotary drilling and then changing to wet drilling when the ground water level is reached by a drill hole. It is estimated that holes averaging 160 feet in depth will be required to penetrate the potential ore-bearing formation.

During the drilling, samples of the cuttings shall be collected for each 2 feet of hole drilled. The samples shall be examined for physical and geologic characteristics and scanned radiometrically. One-half of each sample shall be stored for Government use in heavy paper sample sacks marked to show the hole number and the depths represented by the sample. The other half of each sample will be for the Operator's use, and if it shows significant radioactivity shall be fluorimetrically analyzed for its U_3O_8 content.

All holes shall be logged petrographically and probed for radioactivity. Records of such logging and probing, together with the assay certificates of the "cuttings" samples, shall be submitted with the Operator's monthly progress report. The Operator's report shall also include a map or sketch showing the approximate location of all holes drilled during the reporting period.

No hole drilled under this contract shall be closer than 100 feet to the outer boundary of the property covered by this contract.

The Government will not participate in the cost of any uncompleted hole, or any hole that cannot be probed with standard radiometric probing equipment.

Two geologists and two samplers shall be employed full time in connection with the performance of the project work.

The extent and method of drilling, the location and depth of the drill holes, and the manner of sampling and storing the cuttings, are all subject to Government approval.

The work shall be divided into three stages. The Operator shall perform all the work in Stage I and so much of Stage II and Stage III work as is approved in advance in writing by the Government.

If the estimated drilling footage and other items are not sufficient to complete the number of holes authorized by the Government under Stage I and II, with previous written Government approval, a part of the drill footage and other items allowed for Stage III may be used to complete such holes. Excess drill footage and unused items in Stage I may be transferred to Stage II. However, unused footage or other items of cost remaining after completion of Stage I and II shall not be transferred for Stage III use.

Stage I:

Stage I shall consist of drilling not in excess of 64 holes, totaling an estimated 10,690 feet, spaced on a 300-foot center diamond pattern(with the exception of one hole to test the anomaly in the northeast part of George No. 1 claim). The approximate location of the holes are indicated by a single circle symbol on map Figure 2. Five of the holes, indicated by a double circle, shall be drilled to a depth of about 250

feet, or deep enough to penetrate the entire thickness of the Wind River formation.

It is estimated that 250 samples shall be analyzed flourimetrically for their U_3O_8 content.

Stage II:

Stage II is divided into three phases as follows:

Phase (1) shall consist of drilling not in excess of 65 holes, totaling an estimated 10,400 feet, on a 300-foot center diamond pattern. The approximate location of the holes are indicated by a triangle symbol on map Figure 2.

Phase (2) shall consist of drilling an estimated 76 holes, totaling an estimated 12,160 feet. The holes shall be drilled, on not less than approximately 150-foot centers, as offsets to those holes drilled under Stage I which show uranium in amounts that the Government considers to be significant.

Phase (3) shall consist of drilling an estimated 80 holes, totaling an estimated 12,800 feet. The holes shall be drilled, on not less than approximately 150-foot centers, as offsets to those holes drilled under Stage II which show uranium in amounts that the Government considers to be significant.

Not in excess of 221 holes, totaling an estimated 35,360 feet, shall be drilled under this Stage II of the contract.

Stage III:

Stage III shall consist of drilling not in excess of 188 holes, totaling not in excess of 30,080 feet. The holes shall be drilled, on not less than approximately 75-foot centers, as offsets to holes drilled in the previous stages which show uranium in amounts that the Government considers to be significant.

Estimated Costs of the Project

Stage I

Actual Costs

Category (1) Independent Contracts

10,690 feet of non-core drilling @ $0.70/ft.	$7,483.00	
Standby time for probing holes, 32 hrs. @ $10/hr.	320.00	
TOTAL		$7,803.00

Categories (2) through (7) None

Fixed Unit Costs

Incidental allowance 1/ for each foot of hole drilled, 10,690 feet @ $0.09/ft.	962.10	
Analyses of 250 samples for U_3O_8 content @ $1.25/sample	312.50	
TOTAL		$1,274.60

Total Estimated Cost Stage I $9,077.60

Stage II

Actual Costs

Category (1) Independent Contracts

35,360 ft. of non-core drilling @ $0.70/ft.	$24,752.00	
Standby time for probing holes, 110 hrs. @ $10/hr.	1,100.00	
TOTAL		$25,852.00

Categories (2) through (7) None

Fixed Unit Costs

Incidental allowance 1/ for each foot of hole drilled, 35,360 ft. @ $0.09/ft.	$3,182.40	
Analyses of 850 samples for U_3O_8 content @ $1.25/sample	1,062.50	
TOTAL		$4,244.90

Total Estimated Cost Stage II $30,096.90

Stage III

Actual Costs

Category (1) Independent Contracts

30,080 ft. of non-core drilling @ $0.70/ft.	$21,056.00	
Standby time for probing holes, 94 hrs. @ $10/hr.	940.00	
TOTAL		$21,996.00

Categories (2) through (7) None

Fixed Unit Costs

Incidental allowance 1/ for each foot of hole drilled, 30,080 ft. @ $0.09/ft.	2,707.20	
Analyses of 750 samples for U_3O_8 content @ $1.25/sample	937.50	
TOTAL		$3,644.70

Total Estimated Cost Stage III $25,640.70

SUMMARY

Total Estimated Cost, Stage I	$ 9,077.60	
Total Estimated Cost, Stage II	$30,096.90	
Total Estimated Cost, Stage III	$25,640.70	
TOTAL		$64,815.20
Total Estimated Cost of Project (rounded)		$64,816.00
Government Participation @ 75 percent		$48,612.00

1/ Includes all costs whatsoever that are not included in the estimates for "Independent Contracts" and includes such items as supervision, labor, payroll taxes, supplies, use of equipment to test for radioactivity, etc., which would otherwise be allowable under Categories (2) through (7) of the contract.

6-1-56

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

RECEIVED
JUN - 1 1956

May 29, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman, Operating Committee, DMEA

From: Field Team, Region III

Subject: DMEA Docket 4182 (Uranium) Vitro Minerals Corporation, (George and Ver claims), Fremont County, Wyoming

Enclosed are the original and five copies of Consent to Lien on the Ver group of claims. When we receive the Consent to Lien on the George group, we will forward the executed copies to your office.

DMEA Field Team, Region III

By J. W. Townsend
Acting Executive Officer

Enclosures

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

RECEIVED
JUN - 1 1956

May 29, 1956

224 New Customhouse
Denver 2, Colorado

Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

Re: DMEA Docket 4182 (Uranium) George and Ver claims) Fremont County, Wyoming

Gentlemen:

This will acknowledge receipt of the original and five copies of Consent to Lien on the Ver claims which were forwarded this office by Mr. Charles C. Koripaugh, President, Fremont Metal and Mining, Inc.

When we receive the original and five copies of Consent to Lien, properly executed on the George group, we will continue to process your application.

Very truly yours,

J. W. Townsend

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

HMC:ab

cc: Chair. Op. Comm. (2)
Docket 4182
Chron.

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

May 22, 1956

224 New Customhouse
Denver 2, Colorado

RECEIVED
MAY 24 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: DMEA Docket 4182 (Uranium) Vitro Minerals Corporation, (George and Ver claims), Fremont County, Wyoming

Enclosed are nine extra copies of Figure 2 which accompanied the Report of Examination on the subject docket which may have possible use in the contract.

DMEA Field Team, Region III

By J. W. Townsend
Acting Executive Officer

Enclosures

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

RECEIVED
MAY 24 1956

May 22, 1956

224 New Customhouse
Denver 2, Colorado

Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

Re: DMEA Docket 4182 (Uranium) George and Ver claims, Fremont County, Wyoming

Gentlemen:

Enclosed are the original and five copies of Owner's Consent to Lien on the George group and the original and five copies of Owner's Consent to Lien on the Ver group of mining claims.

Please have all of the owners of the George group sign and return to this office all copies.

The Owner's Consent to Lien on the Ver group of mining claims should be signed by an official of the Fremont Metal and Mining, Inc. who has the authority of its governing body to sign a consent to lien, and this signature should be certified by the Secretary of the Corporation and all signed copies returned to this office.

When we receive all of the enclosed executed copies of Owner's Consent to Lien mentioned above, we will continue to process your application.

Very truly yours,

J. W. Townsend

By J. W. Townsend
Acting Executive Officer

HMC:ab

Enclosures
cc: Chair. Op. Comm. (2)
Docket 4182
Harshman
Shaw (2)
Charon.

5/29/56 gla

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

RECEIVED
MAY 24 1956

May 21, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, DMEA Docket 4182 (Uranium), Vitro Minerals Corporation, (George and Ver claims), Fremont County, Wyoming

Enclosed are the original and three copies of a joint engineering and geologic report on the subject property.

The field examiners recommend a short-form contract consisting of three stages of drilling at a total estimated cost of $64,694.50, Government participation, $48,520.88. We concur in this recommendation.

Owner's Consent to Lien Forms will be prepared in accordance with the sample copies attached to your letter dated February 27, 1956.

Nine extra copies of Figure 2 which accompanies the Report of Examination have been ordered and will be forwarded you for possible use in the contract.

DMEA Field Team, Region III

By J. W. Townsend
Acting Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
5-28-56
(date)

ON-SITE EXAM.

RECEIVED
MAY 21 1956

Region III

TRANSMITTED

MAY 21 1956

Building 20
Denver Federal Center
Denver 2, Colorado
May 17, 1956

DMEA
Date Rec'd.
MAY 17 1956
BUREAU OF MINES
Denver, Colorado

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman
John F. Shaw

Subject: Docket DMEA 4182 (Uranium) George and Ver claims, Vitro Minerals Corp., Fremont County, Wyoming — Examination Report

Enclosed are the original and 9 copies of a Joint Examination Report by R. E. Davis, Geologist and H. F. Robertson, Mining Engineer covering docket DMEA 4182.

Vitro Minerals Corp. applied for DMEA assistance to explore the George and Ver claims group of unpatented mining claims by 61,800 feet of rotary non-core and BX core drilling at an estimated overall cost of $85,657.00.

The property was examined on 4/11/56 by R. E. Davis and M. N. Bergendahl, geologists and H. F. Robertson and C. M. Harrer, mining engineers. The examining team concluded that there was a good possibility of finding significant bodies of uranium on the George and Ver group of claims.

It is recommended that a short form contract consisting of 3 stages be prepared. The first stage would consist of 59 drill holes totalling 10,690 feet. Stage II would be dependent upon the results of Stage I and would consist of a maximum of 221 holes totalling 35,360 feet. Stage III would be dependent upon the results of Stage II drilling and would consist of a maximum of 186 holes totalling 30,080 feet.

The total estimated cost of the contract would be $64,694.50.

Reviewed by
DMEA OPERATING COMMITTEE
5-28-56
(date)

E. N. Harshman
E. N. Harshman
Member Field Team

Scott W. Hager Jr.
for John F. Shaw
Supervising Mining Engineer

cc 9
DMEA 4182
Chron.

JFS/eh

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

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DMEA 4182

VITRO MINERALS CORPORATION

George and Ver Claims

Fremont County, Wyoming

Uranium

Joint Engineering and Geologic Report

By

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Reviewed by
DMEA OPERATING COMMITTEE
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DMEA 4182

VITRO MINERALS CORPORATION
GEORGE AND VER CLAIMS
FREMONT COUNTY, WYOMING

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DMEA 4182

Vitro Minerals Corporation
George and Ver Group
Fremont County, Wyoming

INTRODUCTION AND SUMMARY

Vitro Minerals Corporation, P. O. Box 67, South Salt Lake City, Utah, applied to the Defense Minerals Exploration Administration for assistance in the exploration of the George and Ver groups of unpatented mining claims for uranium. These claims occupy parts of Secs. 22, 26, and 27, T. 33 N., R. 90 W., Sixth Principal Meridian, Fremont County, Wyo. The company application requests participation in a three phase exploration program consisting of a total of 61,800 feet of rotary non-core and BX core drilling at an estimated overall cost of $85,657.00. The proposed program would explore potential ore horizons of the upper Wind River formation.

A field examination was made on April 10, 1956 by an examining team consisting of R. E. Davis and M. H. Bergendahl, geologists, Geological Survey, and H. F. Robertson and C. M. Harrer, mining engineers, Bureau of Mines. The team was accompanied by D. L. Welsh, Division Geologist for Wyoming Vitro Minerals Corporation.

Preliminary work by the applicant shows the possibility of uranium ore in significant quantities on the subject property. Four radioactive anomalies were reported by the applicant and verified by the examining team. Three drill holes, located on the George 1 and the George 2 claims, cut mineralized zones two to four feet in thickness and assaying from 0.11 percent to 0.14 percent U_3O_8. These indications and the presence of nearby ore bodies are encouraging signs that minable ore reserves may be developed on the property.

The possibility of finding significant bodies of uranium ore similar to those of the Lucky Mc mine and Vitro mine is good.

A three-stage exploration program consisting of 473 rotary drilled non-core holes totaling 76,130 feet is recommended at an overall cost of $64,694.50.

Government participation at 75 percent would be $48,520.88.

ACKNOWLEDGMENTS

The examining team was accompanied by Dave Welsh, geologist for Vitro Minerals Corporation. Various other employees of Vitro Minerals Corporation and the nearby Utah Construction Co. (Lucky Mc properties) were contacted for additional information concerning the area.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The property included in the application consists of 18 unpatented claims in sections 22, 26, and 27, T. 33 N., R. 90 W., Sixth Principal Meridian, Fremont County, Wyoming (see Figure 1). They are reached from Riverton by traveling 1.5 miles southwest on paved State Highway 320; thence 1.5 miles south on paved County Sand Draw Road; thence 55.0 miles southeasterly on dirt Muskrat-Pipeline Road to mining camp of Vitro Minerals Corp.

The claims are situated on a northerly trending slope at a mean altitude of 6,480 feet above sea-level and a relief of 120 feet over approximately one mile. The surface is cut by a few shallow, sandy washes.

Vegetation is limited to sagebrush, native grasses, and cacti. Temperatures range from below freezing in the winter to around 90° F. in the summer. Heavy rainstorms occur in the spring and summer. Winters snowstorms accompanied by constant winds result in considerable drifting.

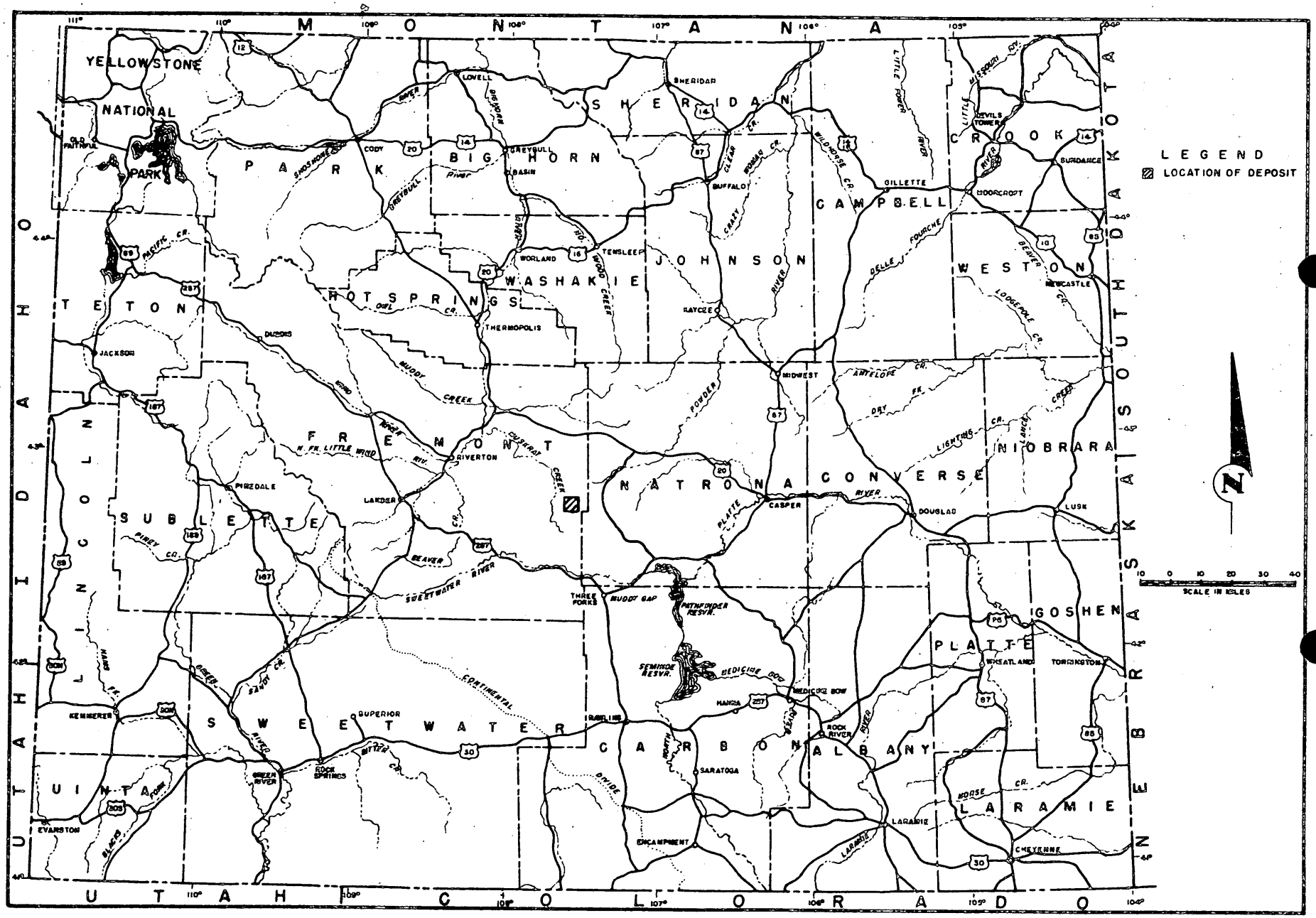


FIGURE 1 - LOCATION MAP, GEORGE AND VER CLAIM GROUPS, VITRO MINERALS CORPORATION, FREMONT COUNTY, WYO. DMEA 4182

Water for drilling and mining purposes can be obtained locally from sumps and pits in the adjoining workings. There are no power facilities locally. Power needed for the applicant's operations is generated by diesel or gasoline engines. Supplies and equipment can be obtained in Riverton. The AEC buying station is located at Riverton on a siding provided by the Chicago Northwestern Railroad and is 55 miles from the applicant's property.

HISTORY, PRODUCTION AND OWNERSHIP

The first discovery of commercial uranium ore in the Wind River formation in the Gas Hills district was made in September 1953 near the site of the present Lucky Mc Mine. There has subsequently been extensive exploration by both the U. S. Atomic Energy Commission and private companies. The exploration programs have developed several important producing mines. There has been no production, however, from the subject claims.

The location records of the George and Ver claim groups were checked in the County Recorder's office at Lander and the following information was obtained:

TABLE I

	Original Filing				Amended			Further Amended		
Claim	Book	Page	Re-corded	Dis-covered	Book	Page	Date	Book	Page	Date
George 1	57	1	11/2/53	10/3/53	58	213	8/16/54	147	438	12/3/55
" 2	57	2	"	"	58	214	"	147	439	"
" 3	57	3	"	"	58	215	"	147	440	"
" 4	57	4	"	"	58	216	"	147	441	"
" 5	57	5	"	"	58	217	"	147	442	"
" 6	57	176	11/12/53	11/5/53	65	73	"	147	443	"
" 7	60	553	5/3/54	4/21/54	65	82	"	147	444	"
Ver 1	57	96	11/9/53	11/8/53	65	109	8/18/54	147	463	12/5/55
" 2	57	97	"	"	65	110	"	147	464	"
" 3	57	98	"	"	65	111	"	147	465	"
" 4	57	99	"	"	65	112	"	147	466	"
" 5	57	100	"	"	65	119	"	147	467	"
" 6	57	101	"	"	65	113	"	147	468	"
" 7	57	102	"	"	65	114	"	147	469	"
" 8	57	103	"	"	65	115	"	147	470	"
" 9	57	104	"	"	65	116	"	147	471	"
" 10	57	105	"	"	65	117	"	147	472	"
" 11	60	532	5/3/54	4/21/54	65	118	"	147	473	"

The field check and the examination of the records in the Fremont County Courthouse at Lander indicate that the 18 claims are valid and without conflicting claims. A map of the claims by Geo. J. Snyder, registered surveyor, was submitted by the applicant and correctly shows the claims as staked on the ground. George No. 7 and Ver No. 11 are fractional claims staked to cover a gap between the two groups of claims.

PRESENT STATUS

Exploration and Development

A total of 186 holes were drilled by the applicant on the subject property. Of this total, 102 holes were on the Ver group and 84 on the George Group. The average depth drilled was 54 feet with holes ranging in depth from 18 feet to 106 feet. Three of the holes on the George 1 and George 2 cut mineralized zones, two to four feet in thickness, and assaying from 0.11% to 0.14% U_3O_8. The uranium content of the drill cuttings was determined by fluorimetric assay. The remainder of the holes were essentially barren. However, the applicant believes that most of the holes were too shallow to penetrate the potential ore horizon.

An isorad survey, conducted by the applicant, disclosed three ground anomalies which had not been tested by drilling. The anomalies, ranging from two to five times the normal background, were checked by the examining team and found to exist as stated by the applicant. A P.R.I. Model 111B Scintillator was used by the team in checking the anomalies.

Mining and Milling Equipment and Other Facilities

There is no mining or milling equipment on the subject property. However, the Vitro Minerals Corporation is operating a nearby property and would use equipment from that property for development of any ore reserves discovered on the subject property.

The Vitro mining camp is within one mile of the claims and would serve as housing for personnel used on the project.

GEOLOGY

Stratigraphy. -- The sedimentary rocks that underlie the George and Ver groups of claims and the immediately adjacent areas consist of sandstones, claystones, shales, and conglomerates belonging to the Wind River formation of Early Eocene age. The Wind River formation was laid down on the rough topography of a deformed and eroded sequence of rocks of Mesozoic age.

No exposures of bedrock were seen on the applicant's property, but, in the pits of Vitro Minerals Corporation and Utah Construction Company (Lucky Mc mine), respectively, about 2,500 and 600 feet east of the east edge of Ver 1 and Ver 2 claims, and on the north-facing slope about 2,000 feet north of the groups, good exposures of parts of the Wind River were observed. The Wind River formation has been described in some detail by Zeller and others of the U. S. Geological Survey (1955, p. 14-19), and their report has been drawn upon freely to supplement information obtained during the field examination of the property.

The Wind River formation has, in the Gas Hills area, been divided into two units -- a lower fine-grained facies and an upper coarse-grained facies. Known uranium deposits in the area occur in the lower part of the upper coarse-grained facies.

In general, the lower fine-grained facies consists of fine-grained sandstone, siltstone, claystone, and carbonaceous shale. The color of the unit generally is some shade of gray or grayish green. Zeller records the average thickness of the unit in the Gas Hills area as about 125 feet. The unit is exposed on the north-facing slope in the northwest quarter of section 22 (fig. 3). The lower unit has been encountered in drill holes in the area,

but there appears to be differences in the criteria employed by the drillers and geologists in establishing the contact between the upper and lower facies, which apparently is gradational in the area. When "bentonite" is encountered in a drill hole, it generally is accepted as belonging to the lower facies.

As shown on the geologic map (fig. 3), which was compiled from Zeller's field sheets, the lower facies is not universally present. Because the eroded surface upon which the Wind River formation was deposited rises rapidly to the south and east, the lower facies pinches out in these directions to points beyond which the upper facies rests directly on Mesozoic rocks. It is doubtful whether any appreciable thickness of the lower facies underlies the applicant's claims.

The upper coarse-grained facies is the ore-bearing unit in the Gas Hills area. It consists predominantly of cross-bedded, medium- to coarse-grained arkosic sandstone, conglomerate, and lesser amounts of siltstone, claystone, and shale. The sandstone beds generally are weakly cemented and appear quite permeable. The lithology changes rapidly, both laterally and vertically; individual beds thus cannot be traced for distances of more than a few hundred feet, and correlations from one locality to another are virtually impossible. Zeller gives the thickness of the upper unit of the Wind River formation as 600 feet where the entire unit is present. According to Zeller's structure contour map of the pre-Wind River erosion surface, probably not more than a total of 150 feet of Wind River, including both the upper and lower facies, underlies the applicant's claims.

Structure. -- The major structure in the area is the Gas Hills anticline (Dutton Basin anticline). The Gas Hills anticline is an asymmetric, northwest-plunging fold, pre-Wind River in age, upon the flanks of which the sediments comprising the Wind River formation were deposited (fig. 3). Post-

Wind River normal faulting in the area south of the Gas Hills probably has modified the initial dip of the Wind River formation to some degree.

The applicant's property lies on the western flank of the Gas Hills anticline in an area where the lower Wind River sediments rapidly pinch out against the steeply dipping western limb of the anticline, and the upper Wind River sediments thin toward the crest of the anticline. Erosion has stripped the Wind River sediments from the crest of the anticline about one mile to the east. The Wind River beds dip at angles of less than 4° to the southwest and south-southeast, based on Zeller's geologic map and on observations in the Lucky Mc pit, east of the applicant's property.

Uranium deposits. -- Uranium deposits in the Gas Hills area occur in the lower part of the upper facies of the Wind River formation and are of two common types and one infrequent type. The first type consists of lenses and pods of oxidized uranium minerals occurring as encrustations and interstitial fillings in the friable sandstone and siltstone in the zone of oxidation above the ground water table. The sandstones associated with the oxidized ore are tan to reddish-brown in color due to the presence of iron oxides, and they appear quite permeable. It is probably these near-surface deposits of uraniferous material that produce small areas of anomalous radioactivity on the surface. According to Zeller, meta-autunite is the most common mineral in the oxidized deposits. The oxidized zone extends downward from the surface approximately to the present ground water level, which ranges from about 60 to perhaps 80 feet below the surface.

The second general type of deposit occurs as an irregular blanket of uraniferous material at or near the top of the unoxidized zone. In this horizon aggregates and disseminations of pyrite, uraninite, and perhaps some carbonaceous material are associated with weakly cemented dark-gray or blue-gray coarse-grained sandstone or claystone. The experience of the

applicant in the Vitro pit in Section 26 has been that the most favorable lithology and richest ore zone is a blue-gray claystone that occurs very close to the top of the unoxidized zone. This relatively impermeable bed, some 15 feet thick, probably controls the level of the ground water table and, consequently, the depth of oxidation at this locality. The impermeable nature of the bed has also provided an effective trap for the solutions that have leached uranium from the overlying permeable beds. Although this particular bed cannot be traced for any great distance, the same situation probably would exist any place where a claystone or siltstone bed controlled the level of the present ground water table.

In areas where the claystone does not coincide with the top of the unoxidized zone, ore has been found in the sandstone that occupies the same position with respect to the top of the unoxidized zone. This was discovered by the applicant in a number of holes that were drilled south of the main Vitro pit.

A third, less frequent type of ore occurrence was observed in one of the pits being operated by the applicant. The ore occurs in its unoxidized habit in a claystone lens close to the surface within the oxidized zone. This lens is completely surrounded and doubtless underlain by oxidized sandstone beds. The clayey lens presented a barrier to the downward-moving solutions and perhaps held up a very local "perched" water table. Reducing conditions prevailed within the relatively impermeable claystone lens, and uranium was precipitated from the downward-moving water and concentrated within the lens.

Anomalies. -- The four anomalies outlined by the applicant's isorad survey were checked with a P.R.I. Model 111B scintillator. The degree of radioactivity was checked, but the outlines of the anomalous areas as shown on the applicant's Plate IV were not redelineated. Anomaly No. 1 showed a

maximum radioactivity of 0.15 MR/hr against a background of .03 MR/hr, or about 5 times background. Anomaly No. 2 showed a maximum of .06 MR/hr against a background of .03 MR/hr, or about twice background. Anomaly No. 3 showed a maximum of .06 MR/hr against a background of .03 MR/hr, or about twice background. Anomaly No. 4 showed a maximum of .07 MR/hr against a background of .03 MR/hr, or about 2-1/3 times background.

Anomalies Nos. 2, 3, and 4 appeared to be associated with surface concentrations of iron oxide nodules, which individually seem somewhat radioactive. Anomaly No. 1 was not associated directly with surface concentrations of the nodules, although some are present nearby. It appears likely that only anomaly no. 1 might be associated with near-surface concentrations of uraniferous material.

References:

Zeller, H. D., Soister, P.E., and Hyden, H.J., 1955, Progress Report on the Geology and Uranium Deposits of the Gas Hills area, Fremont and Natrona Counties, Wyoming: U. S. Geol. Survey, TEIR 560.

MINABLE ORE RESERVES

There is no basis on which to estimate ore reserves on the property.

PROJECT PROPOSALS WITH COSTS

Vitro Minerals Corporation proposes to explore their George and Ver groups of claims by 61,800 feet of non-core and core drilling at an overall cost of $85,657.00. Their program is set up in three stages to explore the 18 claims involved. Stage I would consist of 150 holes spaced on 300-foot centers with an average estimated depth of 120 feet for a total of 18,000 feet. One-fifth of the footage would be core drilling. Stage II would be dependent upon the results of Stage I and would consist of approximately 240 holes totaling 28,800 feet. One-fifth of the footage in this stage would be core

drilling. Stage II is designed to localize areas in which possible ore bodies may be contained. Stage III, on 50-foot centers, with one-fourth of the footage cored, requires 150 holes, each 100 feet deep, for a total of 15,000 feet. This stage is for the purpose of determining whether or not a minable ore body is present. Mineralized holes, discovered in any of the three drilling phases would be offset by 50 feet for each new drilling location in Stage III. The number of holes proposed is adequate for testing six or seven mineralized areas of good promise.

The applicant estimates that the entire program could be completed in four months. Their costs are distributed as follows:

Independent Contracts

Stage I	
Rotary drilling, 150 holes totaling 18,000 feet	
Non-core drilling 14,400 feet at $0.60 per foot	$8,640.00
Wet core drilling 3,600 ft. at $3.00 per foot	$10,800.00
Stage II	
Rotary drilling, 240 holes totaling 28,800 feet	
Non-core drilling 24,000 feet at $0.60 per foot	$14,400.00
Wet core drilling, 4,800 feet at $3.00 per foot	$14,400.00
Stage III	
Rotary drilling, 150 holes totaling 15,000 feet	
Non-core drilling, 12,000 feet at $0.60 per foot	$7,200.00
Wet core drilling, 3,000 feet at $3.00 per foot	$9,000.00
Total Cost, Independent Contracts for Stages I, II and III	$64,440.00

Personnel: estimated four months for completion of project

One Project Supervisor at $650.00 per mo.	$2,600.00
Two Project Geologists at $450.00 per mo.	3,600.00
Two Samplers at $350.00 per month	2,800.00
Bookkeeping at $50.00 per month	200.00
Total cost, Personnel for Stages I, II and III	$9,200.00

Operating Materials and Supplies:

Estimated total cost for Stages I, II and III		$600.00

Operating Equipment:

Two 4-wheel drive units for four months at $60.00/mo.		$480.00

Miscellaneous:

Maintenance on operating equipment at $100.00/mo. for 4 months	$400.00	
Fluorimetric Assays of 2200 samples at $1.25/sample	$2,750.00	
Total cost, Miscellaneous for Stages I, II and III		$3,150.00

Contingencies:

10% of all items above, for such contingencies as difficult drilling, bad weather, mechanical breakdowns. This will also include costs for Workman's Compensation, Insurance and Payroll taxes	$7,787.00

Estimated total cost of Project	$85,657.00
Cost per foot of hole, not including analyses ($82,907.00) / (61,800 ft.)	$1.34
Overall cost per foot of hole $85,657.00 / (61,800 ft.)	$1.39

REVISED AND RECOMMENDED EXPLORATION PROGRAM AND COSTS

The applicant's proposed exploration program is essentially sound but several changes were agreed upon during the field examination and discussion with the Company representative. The drilling pattern was adjusted to keep all but one of the holes a minimum of 200 feet from the boundary lines of the claims. One hole was placed within 100 feet of the boundary to test the strong anomaly on the northeast side of the George 1 claim. Recent work in the area has shown that the hole depth estimated by the applicant is too shallow. An increase to a depth of at least 160 feet is recommended by the examining team for positive exploration of the potential

ore horizon. It is also recommended that five holes in Stage I, located as shown on figure 2, be drilled to a depth of 250 feet for stratigraphic information.

Core drilling now in progress in the immediate area has been consistently poor in sample recovery. Expensive, time-consuming methods are necessary to maintain the percent recovery at an acceptable level. For example, the Lucky Mc operators use dry ice to freeze the core in the barrel before lifting it from the bottom of the hole. The applicant is presently doing non-core drilling on other Vitro property in the area and are satisfied with the results obtained. Therefore, Vitro's representative orally modified their proposed exploration program to substitute non-core drilling for core drilling. The examining team agreed with the applicant on this point and the recommended exploration program includes no core drilling.

All holes excepting the five deep ones, should bottom approximately 40 to 50 feet below the water table in order to test the potential zone of unoxidized uranium ore. Therefore, the following three stage exploration program is based upon dry and wet non-core drilling at a unit cost of $0.70 per foot.

Stage I will consist of 62 holes in the north half of the project area and 2 holes in the south half, as shown in figure 2. The holes are spaced on 300-foot centers in a diamond pattern with the exception of the special hole testing the anomaly in the northeast section of George 1 claim. The depth of these holes with the exception of the 5 holes, will be controlled by the position of the water table with an estimated depth of 160 feet. Exceptions to this are the five deep holes which will be drilled to a depth of 250 feet and are also a part of Stage I. The estimated total footage for Stage I is 10,690 feet. No bulldozer work for drill site preparation will be necessary. Any unused funds and drill footage assigned to Stage I should be made available for Stage II, if necessary and approved.

Stage II is dependent upon the results from Stage I and will require the approval of the DMEA Field Team before commencing. This stage will consist of:

(1) Drilling the 65 holes on the 300-foot grid spacing in the south section of the property.

(2) Drilling a pattern of an estimated 76 offset holes on 150-foot centers around Stage I holes, includes only 3 of the deep holes in the north section of the property which, by estimate, will encounter uranium in amounts considered significant by the Field Team.

(3) Drilling a pattern of an estimated 80 offset holes on 150-foot centers around Stage II 300-foot spacing and the 2 deep Stage I holes in the south section of the property which, by estimate, will encounter uranium in amounts considered significant by the field team.

It is estimated that 30 percent of the wide spaced (300 ft.) holes will be sufficiently mineralized to justify offsetting. Approximately 221 holes totaling 35,360 feet would be necessary for this stage. Any unused funds and drill footage assigned to Stage II should be made available to Stage III if necessary and approved.

Stage III is dependent upon the results of Stage II and will require the approval of the DMEA field team before commencing. This stage will consist of a pattern of holes drilled on 75-foot centers to offset Stage II holes or any other holes which contain uranium in amounts considered significant by the Field Team. This stage, based on the estimate that 30 percent of the 156 Stage II, 150-foot center drill holes will encounter sufficient mineralization to justify offsetting, would require approximately 188 holes totaling 30,080 feet.

Revised costs of the project are estimated as follows:

STAGE I

Estimated time for completion - 1/2 month

Basis - 2 drill-rigs - 1 shift per day per rig

25 days per month - 400 feet per day per rig

Independent Contracts		
Rotary drilling of 64 holes (including the 5 deep holes) 10,690 ft. at $0.70 per foot	$7,483.00	
Standby time for probing holes, 32 hours at $10.00 per hour	320.00	
Total Independent Contracts		$7,803.00
Labor, Supervision, and Consultants		
Two project geologists at $450 per month	$450.00	
Two samplers at $350.00 per month	350.00	
Total Labor, Supervision and Consultants		$ 800.00
Operating Materials and Supplies		
Sample bags, drill log forms and surveying supplies at $50.00 per month	$25.00	
Total Operating Materials and Supplies		$ 25.00
Operating Equipment		
Two - 4WD units at $60.00 per mo. per unit	$60.00	
Depreciation on 1 hole-probing unit at $10/mo.	5.00	
Total Operating Equipment		$ 65.00
Miscellaneous		
Fluorimetric Assays, 250 samples at $1.25 ea.	$312.50	
Direct Accounting costs at $50.00 per month	25.00	
Payroll taxes and insurance, 5% of $800.00	40.00	
Total Miscellaneous		$ 377.50
TOTAL COST OF STAGE I		$9,070.50

Cost per foot for drilling
Rotary drilling and standby time $\frac{\$7,803.00}{10,690 \text{ ft.}} = \$0.73$

Cost per foot for sample analyses $\frac{\$312.50}{10,690 \text{ ft.}} = \$0.03$

Cost per foot for equipment, supervision, supplies, and miscellaneous $\frac{\$995.00}{10,690 \text{ ft.}} = \$0.09$

TOTAL COST PER FOOT $0.85

STAGE II

(1) Drilling 65 holes on 300-foot centers in the South section of the property

65 holes at estimated depth of 160 ft.= 10,400 ft.

Cost for drilling, 10,400 ft. at $0.73 per foot = $7,592.00

Cost for sample analyses, 10,400 ft. at $0.03/ft.= 312.00

Cost for incidental allowances, 10,400 ft. at $0.09/ft.= 936.00

Subtotal $8,840.00

(2) Drilling an estimated 76 offset holes on 150-foot centers around and estimated 30 percent of the 3 deep holes and 59 other Stage I holes in the north section.

76 holes at estimated depth of 160 ft. = 12,160 feet

Cost for drilling, 12,160 feet at $0.73 per foot =$8,876.80

Cost for sample analyses, 12,160 feet at $0.03/ft.= 364.80

Cost for incidental allowances, 12,160 feet at $0.09/ft.=1,094.40

Subtotal $10,336.00

(3) Drilling an estimated 80 offset holes on 150-foot centers around 65 item (1) 300-foot spaced holes and 2 deep stage I holes in the south section.

80 holes at estimated depth of 160 feet = 12,800 feet

Cost for drilling 12,800 feet at $0.73 per foot = $9,344.00

Cost for sample analyses, 12,800 feet at $0.03/ft.= 384.00

Cost for incidental allowances, 12,800 feet at $0.09/ft.=1,152.00

Subtotal $10,880.00

TOTAL STAGE II, 221 holes and 35,360 ft. of drilling

Cost for drilling 35,360 feet at $0.73 per foot= $25,812.80

Cost for sample analyses, 35,360 ft. at $0.03/ft.= 1,060.80

Cost for incidental allowances,35,360' at $0.09/ft.3,182.40

TOTAL STAGE II $30,056.00

STAGE III

Drilling an estimated 188 offset holes on 75-foot centers around 30 percent of the 156 Stage II 150-foot center drill holes.

188 holes at estimated depth of 160 feet = 30,080 feet

Cost of drilling 30,080 ft. at $0.73 per ft. =$21,958.40

Cost of sample analyses 30,080 ft. at $0.03/ft.= 902.40

Cost of incidental allowances, 30,080 feet at $0.09/ft.= 2,707.20

TOTAL STAGE III $25,568.00

SUMMARY OF COSTS

Stage I -	64 holes,	10,690 feet	$ 9,070.50
Stage II -	221 holes,	35,360 feet	30,056.00
Stage III-	188 holes,	30,080 feet	25,568.00
TOTAL	473 holes	76,130 feet	$64,694.50

Rotary drilling costs are based on the bid of J. W. Rupert Drilling Co. No maximum footage of drilling can be guaranteed.

PROPOSED FINANCING

Vitro Minerals Corporation is prepared to furnish its share of the cost of the proposed exploration in cash and equipment owned.

CONCLUSIONS AND RECOMMENDATIONS

The known uranium deposits in the Gas Hills area occur in the lower part of the upper coarse-grained facies of the Wind River formation, which underlies the applicant's property. Utah Construction Company, operating the Lucky Mc mines, is producing uranium ore from three pits northeast of and several hundred feet from the applicant's property. Samples taken from a hole drilled by Utah Construction Company on the east end line of the Ver 1 claim contained an average of 0.19 percent U_3O_8 from 89.4 feet to 101.4 feet below the surface. The top of the unoxidized zone, in which the largest and richest deposits of uraniferous material are found, was penetrated by this

hole at a depth of 66.8 feet. Three holes drilled by the applicant in George 1 and George 2 claims cut mineralized zones assaying from 0.11 percent to 0.14 percent U_3O_8, but these samples were of secondary ore in the oxidized zone.

Experience of the operating companies has shown that pods of oxidized ore may be penetrated at any depth but should not be expected in any specific stratigraphic interval at all places because of the irregular lithology in the upper Wind River formation. It also has been demonstrated that pods of unoxidized ore-grade material may be found associated with lenses of claystone within the oxidized zone. These more or less isolated pods within the zone of oxidation, either of oxidized or unoxidized ore, should not be the goal of the applicant's exploration program.

The ore horizon toward which the applicant's exploration program should be directed is the stratigraphic interval that occupies the upper 40 to 50 feet of the unoxidized zone of sandstone and claystone. The top of the unoxidized zone, which closely coincides with the level of the present ground water table, should lie within 60 to 100 feet of the surface anywhere within the boundaries of the applicant's groups of claims. It is marked by a change in color from tan and reddish-brown sandstone of the oxidized zone to dark-gray and blue-gray sandstone and claystone that may contain disseminated pyrite and black carbonaceous material. The top of the unoxidized zone doubtless is controlled to some extent by the presence of relatively impermeable beds, such as the blue-gray claystone found in the large pits of the Vitro and Lucky Mc mines.

Although the most favorable condition for ore concentration appears to be where the claystone marks the top of the unoxidized zone, drilling by the applicant in the area south of the main Vitro pit has shown that the claystone is not a prerequisite to ore concentration. It is believed, therefore, that

the drilling target should not be the claystone unit but, rather, the top 40 to 50 feet of the unoxidized zone.

It is recommended that the applicant's drilling program be approved in a modified form as outlined below.

Stage I: Drilling on 300 foot centers located as shown on figure 2, and confined to the northern segment of the property, north of a line extending from the southeast corner of Ver 2 approximately west to the northwest corner of Ver 11. In addition, one hole will be drilled 100 feet from the east side line of George 1 claim for the purpose of exploring the anomaly in this area. Three of the holes, located as shown on figure 2, plus two additional holes in the southern segment, the locations of which are also shown on figure 2, will be deeper than the others for the purpose of determining the pre-Wind River structure yielding information with respect to the lithology and thickness of the Wind River, and furnishing information regarding the extreme depths of mineralization in the formation. The average depth of Stage 1 holes, with the exception of the five deep holes, should be about 160 feet. This depth would allow for a 20 percent error in the anticipated depth to the top of the unoxidized zone and still allow the drill hole to penetrate the desired 40 feet into the unoxidized zone. The five deep holes should be deep enough to penetrate the entire thickness of the Wind River formation and bottom in the underlying formation -- probably the Cody shale.

The total drilling for Stage I will be 59 holes to an average depth of 160 feet and 5 holes to a depth of 250 feet, or a total of 10,690 feet. Drilling shall be air rotary to as great a depth as is practicable, then water rotary to the bottom. Samples should be collected every two feet.

Stage II: (All drilling will be contingent upon the results of Stage I drilling and at the discretion of the field team). Stage II drilling will consist of drilling on 300-foot centers in the southern segment of the property, offset drilling on 150-foot centers from Stage I holes found to contain uraniferous material of ore grade and thickness in the northern segment, and offset drilling on 150-foot centers from favorable holes in the southern segment. Locations of initial holes in the southern segment are shown on figure 2.

Number of holes and estimated footage shall be as follows:

1. Drilling on 300-foot centers in the southern segment, as shown on figure 2; 65 holes at 160 feet: 10,400 ft.
2. Offset drilling on 150-foot centers from approximately 30 percent of 62 original holes in northern segment; 76 holes at 160 feet: 12,160 feet
3. Offset drilling on 150-foot centers from approximately 30 percent of 67 initial holes in southern segment (2 holes from Stage 1 and 65 holes from Stage 2); 80 holes at 160 feet: 12,800 feet

Total Stage II drilling: 221 holes at 160 feet or 35,360 feet.

Stage III: (All drilling will be contingent upon the results of Stage II drilling and at the discretion of the field team). Stage III drilling will consist of offset drilling on 75-foot centers from Stage II holes found to contain uraniferous material of ore grade and thickness. Assuming 30 percent of the 156 Stage II, 150-foot offset holes to be favorable, Stage III drilling will total 188 holes at 160 feet, or a total footage of 30,080 feet.

Unused footage at the completion of each stage should be made applicable to the next following stage.

Department of the Interior

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

DMEA
14X81(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to the Office of the Secy.)

Murphy
Weaver
Geehan
Kilsgaard
Martin
Johnson
Whitendorf

T E L E T Y P E

MAY 21 1956

W. M. TRAVER
EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REURTT MAY 18 VITRO MINERALS CORPORATION DOCKET 4182. OWNERS CONSENT TO LIEN SHOULD STATE BOOK AND PAGE NUMBER OF RECORDED MINING CLAIMS.

W. S. Martin (WS)
[redacted]
ACTING CHAIRMAN, OPERATING COMMITTEE

FMMurphy/izm 5-21-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
OPerating Committee
Confirmation copy to Reg. III
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

RCS.

Mr. George Selfridge

RECEIVED

MAY 21 1956

DN 235 BUR MINES 5-18-56 4-22

CHAIRMAN, OPERATING COMMITTEE, DMEA

SAMPLE COPIES CONSENT TO LIEN WITH YOUR LETTER 2-27-56, DMEA 4182
/
74- XXXX /URANIUM/ VITRO MINERALS CORP., SHOW NO RECORDING DATA ON CAXX CLAIMS. DO YOU NO LONGER REQUIRE BOOK AND PAGE OF RECORDING OF MINING CLAIMS IN OWNER S CONSENT TO LIEN /S// /Q/

W M TRAVER

Denver, Colo.

MAY 21 9 05 AM '56
BUREAU OF MINES
MAIL ROOM
WASHINGTON D. C.

3/8/56 [illegible]

RECEIVED
MAR - 8 1956

March 2, 1956

Memorandum

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

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4182 (Uranium) Vitro Minerals Corporation, George and Ver claims, Fremont County, Wyoming

The subject application in the amount of $85,217.00 was received in this office on March 2, 1956

A field examination will be made and suitable report prepared by an engineer from the Denver office.

JOHN F. SHAW
John F. Shaw

cc: W. M. Traver (2)
E. N. Harshman
J. F. Shaw

3/5/56 [illegible]

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

RECEIVED
MAR - 5 1956

March 1, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw (1) (With brochure)
E. M. Marshman

From: Field Team, Region III

Subject: Docket DMEA 4182 (Uranium), Vitro Minerals Corporation, George and Ver claims, Fremont County, Wyoming

Enclosed is the subject application in the amount of $85,217.00. A field examination and suitable report are requested. Enclosed also for your information is a copy of a letter from the Chairman of the Operating Committee dated February 27, 1956 and memoranda of review of the application by W. P. Williams and John E. Crawford.

The sample copies of the Consent to Lien forms mentioned in the Chairman's letter are not attached.

DMEA Field Team, Region III

W. M. TRAVER

By W. M. Traver
Executive Officer

Enclosures

HMC:ab

cc: Chair. Op. Comm. (2)
Docket 4182
Chron.

700

FILE COPY
Surname:
Murphy
Selfridge

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

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

FEB 27 1956

Re: Docket No. DMEA-4182 (Uranium)
Vitro Minerals Corporation
George and Ver claims
Fremont County, Wyoming

Dear Mr. Traver:

The captioned application is referred to Region III Field Team for investigation, a field examination, and recommendation. A copy of the application was retained by your office.

Enclosed are copies of memoranda, dated February 21 and 24, 1956, from W. P. Williams, USGS, and J. E. Crawford, USBM, respectively, relating to the subject application.

In the event the Field Team recommends an exploration project on the subject claims, it should advise the Applicant that we will require 6 copies of a Consent to Lien signed by the owners of the George and the Ver groups of claims.

Enclosed are sample copies of the Consent to Lien forms with the names of the Corporation, and the individuals who should execute these documents.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee GCS

Enclosures

APPROVED:

/s/ Robert W. Geehan GCS
Director, Bureau of Mines

Thor H. Kiilsgaard GCS
Director, Geological Survey

FMMurphy/izm 2-24-56
cc to: Docket
Code 700
Mr. Murphy
Operating Committee
Admr.'s Reading File
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.C.L.

700

FILE COPY

Surname:

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

FEB 27 1956

Vitro Minerals Corporation
Post Office Box 67
South Salt Lake City, Utah

Re: Docket No. DMEA-4182 (Uranium)
George and Ver claims
Fremont County, Wyoming

Gentlemen:

The application for assistance in exploring the subject claims, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred for a field examination to the Executive Officer of Region III at the following address:

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

Any assistance you may give the members of the Field Team during the Examination will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

FMMurphy/izm 2-24-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
DMEA Field Team, Region III (2)

R.G.

2-24-56

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

February 24, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Application for assistance, DMEA Docket 4182, Vitro Minerals Corporation, George and Ver Claims, Gas Hills Area, Fremont County, Wyoming

I have reviewed the attached application of the Vitro Minerals Corporation, dated February 2 and received in this office February 17. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The Vitro Minerals Corporation, a joint subsidiary of the Vitro Corporation of America and the Rochester and Pittsburgh Coal Company, has requested Federal participation in exploring for uranium on the George and Ver groups of claims located in the Gas Hills area, Fremont County, Wyoming. The proposed project consists of a three-stage drilling program which includes 540 holes, with an average depth per hole of 114 feet, or a total of 61,800 feet of core and non-core drilling at a cost of $1.04 per foot. The total estimated cost of the program is $85,217.00.

Three of the 186 holes drilled by the applicant on the subject claims have indicated the presence of ore-grade uranium.

Field referral for possible examination and report is recommended. We also suggest that the Field Team be requested to consult with D. L. Everhart, Acting Chief, Denver Exploration Branch, Atomic Energy Commission.

John E Crawford
John E. Crawford

Attachment

2-24-56 dgm

IN REPLY REFER TO:

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

RECEIVED
FEB 23 1956

February 21, 1956

Memorandum

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

From: W. P. Williams, U. S. Geological Survey

Subject: Review of Application, DMEA 4182, Vitro Minerals Corporation, George and Ver claims, Gas Hills District, Fremont County, Wyoming.

The applicant proposes an exploration drilling project consisting of 540 holes for a total of 61,800 feet of drilling at an estimated total cost of $85,217.00.

The best recommendation for the property seems to be that the property is located only about 300 yards from the Lucky Mc ore body which has produced significant tonnages of ore in recent months.

A bad feature is that 186 holes have already been drilled on the property none of which penetrated material equal to or above the buying station minimum grade requirement of 0.20 percent U_3O_8.

In spite of the completed holes, much unexplored ground remains on the property. At least a first stage of wide-spaced holes may be warranted on the property.

I recommend that the application be referred to the Field Team for field examination and suitable report.

W P Williams

W. P. Williams

4182. Vitro Minerals Corp. (a corp. of Del. Lease)
Require. Owners' Consent to Lien
On George claims Nos. 1 through 7 signed by
John E Bansept and wife J.F. Bansept, also known as
Josephine F. Bansept
Robert Jerome Albert
John Bansept, Sr.
George Snyder, also known as George J. Snyder
Emma Snyder, also " " Emma W. Snyder
Clyde Slacker

Owners' Consent to Lien.
On Ver claims Nos. 1 through 11 signed by
Fremont Metal & Mining Inc. a Wyoming
Corporation

February 17, 1956

Vitro Minerals Corporation
Post Office Box 67
South Salt Lake City, Utah

Subject: DMEA 4182
Re: Exploration Assistance
George and Ver Claims

Gentlemen:

The receipt of your application dated February 2, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA 4182 and referred to the Rare and Miscellaneous Division

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

February 17, 1956

Memorandum

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

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region III.

DMEA - 4182 Vitro Minerals Corporation

Robert E. Adams
Chief, Operation's Control
and Statistics Division

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

RECEIVED
FEB 1 3 1956

February 13, 1956

224 New Customhouse
Denver 2, Colorado

Mr. J. O. Horton, General Manager
Vitro Minerals Corporation
P. O. Box 67
South Salt Lake City, Utah

Re: Application for DMEA Aid (Uranium), George and Ver claims, Secs. 22, 26, and 27, T. 33 N., R. 90 W., Fremont County, Wyoming

Dear Mr. Horton:

This will acknowledge receipt of your letter dated February 1956 and your application for DMEA assistance on the George and group of claims, Fremont County, Wyoming.

Your application has been well prepared. We are forwarding copies of the application to the DMEA Washington office, and ll advise you if any further information is required.

Very truly yours,

W. M. TRAVER,

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

HMC:ab

cc: Sec.
Harshm (2)
Shaw
Subject
Chron.

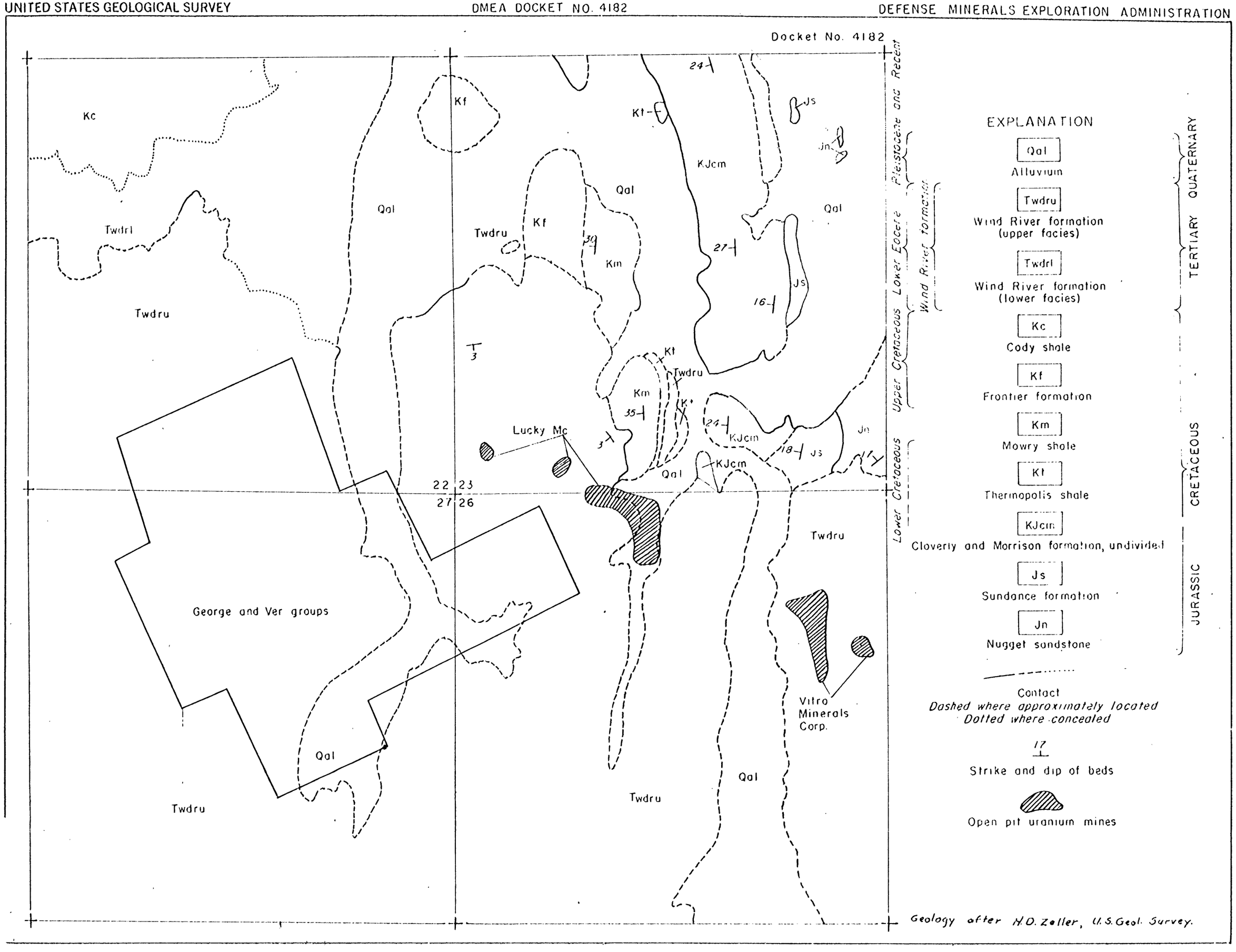


FIGURE 3-GEOLOGIC MAP OF PART OF GAS HILL AREA, SHOWING LOCATION OF GEORGE AND VER GROUPS OF CLAIMS VITRO MINERALS CORP., FREMONT COUNTY WYOMING.

0 500 1000 2000 3000 Feet

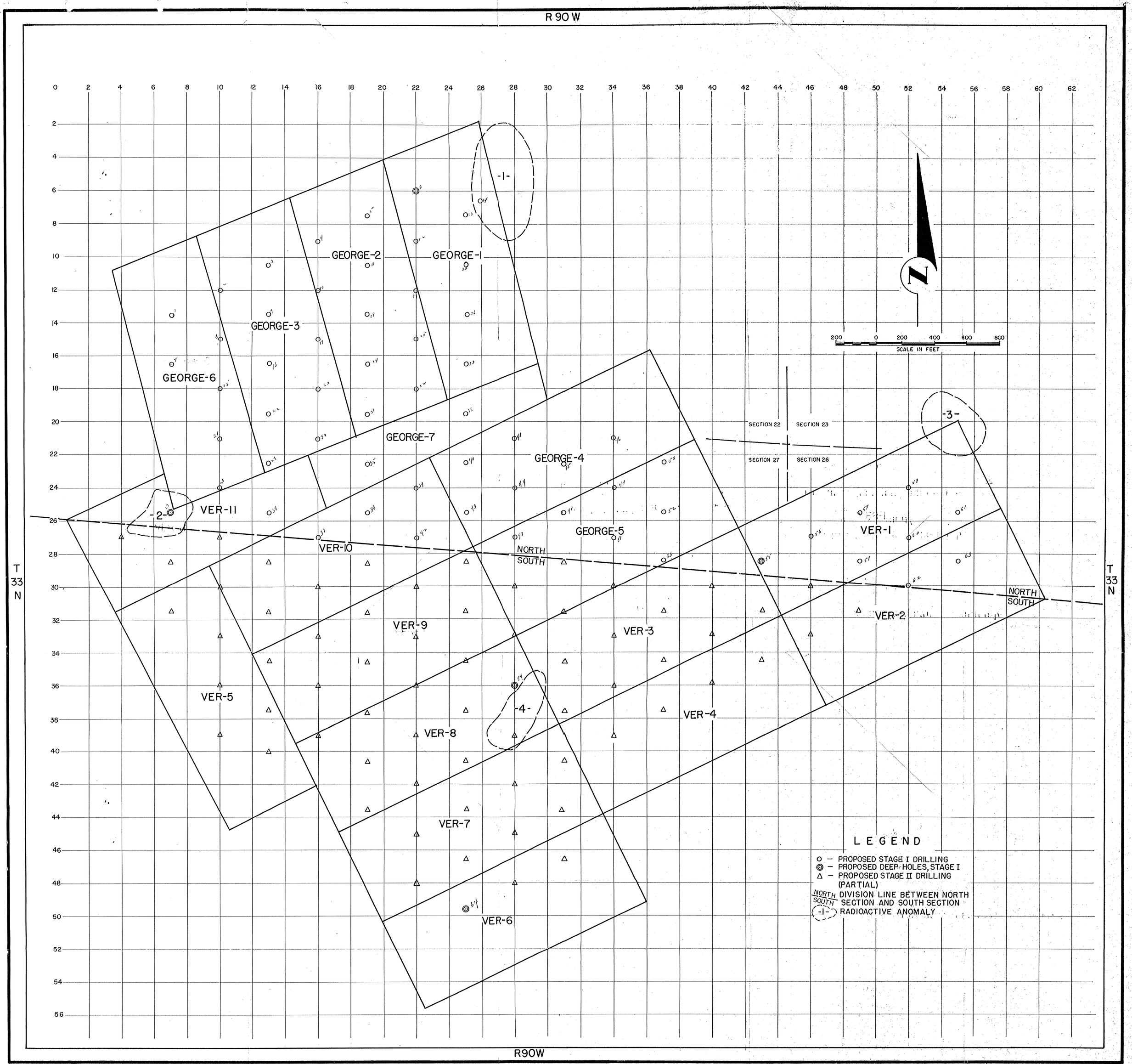


FIGURE 2 - MAP OF GEORGE AND VER GROUP SHOWING LOCATION OF PROPOSED STAGE I HOLES AND PART OF PROPOSED STAGE II HOLES, VITRO MINERALS CORPORATION, FREMONT COUNTY, WYO. DMEA 4182

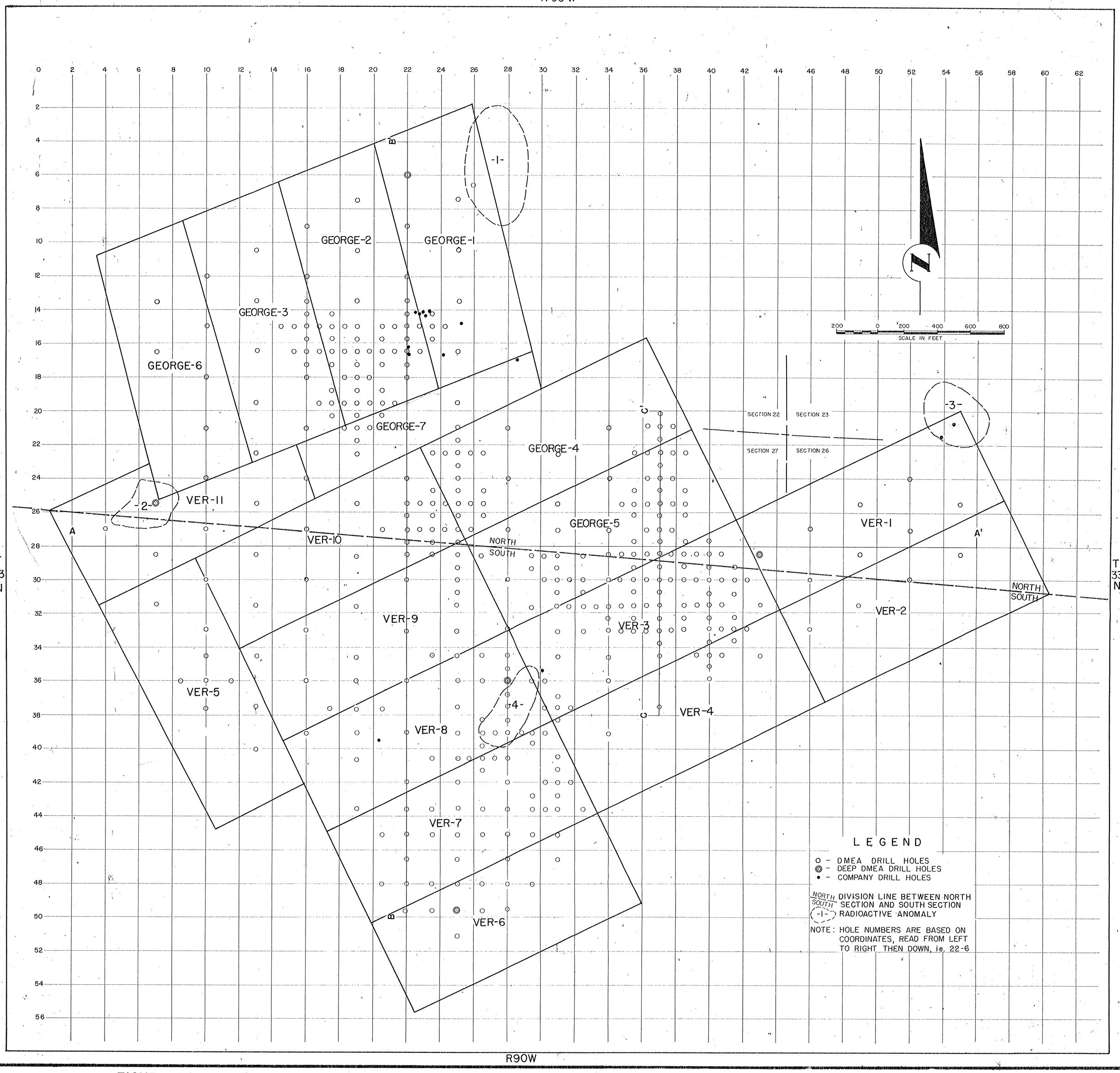


FIGURE 2 - MAP OF GEORGE AND VER GROUP SHOWING LOCATION OF DMEA DRILL HOLES
VITRO MINERALS CORPORATION, FREMONT COUNTY, WYOMING DMEA 4182

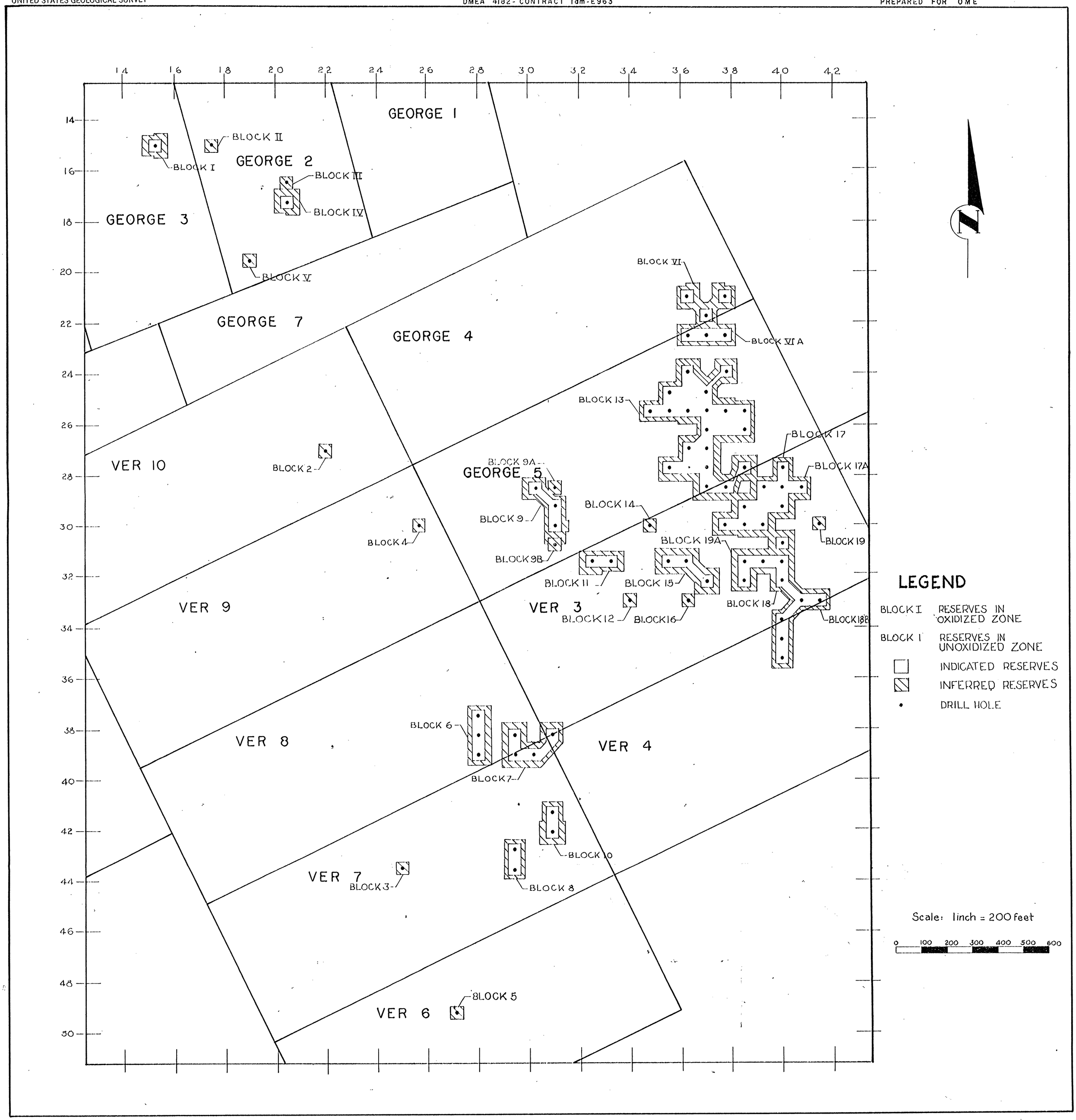
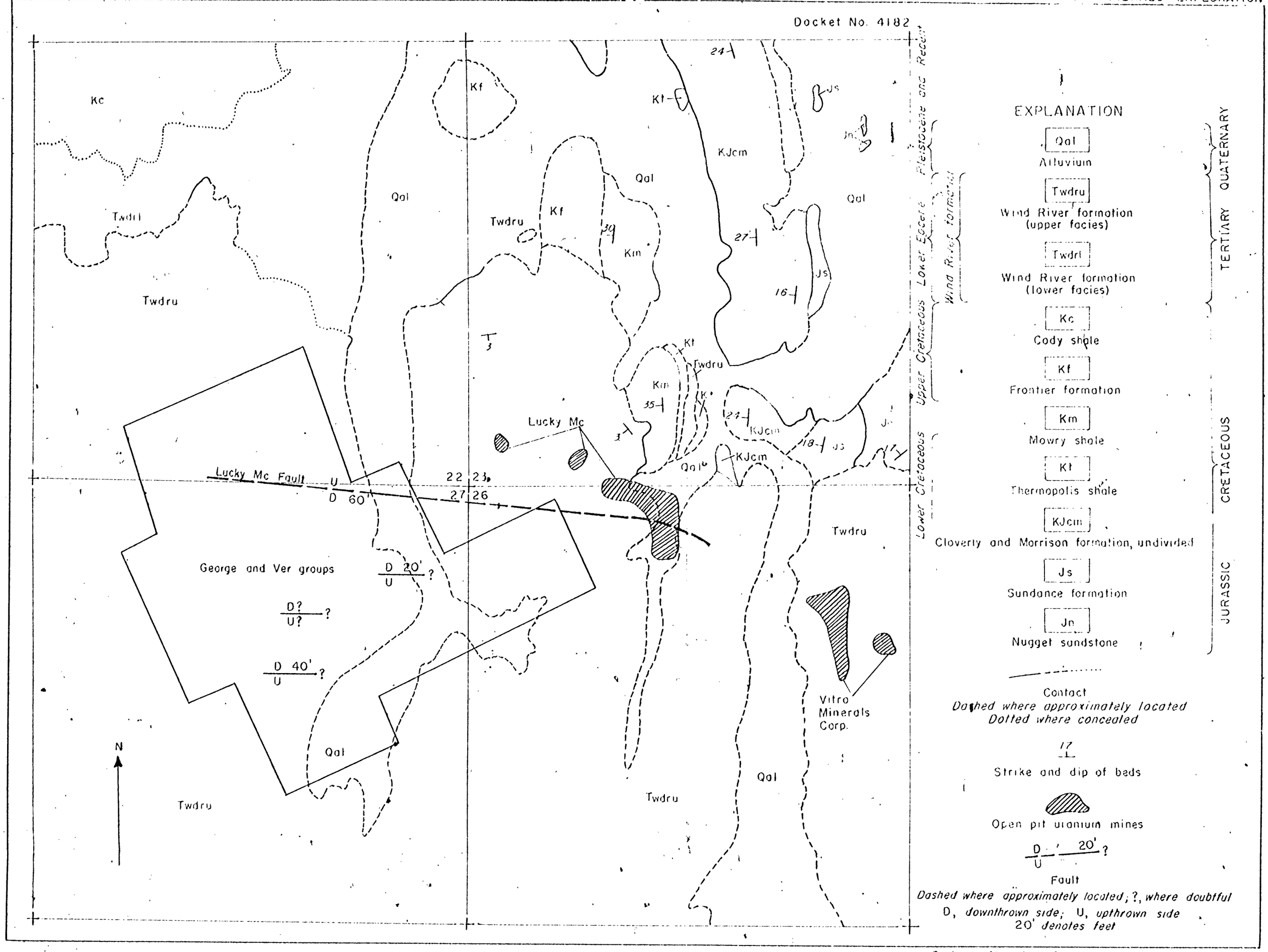


FIGURE 4 - MAP SHOWING LOCATIONS OF ORE RESERVE BLOCKS
VITRO MINERALS CORPORATION, FREMONT COUNTY, WYOMING



Geology after H.D. Zeller, U.S. Geological Survey

FIGURE 3 - GEOLOGIC MAP OF PART OF GAS HILL AREA, SHOWING LOCATION OF GEORGE AND VER GROUPS OF CLAIMS VITRO MINERALS CORP., FREMONT COUNTY WYOMING.

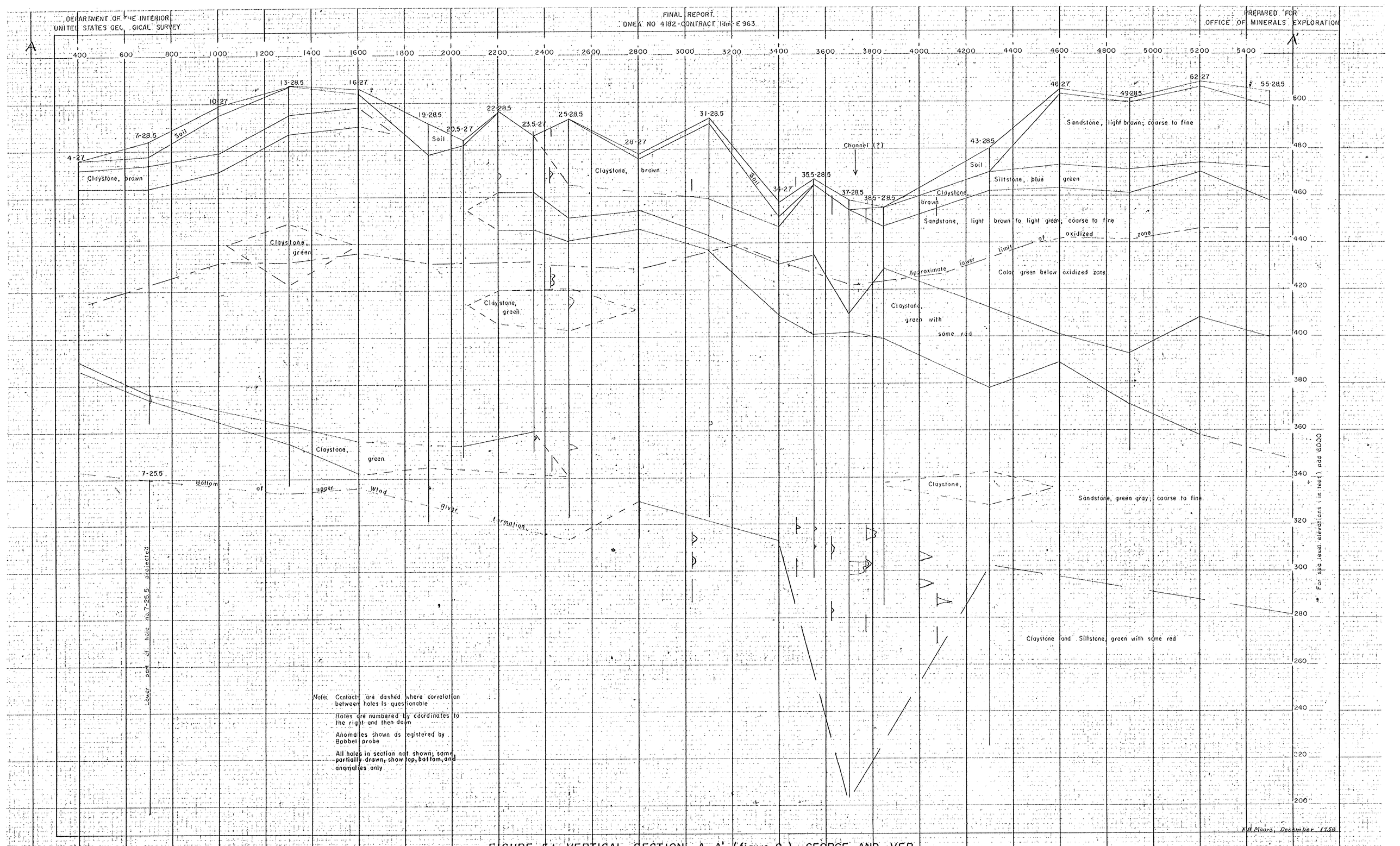


FIGURE 5 - VERTICAL SECTION A-A' (figure 2), GEORGE AND VER CLAIM GROUPS, GAS HILLS DISTRICT, FREMONT COUNTY, WYOMING

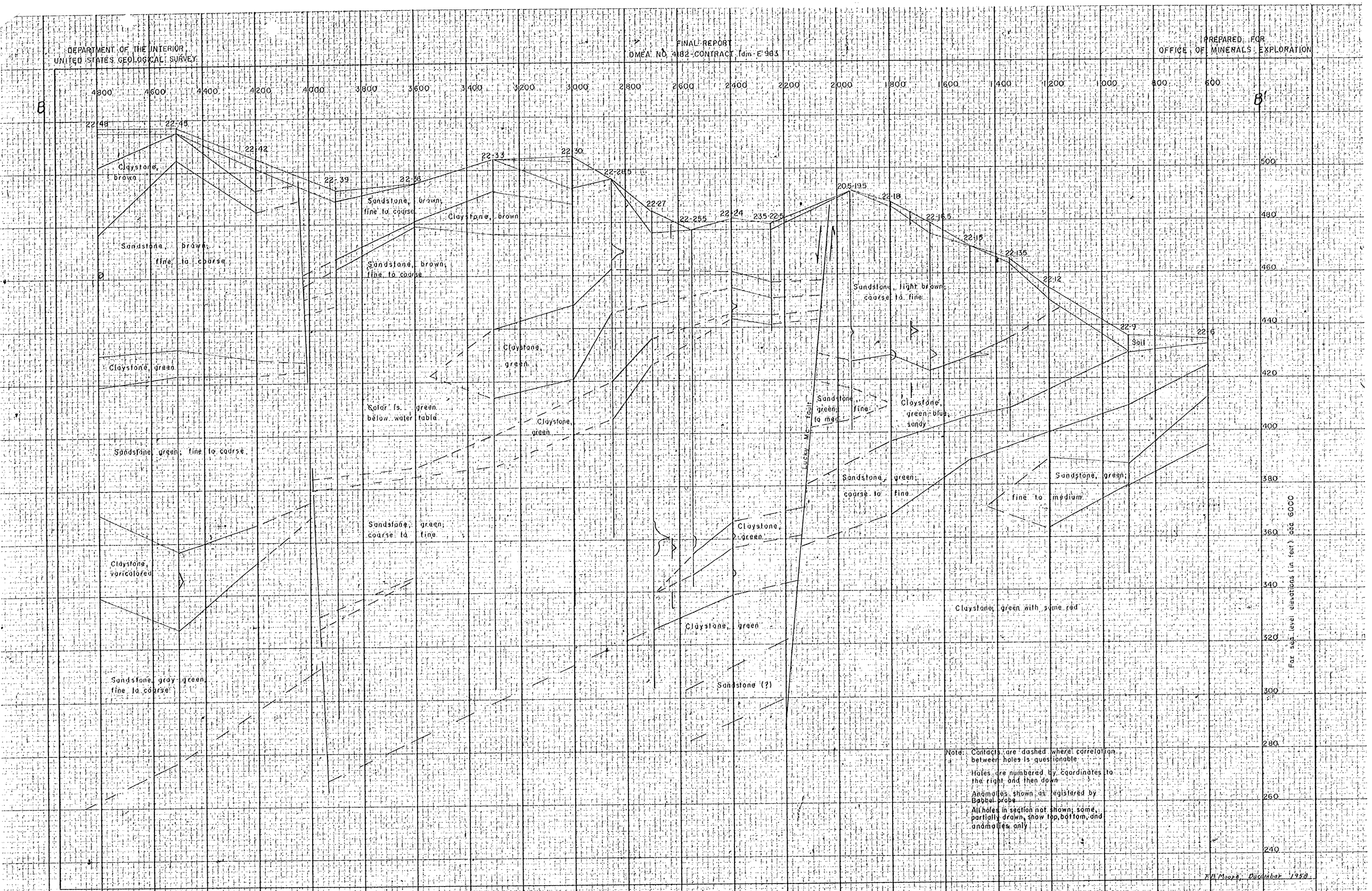


FIGURE 6 - VERTICAL SECTION B-B' (figure 2), GEORGE AND VER CLAIM GROUPS, GAS HILLS DISTRICT, FREMONT COUNTY, WYOMING

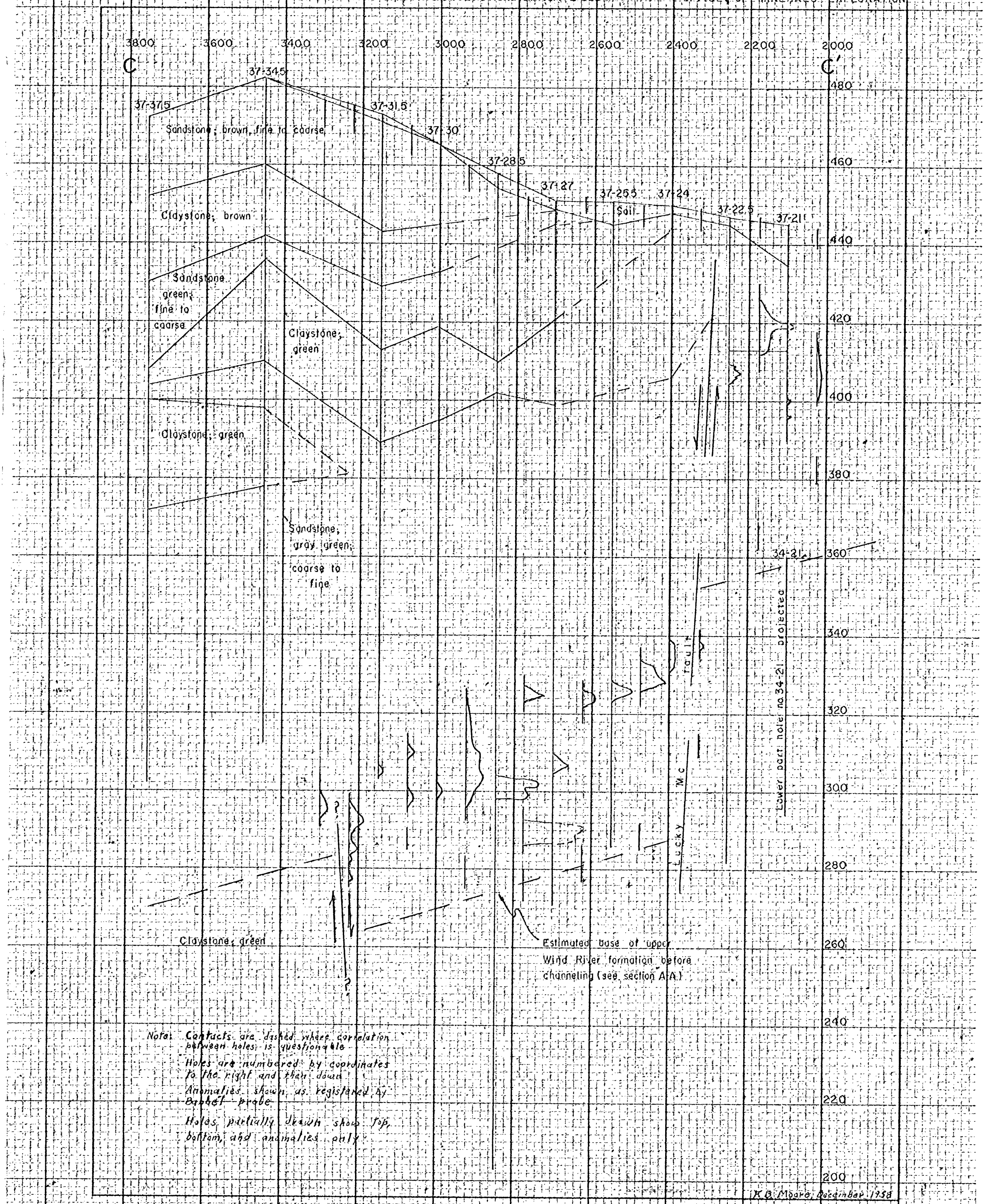


FIGURE 7 - VERTICAL SECTION C-C' (figure 2), GEORGE AND VER CLAIM GROUPS, GAS HILLS DISTRICT, FREMONT COUNTY, WYOMING

Horizontal scale: 1 in = 200 ft
Vertical scale: 1 in = 20 ft