MME Form 9
Rev. Mar. 59

UNITED STATES
DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

OFFICIAL DOCKET FILE

Contract No. 14-23- _____ Docket No. MME- 6094

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [x] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [x] Recision ~~Notkkxx~~ Agreement 5-9-62
- [ ] Assignment of Contract
- [x] Contract Amendments
- [x] Contract with all exhibits and annexes
- [x] Owner's Consent to Lien and Subordination Agreement
- [x] Application and Attachments

Right Side

- [ ] Project Summary (final)
- [ ] Work Completed Analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semiannual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [ ] On-site Exam. Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. 2 : Reports

- [ ] Analysis of Semiannual Inspection Reports
- [ ] Project Summary (Interim) by MME Engineers

Right Side

- [ ] Field Team Semiannual Report for Certified Project
- [x] Field Team Interim Reports
- [x] Operator's Monthly Reports with Transmittal, Narrative and Maps

Folders No. 3 : Maps (~~Use pocket folder or envelope~~) and drill logs

Folders No. _____ : Settlement Sheets

Folders No. _____ : ~~Drill Logs~~

Folders No. _____ : Royalty Material

52625

Government's copy

Trainel
Sollee
Brown
Appd. Sol. Off.
Selfridge
Johnson

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

RESCISSION OF OME EXPLORATION CONTRACT

It is agreed this 9th day of May, 1962, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, and Vitro Minerals Corporation, parties to that certain Exploration Contract No. 2119, (Docket No. OME-6094), dated August 22, 1960, that said contract is hereby rescinded, revoked, and cancelled as of the date thereof, without any obligations whatever one party to the other, the same as if the contract had never been entered into.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By George Turnick
Director, Office of Minerals Exploration

VITRO MINERALS CORPORATION

By Eugene B. Holtzclaw

Title Exec. Vice President

Government's Copy

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

AMENDMENT NO. 4

It is agreed this 12th day of October, 1961, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and the Vitro Minerals Corporation, hereinafter called the "Operator," that Exploration Contract No. 2119 (Docket No. 6094), dated August 22, 1960, as amended, is further amended as follows:

1. Work under the project shall be suspended during the period beginning November 23, 1960, and ending not later than May 23, 1962.

(a) The Government shall not contribute to any costs incurred by the Operator during the period of suspension nor to any costs of rehabilitation or repair which in its opinion would not have occurred had the work not been suspended.

(b) 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 1 of the contract for completion of the work is further extended from 24 months (August 22, 1962) to 30 months (February 22, 1963).

3. The maximum period for royalty payments and the lien to secure the payment thereof provided for in Article 7(b)(2) of the contract is increased from eleven (11) years to twelve (12) years from the date of the contract.

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

Sellers
Brown
App'd. Sol. Off.
Selfridge
Johnson
Talbot

THE UNITED STATES OF AMERICA

By George Turnichel
Director, Office of Minerals Exploration

VITRO MINERALS CORPORATION

By Eugene B. Hetelsen

Title Exec V.P.

October 6, 1961

OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

JUSTIFICATION FOR AMENDMENT NO. 4

The project covered by the contract is considered to be one presenting excellent possibilities for developing worthwhile quantities of a highly strategic metal. It is regrettable that it has been so delayed due to crowded court calendars, but it appears that there is now some likelihood of obtaining action.

The delay is due to no fault of the Operator and, hence, the amendment for further recess is warranted.

W. R. Griswold

Government's Copy

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

AMENDMENT NO. 3

It is agreed this 11th day of May, 1961, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and the Vitro Minerals Corporation, hereinafter called the "Operator," that Exploration Contract No. 2119 (Docket No. 6094), dated August 22, 1960, as amended, is further amended as follows:

1. Work under the project shall be suspended during the period beginning November 23, 1960, and ending not later than November 23, 1961.

(a) The Government shall not contribute to any costs incurred by the Operator during the period of suspension nor to any costs of rehabilitation or repair which in its opinion would not have occurred had the work not been suspended.

(b) 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 1 of the contract for completion of the work is extended from 14 months (October 22, 1961) to 24 months (August 22, 1962).

3. The maximum period for royalty payments and the lien to secure the payment thereof provided for in Article 7(b)(2) of the contract is increased from ten (10) years to eleven (11) years from the date of the contract.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate amount which

the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated as maximum.

Sellers
Brown

App'd. Sol. Off.
Fulbright
Selfridge

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Acting Director, Office of
Minerals Exploration

VITRO MINERALS CORPORATION

By Eugene B. Hotchkiss

Title Exec Vice Pres.

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

JUSTIFICATION FOR AMENDMENT NO. 3

The Operator, in its April 24, 1961, letter, explains the difficulty in getting into court due to a crowded court calendar and the shortage of federal judges. The Operator's request is reasonable.

W. R. Griswold

Government's Copy

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

Seller
Hoffland
Appd. Sol. Off.
Talbot
Hiamel
Selfridge

AMENDMENT NO. 2

It is agreed this 13 day of January, 1961, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and the Vitro Minerals Corporation, hereinafter called the "Operator," that Exploration Contract No. 2119 (Docket No. 6094), dated August 22, 1960, is amended as follows:

1. Work under the contract shall be suspended during the period beginning November 23, 1960, and ending not later than May 23, 1961.

(a) The Government shall not contribute to any costs incurred by the Operator during the period of suspension nor to any costs of rehabilitation or repair which in its opinion would not have occurred had the work not been suspended.

(b) 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.

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 as maximum.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Acting Director, Office of
Minerals Exploration

VITRO MINERALS CORPORATION

By Eugene B. Hotchkiss

Title Exec Vice Pres

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

JUSTIFICATION FOR AMENDMENT NO. 2

The amendment provides a time interval to permit the Operator to clear up matters pertaining to an alleged title conflict. The delay is necessary, though regrettable.

W. R. Griswold

Government's Copy

EXPLORATION PROJECT CONTRACT
~~NEW PARK MINING COMPANY~~ VITRO MINERALS CORPORATION
DOCKET NO. OME-~~6091~~ 6094

AMENDMENT NO. 1

It is agreed this 11th day of January, 1961, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government", and Vitro Minerals Corporation, hereinafter called the "Operator", that Exploration Project Contract No. 2119 (Docket No. OME-6094), dated August 22, 1960, hereinafter called the "Contract" is amended as follows:

1. In EXHIBIT "A" under the heading, General Conditions, the specification "All holes shall be drilled through the rhyolite tuff host rock." is revised to read as follows:

All holes shall be drilled through all the mineralized zones in the rhyolite tuff host rock.

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, nor the amount of any item designated maximum.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Hugh M. Connors
Acting Field Officer, Region III
Office of Minerals Exploration

VITRO MINERALS CORPORATION

By Eugene B. Hotchkiss

Title Exec Vice Pres

Government's Copy

MME Form 50
Feb. 1959

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

EXPLORATION CONTRACT
(Long Form)

Docket No.	Commodity	Contract No.	County	State
OME -6094	Beryllium	14-23-090- 2119	Juab	Utah

It is agreed 22 AUG 1960 (Date), between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and

Vitro Minerals Corporation

whose mailing address is 600 West 33rd South, Salt Lake City 15, Utah, hereinafter called the "Operator, as follows:

ARTICLE 1. Authority and scope.--(a) This contract, entered into under the authority of Public Law 701, 85th Cong., 2d sess. (72 Stat. 700; 30 U.S.C. § 641 - 646)*, consists of this form, the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed. The work is a search for new or unexplored deposits of the commodity designated above. The Operator shall begin the work on or before 9/26/60 (Date), and, subject to the provisions of Article 9 and Exhibit A, shall either have completed the work within 14 months from the date of the contract or shall have incurred allowable costs (see Article 6) in a sum not less than the total cost set forth in Exhibit A.

(b) The total allowable cost of the work set forth in Exhibit A is $ 75,440.00. The Government will contribute 50 percent of the allowable costs as they are incurred, in a total sum not in excess of $ 37,720.00 in accordance with the provisions of Articles 3, 4, 5, and 6. "Costs incurred" means costs that have been paid or have become due and payable, or that the Government determines have become obligations.

(c) Interest computation.--Simple interest computed annually at the rate of 6 percent shall accrue from the dates Federal funds are made available until the period specified for payment of royalty expires, or until the amount of Federal funds contributed is fully repaid with interest.

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

ARTICLE 2. Operator's rights in land.--(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's right of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances:

Interest of Lessor

(b) 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 lien agreement of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached as follows:

Lien and Subordination Agreements signed by Chester L. Whitelock

*and 30 CFR 301 as amended
(25FR8033 - 8/19/60)

(c) The Operator shall preserve and maintain his right, title, or 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. 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 royalty on production and liens for the payment thereof. Two true copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 7 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. Performance of the work.--(a) Operator's responsibility.--The work shall be performed diligently, efficiently, in a workmanlike manner in accordance with good mining standards, and in compliance with State laws governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work as specified in Article 1(a).

(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 (see Article 6(a), Category (1)). 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, the Government will participate in payments to the independent contractor only as to work performed in accordance with the provisions of this exploration 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 production operations during the period that royalty is payable to the Government. The Operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 4. Contribution by the Government.--(a) The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5(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 and the Operator's final report has been received, the Government may withhold such sums as are necessary to protect its interests. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. 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. 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 all pertinent books, documents, papers, and records of the Operator. 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) Monthly reports.--The Operator shall provide the Government with five copies of monthly reports in three sections as follows:

(1) Operator's Monthly Voucher claiming costs for work performed;

(2) Operator's Progress Report showing the number of units of the various types of work performed; 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 monthly report). 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 the related costs.

(d) Report of sales.--The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's 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 the Government determines that 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 preparation or completion of the same 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 6. Costs.--(a) Allowable costs.--The allowable costs of the work to which the Government will contribute are limited to:

(1) the necessary, reasonable, and direct actual costs that are estimated in Exhibit A by categories as specified in this article; and

(2) fixed costs for units of work to be performed (per foot, per hour, etc.) agreed upon in lieu of actual costs and set forth in Exhibit A.

The Government will not contribute to costs under any category or subcategory omitted from the estimate of costs in Exhibit A. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost; any excess over a fixed unit cost; and any excess over the total allowable cost of the work are not allowable. The Operator shall incur such excesses for his own account without contribution by the Government, but the Operator is not obligated to incur more than his agreed percentage of the total allowable cost of the work.

Any category or subcategory or element thereof not designated as a maximum in this article or in Exhibit A may be exceeded, provided that the total allowable cost of the work, which is a maximum, is not exceeded.

CATEGORY (1)--INDEPENDENT CONTRACTS.--(See Article 3(b)). The total of this category and the average unit cost estimated for each type of work to be performed under an independent contract are maximums.

CATEGORY (2)--PERSONAL SERVICES.

Subcategory (a)--Supervision and Technical Services--All elements of this subcategory (number of supervisors, technicians, outside consultants, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)--Labor.

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

CATEGORY (4)--OPERATING EQUIPMENT.

Subcategory (a)--Rental.--The number of each rented item [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 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.--Costs of items listed under this category include all requirements, 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 total of this category is a maximum.

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

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

CATEGORY (6)--NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).--Costs of items listed under this category include all requirements, 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 total of this category is a maximum.

CATEGORY (7)--MISCELLANEOUS.--Includes requirements and costs that do not fall within any of the first six categories, such as repairs other than initial and maintenance of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, and communications.

(b) Nonallowable costs.--The Government will not contribute to the following costs:

(1) Costs of the land, such as rental, depreciation, depletion, or other costs 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 total cost. This provision does not apply to receipts from production which are subject to the Government's royalty under the provisions of Article 7.

ARTICLE 7. Repayment by Operator.--(a) Certification.--If the Government considers that mineral or metal production from the land covered by the contract may be possible as a result of the exploration work, it shall so certify in writing to the Operator at any time not later than six months after a sufficient final report and final accounting (see Article 5) have been furnished.

(b) Royalty on production.--The Operator, whether or not the producer (for example, if the Operator either transfers or does not retain his interest in the land), shall pay to the Government a royalty on all minerals and metals mined or produced from the land as follows:

(1) irrespective of any certification of possible production--from the date of the contract until the lapse of the time within which the Government may issue such certification or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first; or

(2) if the Government issues a certification of possible production--for a period of ten years from the date of the contract, or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first.

(c) Payment of royalty.--(1) The Government's royalty shall be five percent of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrate, 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 (such as treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight payable 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. No costs of the Operator are deductible in arriving at the "gross proceeds" as that term is here used.

The term "treatment processes" means those processes (such as milling, concentrating, smelting, refining, or equivalent, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form.

(2) 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.

(d) Unsold production.--If any production (ore, concentrate, 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, concentrate, 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 thereof in the form in which and at the time 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) Lien for payment.--To secure the payment of royalty (see Article 7(b)), the Operator hereby grants to the Government a lien upon his interest in the land and upon any production of minerals and metals therefrom until the royalty claim is extinguished by lapse of time or is fully paid.

(f) 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 Government, and this estimate shall be final and binding upon the Operator.

(g) No obligation to produce.--Nothing in this contract shall be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

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

ARTICLE 8. 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, and any reasonable and necessary cost thereof will be treated as an allowable cost of the exploration. After the completion of the work, termination of the Government's obligation to contribute, or when such property is not being used for the work, the Operator shall not use it elsewhere without the written consent of the Government and without paying a reasonable rental to be fixed by the Government for its proportionate interest.

(c) Disposal of property.--Upon the completion of the work, 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, sale to others, purchase by the Operator, or sale or transfer to 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 that cost more than $500, and shall not sell at less than 25 percent of the purchase price any item of property that 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 offers. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, explosives, pipe, or rail), 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 exploration.

(d) Default of the Operator re disposal.--If within 90 days after the completion of the work, termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, 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:

(1) in writing extend the time within which the Operator must dispose of or liquidate the property;

(2) by written notice to the Operator, place upon such property what it determines to be 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; and

(3) 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 9. Termination of the Government's obligations.--(a) If the Government determines that operations at any time have failed to achieve anticipated results and further work is 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 final accounting and reporting; and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

(b) If the Government determines that the Operator is 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 final accounting and reporting; and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 9 shall not affect the Government's rights as provided for in the contract with respect to royalty and liens to secure the payment thereof, and such rights shall be fully preserved.

(d) The determinations of the Government are subject to appeal under Article 13.

ARTICLE 10. Notices to be given by the Government may be delivered to the Operator, or may be sent by certified 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 11. 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 12. Nondiscrimination.--In connection with the performance of work under this contract, the Operator agrees not to discriminate against any employee or applicant for employment because of race, religion, color, or national origin. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Operator agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Government setting forth the provisions of the nondiscrimination clause.

The Operator further agrees to insert the foregoing provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

ARTICLE 13. Disputes.--Any dispute arising under this contract which is not disposed of by agreement shall be decided by the Director, Office of Minerals Exploration, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Operator. The decision of the Director, Office of Minerals Exploration, shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Operator mails or otherwise furnishes to the Director, Office of Minerals Exploration, a written appeal addressed to the Secretary. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence.

The term "Director, Office of Minerals Exploration," as used herein includes his duly authorized representative.

ARTICLE 14. Eight-Hour Law of 1912--Overtime compensation.--This contract, to the extent that it is of a character specified in the Eight-Hour Law of 1912, as amended (40 U. S. Code 324—326) and is not covered by the Walsh-Healey Public Contracts Act (41 U. S. Code 35—45), is subject to the following provisions and exceptions of said Eight-Hour Law of 1912, as amended, and to all other provisions and exceptions of said Law:

No laborer or mechanic doing any part of the work contemplated by this contract, in the employ of the Operator or any independent contractor contracting for any part of said work contemplated, shall be required or permitted to work more than eight hours in any one calendar day upon such work, except upon the condition that compensation is paid to such laborer or mechanic in accordance with the provisions of this clause. The wages of every laborer and mechanic employed by the Operator or any independent contractor engaged in the performance of this contract shall be computed on a basic day rate of eight hours per day; and work in excess of eight hours per day is permitted only upon the condition that every such laborer and mechanic shall be compensated for all hours worked in excess of eight hours per day at not less than one and one-half times the basic rate of pay. For each violation of the requirements of this clause a penalty of five dollars shall be imposed for each laborer or mechanic for every calendar day in which such employee is required or permitted to labor more than eight hours upon said work without receiving compensation computed in accordance with this clause, and all penalties thus imposed shall be withheld for the use and benefit of the Government.

ARTICLE 15. Copeland (Anti-Kickback) Act--Nonrebate of wages.--The regulations of the Secretary of Labor applicable to contractors and subcontractors (29 CFR, Part 3), made pursuant to the Copeland Act, as amended (40 U. S. C. 276c) and to aid in the enforcement of the Anti-Kickback Act (18 U. S. C. 874) are made a part of this contract by reference. The Operator will comply with these regulations and any amendments or modifications thereof and will be responsible for the submission of affidavits required of independent contractors thereunder. The foregoing shall apply except as the Secretary of Labor may specifically provide for reasonable limitations, variations, tolerances, and exemptions.

ARTICLE 16. Changes and added provisions.--

Executed in quintuplicate the day and year first above written.

VITRO MINERALS CORPORATION
(Operator)

By W. B. Hall

Title Vice President

THE UNITED STATES OF AMERICA

By Frank C. Johnson
Acting Director, Office of Minerals Exploration

J. Lynch
App'd. Sol. Off.
Talbot

I, William H. Denne, Jr. (Name), certify that I am the secretary of the corporation named as Operator herein; that W. B. Hall (Name), who signed this contract on behalf of the Operator, was then Vice President (Title) 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]

INT.-DUP. SEC., WASH., D.C. 52374

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

FOR GOVERNMENT USE ONLY
Operator
Docket No. OME –
Contract No. 14-23-090 – 2119
Contract Date 22 AUG 1960

LIEN AND SUBORDINATION AGREEMENTS 1/

To the United States of America:

That certain land in the County of JUAB, State of UTAH;

described ~~as follows~~: 2/ in a lease dated April 1, 1960, and covering those claims in Vitro's application for financial assistance dated June 21, 1960.

hereinafter called the "land", is the subject of a proposed exploration contract, hereinafter called the "Contract", between the United States of America, hereinafter called the "Government" and

VITRO MINERALS CORPORATION 3/

hereinafter called the "Operator". In consideration for and as an inducement to the Government executing the Contract, the undersigned:

1. (a) Being the owner of an interest in the land, hereby grants to the Government a lien upon all of his right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of the royalty on production provided for by the Contract, and agrees if the Operator's interest should be surrendered or terminated at any time prior to the expiration of the rights of the United States under said Contract to pay royalty to the Government according to the terms of said Contract; or

(b) Being the holder of a claim, lien, or encumbrance against the land, hereby subordinates his claim, lien, or encumbrance in or against the land and in any production therefrom to the rights of the Government under the Contract with respect to royalty on production and liens to secure same. 4/

2. 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.

3. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none". Do not leave blank.)

NONE

1/ Production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ 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 must be inserted above. If the space provided is insufficient, use an Annex and refer to the Annex in the space.

3/ Insert name exactly as it appears in the Application MME Form 40.

4/ Subparagraph 1(a) does not apply to the holder of a claim, lien, or encumbrance.

4. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land or any production therefrom, furnishing the Government with two true copies of such notice; and

5. Consents to all amendments (including an agreement of termination) and assignments of the Contract without notice thereof, and undertakes and agrees that this agreement shall extend and apply thereto.

6. Added provisions NONE (State "None" or "See Annex No. ____".)

Dated this 24th day of June, 1960.

Chester L. Whitehead (Seal) _____ (Street) (City & State)

_____ (Seal) _____ (Street) (City & State)

_____ (Seal) _____ (Street) (City & State)

_____ (Seal) _____ (Street) (City & State)

_____ (Seal) _____ (Street) (City & State)

VITRO MINERALS CORPORATION

By: Eugene B. Hotchkiss, Exec VP (Seal) _____ (Street) (City & State)

I, William H. Denne, Jr., certify that I am the Secretary (Title—Secretary, etc.) of the corporation named herein; that Eugene B. Hotchkiss (Name), who signed this agreement was then Executive Vice Pres. (Title—Pres., Vice-Pres., 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.

William H. Denne

(Corporate Seal)

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

ANNEX I

The land referred to in Article 2 of the contract consists of 54 unpatented mining claims and is outlined in green on the attached map entitled, "Vitro Minerals Corporation, Bedrock Geologic Map of the Whitelock Lease, Spor Mountain Area, Juab County, Utah." The land is situated in sections 5 and 8, T. 13 S., R. 12 W., S.L.P.M., and in unsurveyed section 32, T. 12 S., R. 12 W., S.L.P.M.

The land is held by the Operator under a Mining Lease and Option, dated April 1, 1960, granted by Chester L. Whitelock. A Lien and Subordination Agreements is attached hereto and made a part hereof.

All claims are recorded in the Juab County Courthouse at Nephi, Utah, as follows:

Claim Name	Book	Page
Roadside #1	177	324
Roadside #2	177	359
Roadside #3	177	360
Roadside #4	177	361
Roadside #5	177	362
Emma #1	177, 178	286, 125
Emma #2	178, 177	287, 126
Emma #3	178, 177	288, 127
Emma #4	178, 177	289, 128

Claim Name	Book	Page
Emma #5	178, 177	290, 129
Emma #6	178, 177	291, 130
Emma #7	178, 177	292, 131
Emma #8	178, 177	293, 132
Emma #9	178, 177	294, 133
Emma #10	178, 177	295, 134
Sigma #1	177	619
Sigma #2	177	620
Sigma #3	177	621
Sigma #4	177	622
Sigma #5	177	623
Sigma #7	177	625
Sigma #8	177	626
Sigma #9	177	627
Taurus #1	177	517
Taurus #2	177	518
Taurus #3	177	538
Taurus #4	177	539
Taurus #5	177	540
Taurus #6	177	541
Taurus #7	177	542
Taurus #8	177	543
Taurus #9	177	544
Taurus #10	177	545

Claim Name	Book	Page
Lambda #1	177	597
Lambda #2	177	598
Lambda #3	177	599
Lambda #4	177	600
Lambda #5	177	601
Shelley #1	177	590
Shelley #2	177	603
Shelley #3	177	591
Shelley #4	177	592
Shelley #5	177	593
Shelley #6	177	594
Shelley #7	177	595
Shelley #8	177	596
Omega #4	178	29
Omega #5	178	30
Omega #6	178	31
Omega #7	178	32
Argus #1	178	22
Argus #2	178	23
Argus #3	178	24
Argus #4	178	25

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

EXHIBIT A

The purpose of the project is to explore for ores of beryllium by non-core drilling from the surface, which shall be done in two stages. All of Stage I work shall be done as outlined herein and as much of Stage II as may be approved in advance by the Government. Stage II work shall be contingent upon favorable results having been obtained under Stage I.

General Conditions

Drilling shall be done to a size of not less than 4-3/4 inches of non-core hole.

The Government will not contribute to the cost of an incompleted drill hole.

The Government will not contribute to the cost of any hole drilled closer than 100 feet to the property boundary.

When drilling is being done in the rhyolite tuff, or in any other rock which may be found to serve as a host rock for beryllium ore, all cuttings shall be saved and properly stored and made available to the Government. In cases where samples are to be sent for assay, the sample shall first be split and the remaining half made available to the Government.

Each two-foot section from the drill holes shall be checked with a berylometer to determine the presence of beryllium mineralization. A controlled berylometer assay shall be made on each mineralized section and approximately 10 percent of the mineralized sections shall be chemically assayed as a check of the berylometer results. Care shall be taken in the use of the berylometer to prevent the "drifting" which seems to appear in certain instruments after several hours of continuous operation.

All holes shall be drilled through the rhyolite tuff host rock.

The record of all logging, together with copies of all assays, shall be submitted with the Operator's monthly reports.

The work shall be supervised by an experienced mining engineer or geologist who shall devote full time to the project work. The Operator shall also provide such other technical services and labor as are required to complete the project work.

The locations of all drill holes are subject to prior approval of the Government.

The bulldozer used for road work and location preparation shall be of not less than D-6 size or similar size of other make.

An adequate trailer camp will be maintained for the housing (and food) of employees.

Description of the Work

Stage I

The work shall consist of approximately 24 non-core holes, totalling not to exceed 7,200 feet and located roughly as shown on the attached map, noted in Annex I. However, any of such hole locations may be changed with the prior approval of the Government.

Bulldozing shall be done as necessary for road work and preparation of drill locations. The Government will contribute to the cost of not to exceed 100 hours of such bulldozing.

Stage I holes shall be spaced at roughly 500-foot intervals.

Stage II

An additional 7,200 feet of drilling may be done at locations given prior approval by the Government. No Stage II drilling shall be done at a spacing of less than 100 feet.

Bulldozing shall be done as necessary for road work and preparation of drill locations. The Government will contribute to the cost of not to exceed 100 hours of such bulldozing.

Estimated Costs

Stage I

Actual Costs

Category (1) Independent Contracts

7,200 feet non-core drilling, @ $3.10/ft.	$22,320.00	
100 hours bulldozing @ $15.00/hr.	1,500.00	
Trailer camp costs, 4 months @ $1,800.00/month	7,200.00	$31,020.00

Category (3) Operating Materials and Supplies

None Except 3,600 sample sacks at $0.04 each		$ 144.00

Category (4) Operating Equipment

None Except

Subcateogry (a) Rental

Rental of one pickup truck, 4 months @ $100.00/month	$ 400.00	
Rental of one jeep station wagon 4 months @ $100.00/month	400.00	800.00

Category (7) Miscellaneous

None Except

356 berylometer assays @ $1.00 each	356.00	
36 chemical assays for BeO @ $10.00 each	360.00	716.00

Fixed Unit Costs

Incidental allowance in lieu of Categories (2) through (7) except sample sacks and sample analyses and rental of truck and jeep, @ $0.70/ft. for 7,200 feet of drilling	5,040.00
Estimated Cost of Stage I	$37,720.00

Stage II

Actual Costs

Category (1) Independent Contracts

7,200 feet non-core drilling, @ $3.10/ft.	$22,320.00	
100 hours bulldozing @ $15.00/hr.	1,500.00	
Trailer camp costs, 4 months @ $1,800.00/month	7,200.00	$31,020.00

Category (3) Operating Materials and Supplies		
None Except		
3,600 sample sacks at $0.04 each		$ 144.00
Category (4) Operating Equipment		
None Except		
Subcategory (a) Rental		
Rental of one pickup truck, 4 months @ $100.00/month	$ 400.00	
Rental of one jeep station wagon 4 months @ $100.00/month	400.00	800.00
Category (7) Miscellaneous		
None Except		
356 berylometer assays @ $1.00 each	356.00	
36 chemical assays for BeO @ $10.00 each	360.00	716.00

Fixed Unit Costs

Incidental allowance in lieu of Categories (2) through (7) except sample sacks and sample analyses and rental of truck and jeep, @ $0.70/ft. for 7,200 feet of drilling	5,040.00
Estimated Cost of Stage II	$37,720.00

S U M M A R Y

Total Cost of Stage I	$37,720.00
Total Cost of Stage II	37,720.00
Total Estimated Cost of Project	$75,440.00
Government Participation at 50%	$37,720.00

Vitro CORPORATION of AMERICA
261 MADISON AVENUE · NEW YORK 16, N. Y. · MURRAY HILL 2-5700

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 12 1960

DATE		CODE
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"	Reviewed	OO

August 11, 1960

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

Re: OME-6094

Dear Mr. Johnson:

I am attaching the correspondence with our principal bank here in New York that you requested relative to our application for a loan for the purpose of undertaking further exploration on our Topaz Mountain beryllium property.

With this correspondence and the information already furnished you by Mr. Smith of our Salt Lake office on the itemization of camp expenses and the bids for drilling, I believe we have complied with all of the requirements in connection with our application for an OME loan.

Very truly yours,

Eugene B. Hotchkiss

Eugene B. Hotchkiss
Executive Vice President

EBH:ns
Encls.

BANKERS TRUST COMPANY

NEW YORK

CLETUS J ZINSMEISTER
ASSISTANT TREASURER

TELEPHONE MURRAY HILL 2-7900
FIFTH AVENUE
NEW YORK 17, N. Y.

August 10, 1960

VITRO CORPORATION OF AMERICA
RECEIVED
AUG 11 1960
R. T. RUDER
NEW YORK, N. Y.

Mr. Raymond T. Ruder, Treasurer
Vitro Minerals Corporation
261 Madison Avenue
New York 16, New York

Dear Mr. Ruder:

We have now completed the review of the loan request contained in your letter of August 1. In that letter you asked us to lend Vitro Minerals Corporation a total of $44,000 which you propose to repay over a ten-year period. We understand the proceeds of our loan would be used together with a like amount from the company to finance an exploration program to evaluate the mineral potentialities of certain leased properties in Juab County, Utah.

For several reasons a loan of this type is unacceptable to us. The term proposed, we believe, is not within the province of commercial bank lending nor do we believe the financing of mineral exploration to be within that province. As you are probably aware, as commercial bank lenders we prefer that loans be of short term and self-liquidating for ~~anticipating~~ working capital. For these reasons we must decline your request.

Very truly yours,

Cletus J. Zinsmeister

Assistant Treasurer

Vitro MINERALS CORPORATION
261 MADISON AVENUE • NEW YORK 16, N. Y. • MURRAY HILL 2-5700

August 1, 1960

Mr. C. J. Zinsmeister, Assistant Treasurer
Bankers Trust Company
529 Fifth Avenue
New York 17, New York

Dear Mr. Zinsmeister:

As I discussed with you on the telephone, this letter is an application for a loan of $44,000 payable in ten years, to Vitro Minerals Corporation for the purpose of conducting an exploration program as outlined hereinafter.

Our corporation has made a discovery of a beryllium mineral in Juab County, Utah. The preliminary exploration indicates the possibility of finding commercial quantities of this ore upon approximately 54 mining claims which Vitro Minerals has under lease from a Mr. Whitlock of Payson, Utah. We propose to match the amount of this loan with our own funds and use the total amount of $88,000 in an exploration program involving trenching and drilling, sampling, assaying and other work required to evaluate the mineral potentialities of this property.

Any further information that you may request concerning this matter we will be happy to furnish you.

Very truly yours,

R. T. Ruder

R. T. Ruder
Treasurer

RTR:jc

Vitro MINERALS CORPORATION
600 W. 33rd SO. ST. • P. O. BOX 67 • SOUTH SALT LAKE • TELEPHONE IN 7-5414

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 8 1960

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"	Grisvach	500

August 5, 1960

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

Re: OME-6094 (beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah

Dear Mr. Johnson:

Enclosed herewith please find the drilling bid from Nichols & Thompson Core Drilling Company, Inc. This bid is the third bid from independent contractors and should fulfill your request of July 1, 1960.

We appreciate your patience and cooperation, and if you need any additional information, we will be most happy to supply it.

Very truly yours,

VITRO MINERALS CORPORATION

Cecil H. Smith

CECIL H. SMITH
Exploration Manager

CHS:bas

Enclosures - Original and two copies - Nichols & Thompson Core Drilling Company, Inc.

cc: Mr. E. B. Hotchkiss

2 copies this letter & enclosures forwarded to Reg. III

Diamond Drilling Contractor

NICHOLS & THOMPSON
CORE DRILLING CO., Inc.

AL NICHOLS
GENERAL MANAGER

111 E. 39TH ST.

PHONE 4-2575

BOISE, IDAHO

DON NICHOLS
ASSISTANT MANAGER

P. O. BOX 2057

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 8 1960

DATE	INITIALS	CODE
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		500

AUGUST 3, 1960

VITRO URANIUM COMPANY
600 WEST 33 SOUTH ST.
SALT LAKE CITY, UTAH

ATTN: MR. DAVE SNYDER

GENTLEMEN:

ON YOUR PROPOSED ROTARY DRILLING PROGRAM NORTHWEST OF DELTA, UTAH, THE FOLLOWING WILL CONFIRM THE PROPOSAL I MADE TO YOU OVER THE TELEPHONE:

1. MOBILIZATION - ONE ROTARY DRILL $445.00
2. ROTARY DRILLING - ROCK BIT AND FINGER BIT $3.45 PER FOOT, WITH AIR, SIZE 4½".
3. DIAMOND CORING:
   A. $14.00 PER FT. (CHRISTENSEN BARREL)
   B. WATER HAUL - TRUCK- FOR DIAMOND DRILLING $75.00 PER SHIFT WHEN USED.
   C. RENTAL ON CORE BARREL PLUS COST OF DIAMONDS.
4. DRILL SITES AND ACCESS ROADS ARE TO BE PREPARED BY THE OWNER, CAT AVAILABLE AND ALL RIGHT-OF-WAYS TO PROPERTY BY OWNER.
5. CORE BOXES $4.85 WOODEN, NEW.

THANK YOU FOR GIVING US THE OPPORTUNITY TO BID ON THIS DRILLING.

VERY TRULY YOURS,

NICHOLS & THOMPSON
CORE DRILLING CO., INC.

J. G. Fuss, for

ALVIN P. NICHOLS
MANAGER

APN/SJB

Vitro Chemical Company
☐ Note & Ret. ☐ Handle
JUL 5 1960
RCC..... GHY..... HDH.....
MTE..... JDM..... LDL.....
CAT..... EBR..... RBC.....

Vitro MINERALS CORPORATION
600 W. 33rd SO. ST. • P. O. BOX 67 • SOUTH SALT LAKE • TELEPHONE IN 7-5414

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 5 1960
DATE | INITIALS | CODE
8-5 gad VVO
" ~~[illegible]~~ 500
Brickwood

August 3, 1960

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

Re: OME-6094 (beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah

Dear Mr. Johnson:

In compliance with your request of July 1, 1960, we are submitting herewith original and two copies of drill bids from two independent contractors. The third bid has not arrived as yet, but we will forward it to you as soon as we receive it. Unless otherwise noted, all bids are on a 4 3/4" size non-core hole.

An original and two copies of trailer camp costs bid are also enclosed.

I hope these bids are satisfactory, but if you need a more detailed breakdown, please let us know so we may notify the contractors.

Thank you for your promptness in expediting this matter, and we will be looking forward to hearing from you shortly.

Very truly yours,

VITRO MINERALS CORPORATION

Cecil H. Smith

CECIL H. SMITH
Exploration Manager

CHS:bas

Enclosures - Original and two copies - T. A. Beavers Drilling
" " " " - Boyles Bros. Drilling Company
" " " " - Farnsworth Commissary
Hatch's City Cafe

cc: Mr. E. B. Hotchkiss

2 copies this letter + attachments to Reg III 8/8/60

OFFICIAL FILE COPY
O. M. F.
RECEIVED AUG 5 1960
DATE

T. A. BEAVERS DRILLING
BOX 1752
CASPER, WYOMING

July I6 , I960

Mr. Cecil Smith ,
Vitro Minerals Corporation
600 West , 33 South ,
Salt Lake City , Utah .

Dear Mr. Smith

I would like very much to bid on the Uranium Drilling you are planning on doing in Utah.

I understand it will be more than 7000' and less than I4,000' , the holes to be an average of about 400' deep.

I will bid $ 3.I0 Per ft.

Very Truly Yours,

T. A. Beavers Drilling

T. A. Beavers

Vitro Chemical Company
☐ Note & Ret. ☐ Handle
July 19 1950
RCC..... GHY..... HDH.....
MTE..... JDM..... LDL.....
CAT..... EBR..... RBC.....

DIAMOND CORE DRILLING
MINING
QUARRIES
SHAFT SINKING
TUNNEL DRIVING
GROUTING
FOUNDATION TESTING
MINE PLANT DESIGN
AND FABRICATION

Boyles Bros. DRILLING COMPANY

CONTRACTORS-ENGINEERS-GEOLOGISTS
General Offices
1321 South Main Street Phone HUnter 7-7595
SALT LAKE CITY 15, UTAH

BRANCH OFFICES
PHOENIX
RENO
SPOKANE
DENVER
SACRAMENTO

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 5 1960

DATE	INITIALS
	Reply to: Box 58

July 26, 1960

Vitro Minerals Co.
600 West 33rd South
Salt Lake City, Utah

Attention: Mr. Cecil Smith

Gentlemen:

We propose the following schedule of charges for drilling your properties at the south end of Spar Mountain about 55 miles Northwest of Delta, Utah:

1. Mobilization and demobilization of men and equipment - $500.00.

2. Non-Core Drilling -
   From 0 to 300 feet - $2.60 per foot
   300 to 400 feet - $3.60 per foot
   400 to 800 feet - $4.30 per foot

3. Coring -
   From 0 to 400 feet - $6.30 per foot
   400 to 800 feet - $7.50 per foot

4. Water haul, if required, will be charged for at the rate of $225.00 per month, plus 12¢ per mile and driver's wages and payroll taxes.

5. Cementing, if required, will be charged for at the rate of $12.00 per hour plus cost of cement and cement substitutes including drilling mud.

In the event this proposal is accepted by your company, we would appreciate your advising us as early as possible.

Very truly yours

R F Durfee

R. F. Durfee
Ass't. Mgr., Drilling Division

RFD:bg

Vitro Chemical Company
☐ Note & Ret. ☐ Handle
JUL 26 1960
RCC..... GHY..... HDH.....
MTE..... JDM..... LDL.....
CAT..... EBR..... RBC.....

Farnsworth Commissary « » Hatch's City Cafe
DELTA, UTAH — PHONE 5951

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O. M. E.
RECEIVED AUG 5 1960
DATE INIT.
CAMP MAINTENANCE SERVICE
GENERAL CATERING
RESTAURANT MANAGEMENT

July 27, 1960

Vitro Minerals
600 West 33rd South
Salt Lake City, Utah

ATTENTION: Mr. C. H. Smith

Dear Mr. Smith:

This letter is written to set forth the tentative figures and agreements regarding catering services which I will furnish to employees of Vitro Minerals in the area west of Delta, Utah.

I will furnish house trailers with sleeping quarters and shower facilities for three men, a cook and food of adequate quality. Both the sleeping quarters and the food are to be of a quality satisfactory to the men. This includes food, water and lodging for approximately $1700.00 to $1950.00 per month. The amount will depend upon the cost of the trailers to be furnished.

Also, if the weather is such that air coolers are necessary, we will have to make some arrangements for same. The cost of air coolers is not included in the above figure.

Sleeping quarters will not be furnished to additional men; however, meals for additional men will be furnished at a cost of $2.00 per meal per man.

The light plant is to be furnished by me, but Vitro Minerals is to pay all direct cost for rental, fuel and repairs for the operation of same.

This is for a guaranteed three months duration. If the camp is not used for three months, Vitro will pay $200.00 per month for the unused time guaranteed.

Sincerely yours,

HATCH FARNSWORTH

Vitro CORPORATION of AMERICA
261 MADISON AVENUE · NEW YORK 16, N.Y. · MURRAY HILL 2-5700

FRANK B. JEWETT, JR.
PRESIDENT

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 11 1960

DATE	INITIALS	CODE
7-11	gad	VVO
		VOO

July 8, 1960

Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
261 Madison Avenue
New York 16, New York

Dear Mr. Hotchkiss:

I have reviewed your request for an advance of funds from Vitro Corporation to finance a proposed beryllium exploration program in Juab County, Utah.

I am sorry to say that under existing circumstances it is impossible for Vitro Corporation of America to comply with this request.

Sincerely yours,

Frank B. Jewett, Jr.

Frank B. Jewett, Jr.

FBJ:jd

(See Vitro's letter July 8 on right-hand side)

ROCHESTER & PITTSBURGH COAL COMPANY

MINERS OF BITUMINOUS COAL AND MANUFACTURERS OF COKE

INDIANA, PENNSYLVANIA

CHARLES J. POTTER
President

CENTRAL FILE COPY
O. M. F.
RECEIVED JUL 11 1960

DATE	INITIALS	CODE
7-11	gad	VVO
		500

July 7, 1960

Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
261 Madison Avenue
New York 16, New York

Dear Mr. Hotchkiss:

This letter is to confirm the fact that Rochester & Pittsburgh Coal Company, under current circumstances, is unwilling to furnish all or any part of the funds necessary for the exploration work on the Whitelock beryllium claims in Juab County, Utah.

Yours very truly,

ROCHESTER & PITTSBURGH COAL COMPANY

By C. J. Potter
President

hla

THOMAS C. KING

Vitro Corp.

5564

Stock	*Price 4/12/60	Dividend	Yield
COMMON	13¾ - 14¾	None	None

POSITION: This industrial holding company is engaged in a variety of manufacturing, engineering and processing operations through subsidiaries and divisions.

FUNDAMENTAL POSITION

Vitro Corp. operates through divisions which develop, design and engineer chemical processes and plants and electronic and electro-mechanical equipment and systems, process uranium-bearing residue, manufacture colors and pigments, and develop and produce aircraft components.

Vitro Laboratories, Silver Spring (Maryland), West Orange (New Jersey) and Eglin Air Force Base (Florida), does chemical and physics research and development; Vitro Engineering, New York and Tulsa, designs and constructs processing and technical facilities and does refinery and petrochemical engineering; Nems-Clarke, Silver Springs, Maryland, and Martinsburg, West Virginia, operates in precision electronics; and Vitro International, New York, handles overseas operations. Thieblot Aircraft, Martinsburg, was dissolved early in 1959 as a result of unprofitable operations and the manufacturing plant was turned over to Nems-Clarke. Vitro Manufacturing, Pittsburgh, maker of ceramic colors and pigments and related chemical products, was disposed of on March 1, 1960. Formerly, it had been a member of the Chemical and Metallurgical Group.

Subsidiaries include the wholly-owned Berkshire Chemicals, Refinery Engineering Limited (Canadian refinery construction), Vitro Italiana and Vitro Chemical, the latter formed in 1959 to consolidate chemical and metallurgical operations, including those conducted by Vitro Uranium, Heavy Minerals and Vitro Rare Metals.

Associates are 50%-owned Vitro Minerals (exploration and mining of uranium ores); 40%-owned United States Manganese; and 15%-owned Sheer-Korman Associates (developers of Hierarc process for the production of manganese).

Employees: About 3,935.

EARNINGS-DIVIDEND RECORD

Yr. End. Dec. 31	a Tot. Revs.	--b Per Share Data ($)-- Earns.	Divs.	e Range
1960	.....	.....	....	13⅞-11⅜
1959	59.98	0.47	Nil	18¾-11
1958	65.35	0.42	Nil	18 -11¼
1957	62.94	1.27	Nil	26¼-15
1956	40.69	0.69	Nil	25¾-17¼
1955	29.76	0.57	Nil	29 -15¼
1954	29.59	0.53	Nil	20 - 7⅞
1953	29.12	0.09	Nil	7⅞- 5¾
1952	2.24	0.11	c0.10	14 - 8¼
1951	2.39	0.62	0.15	15¾-10½
1950	1.89	0.71	0.25	.....
1949	1.20	0.43	0.30	.....
1948	1.35	0.90	0.60	.....

a In millions of dollars. b Adjusted for 2-for-1 split in 1951. c Also 1% in stock. e Bid prices.

RECENT DEVELOPMENTS

Sales receded 8.2% from a year before in 1959, reflecting problems in realigning the organizational and operational structure. Costs were off less than proportionately and operating income dropped 31%. Other income was up, but depreciation, amortization and interest charges were greater. A credit from minority interest more than offset miscellaneous expenses, holding the decline in net income to 12%, after a tax credit of $649,000.

Operations have been separated into three groups which serve specific areas of the industry: Technical Services and Electronics; Chemical and Metallurgical; and International.

Early in 1960 the Nems-Clarke division received orders for its telemetering equipment for the ground receiving stations of Project Mercury, the man-in-space program.

Negotiations have been completed between Vitro International and the Indian Government for the design of a $4,000,000 high level radiation laboratory, at Trombay, the Indian Atomic Energy Department nuclear center.

*Approx.-Traded over the counter.

EARNINGS AND BALANCE SHEET POSITION

INCOME ACCOUNT, DEC. 31: $	YRS. 1959	END. 1958
Net sales of prod. & services	59,981,635	65,347,381
Costs & exps.	58,079,729	62,606,868
Oper. income	1,901,906	2,740,513
Other income	319,594	129,096
Total income	2,221,500	2,869,609
Depr. & amort.	1,828,735	1,517,538
Income tax	cr649,000	319,810
Interest	502,981	375,791
Cost of inv. in exc. of net assets acq. on liquid. of Uranium Prospectors Co., Ltd.	------	128,447
Misc. exps.	306,991	27,730
Minority int.	cr333,459	------
Net income	a565,252	†500,293
*Sh. Earns.	$0.47	$0.42

*Shs. outstg. 1,197,875.

†Before $1,998,156 prov. for reval. of invest. in Heavy Minerals Co.

a Bef. $1,476,663 anticipated loss on prop. & equip. retired.

CONSOL. BAL. SHEET, DEC. 31: $ Assets—	1959	1958
*Net property	9,448,225	12,281,176
Patents, etc.	1	1
Invsts. & advcs.	419,383	506,955
Misc. recs.	155,371	172,165
Airport lshld., net	------	380,106
Deferred chgs.	63,715	587,345
Current Assets—		
Cash	1,540,890	1,468,122
Receivables & unbilled costs & fees on contracts	8,463,561	8,927,908
Tax refund	1,378,000	------
Inventories	8,379,158	5,937,819
Prepayments	164,027	130,211
Tot. curr. assets	19,925,636	16,464,060
Total assets	30,012,331	30,391,808
Liabilities—		
Com. stk., par $0.50	598,938	598,938
Long-term debt	2,033,300	2,453,186
Minority int.	------	2,549
Capital surplus	11,585,739	11,585,739
Earned surplus	1,675,329	2,586,740
Current Liabilities—		
Notes pay. bank	5,900,000	7,707,000
Curr. mat. debt	138,381	128,630
Accts. pay.	4,534,017	2,566,053
Accruals	3,031,577	2,319,889
Inc. taxes	126,817	365,743
Adv. on contracts	388,233	77,341
Tot. curr. liabs.	14,119,025	13,164,656
Total liabs.	30,012,331	30,391,808
Net wkg. cap.	5,806,611	3,299,404
Equity com. shr.	$11.57	$12.33
*Depr., depl. & amort.	9,778,106	6,478,474

STOCK DATA

Authorized stock was changed from 500,000 $1 par to 1,000,000 $0.50 par shares for a two-for-one split in 1951; reduced to 708,400 shares in 1953; and increased to 1,000,000 shares in 1955 and to 2,000,000 in 1956.

Blyth & Company offered 100,000 shares at $13.50 each in 1951, and 160,000 at $23 each in 1955.

In 1957, shareholders were offered 178,646 shares at $16 each on a one-for-five basis.

Shareholders: About 6,720.

FINANCES

On December 31, 1959, current ratio was 1.4 to 1. Receivables accounted for 43% of current assets, inventories for 42% and cash items for 14%. Short-term bank loans amounted to $5,900,000.

DIVIDEND DATA

There are no reported restrictions.

No cash dividends have been paid since June 14, 1952. Previously, payments were reported in each year beginning with 1948.

CAPITALIZATION

LONG TERM DEBT: $2,033,300, including $1,318,696 5¼%, $231,795 4½% and $172,450 4% first mortgage notes due January 1, 1978, March 13, 1971 and July 1, 1963, respectively; $228,988 3½% unsecured note due January 9, 1961; and $81,371 5% subsidiary note due February 9, 1969.

COMMON STOCK: 1,197,875 shs. ($0.50 par).

OPTIONS: To purchase 64,300 shs.

INCORPORATED in Pennsylvania in 1909. OFFICE - 261 Madison Ave., New York 16. PRESIDENT - F. B. Jewett Jr. SECRETARY - W. H. Denne Jr. TREASURER - R. T. Ruder. CONTROLLER - J. H. Cooper. DIRECTORS - J. C. Ward Jr. (Chmn.), T. E. Brittingham Jr., A. S. Clarke, J. R. Dunning, J. I. Gearhart, S. S. Hawes, F. B. Jewett, Jr., H. A. Kroeger, A. G. Noble, C. S. Payson, C. J. Potter, R. W. Purcell, A. J. Thieblot, F. K. Trask Jr., H. Woodward. TRANSFER AGENT - Bankers Trust Co., New York. REGISTRAR - Marine Midland Trust Co., New York.

Information has been obtained from sources believed to be reliable, but its accuracy and completeness, and that of the opinions based thereon, are not guaranteed.

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AUDITED FINANCIAL STATEMENTS AND OTHER INFORMATION

VITRO MINERALS CORPORATION - NEW YORK, N. Y.

December 31, 1959

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--ooOoo--

ERNST & ERNST
GRANT BUILDING
PITTSBURGH 19, PENNA.

ACCOUNTANTS-AUDITORS
MANAGEMENT SERVICES

OFFICES IN PRINCIPAL CITIES
ASSOCIATES IN FOREIGN COUNTRIES

Board of Directors,
Vitro Minerals Corporation,
New York, N. Y.

We have examined the financial statements of Vitro Minerals Corporation as of and for the year ended December 31, 1959. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statement of income and retained earnings present fairly the financial position of Vitro Minerals Corporation at December 31, 1959, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Ernst & Ernst
Certified Public Accountants

Pittsburgh, Pa.
March 30, 1960

BALANCE

VITRO MINERALS

	DECEMBER 31, 1959	DECEMBER 31, 1958
ASSETS		
CURRENT ASSETS		
Cash	$196,282.99	$130,991.40
Trade and other accounts receivable	177,831.91	318,832.03
Inventory-uranium ore-at cost not in excess of market	117,885.60	117,510.40
TOTAL CURRENT ASSETS	$492,000.50	$567,333.83
MINING CLAIMS, PLANT AND EQUIPMENT-at cost, less allowances for depletion and depreciation		
Mining claims	$ 75,000.00	$ 75,000.00
Mine plant and equipment	664,473.49	333,367.32
Office furniture and fixtures	6,107.71	5,081.41
Automobiles and trucks	110,631.14	41,678.37
	$856,212.34	$455,127.10
Less allowances for depletion and depreciation	487,699.81	353,954.80
NET MINING CLAIMS, PLANT AND EQUIPMENT	$368,512.53	$101,172.30
DEFERRED CHARGES		
Ore claims and exploration expenses (less reserves of $206,932.60 and $128,453.11 respectively)	$ 36,799.65	$ 97,045.53
Prepaid royalties	75,356.59	-o-
Prepaid insurance and miscellaneous	13,142.10	6,887.40
TOTAL DEFERRED CHARGES	$125,298.34	$103,932.93
	$985,811.37	$772,439.06

SHEET

CORPORATION

	DECEMBER 31, 1959	DECEMBER 31, 1958
LIABILITIES		
CURRENT LIABILITIES		
Trade and other accounts payable	$ 50,732.45	$ 43,039.90
Amounts payable to shareholders:		
Notes payable	270,000.00	470,000.00
Accounts payable	7,571.30	3,809.88
Accrued expenses	71,812.07	53,263.14
Long term debt installments due within one year	10,000.00	-0-
TOTAL CURRENT LIABILITIES	$410,115.82	$570,112.92
LONG TERM DEBT		
Notes payable (non-interest bearing) due in monthly installments to December 20, 1963 (less amount due within one year included in current liabilities)	20,000.00	-0-
SHAREHOLDERS' EQUITY		
Common stock, par value $100.00 per share: Authorized 2,000 shares, issued and outstanding 1,200 shares	$120,000.00	$120,000.00
Retained earnings	435,695.55	82,326.14
TOTAL SHAREHOLDERS' EQUITY	$555,695.55	$202,326.14
	$985,811.37	$772,439.06

STATEMENTS OF INCOME AND RETAINED EARNINGS

VITRO MINERALS CORPORATION

	YEARS ENDED DECEMBER 31, 1959	1958
Sales:		
Uranium	$1,626,003.22	$1,333,648.52
Premium on uranium	32,813.94	20,757.36
Development allowance	235,274.88	192,590.40
	$1,894,092.04	$1,546,996.28
Miscellaneous income	9,818.48	2,649.24
	$1,903,910.52	$1,549,645.52
Costs and expenses:		
Cost of mining	$1,058,658.16	$ 820,945.32
General and administrative expenses	116,527.26	79,716.67
Exploration expenses on claims abandoned	120,570.04	151,183.93
Provision for claims revaluation	123,732.59	128,453.11
Loss on investment and joint venture	104,922.82	15,000.00
Interest	21,080.56	17,047.43
Miscellaneous	5,049.68	1,085.21
	$1,550,541.11	$1,213,431.67
NET INCOME - Note A	$ 353,369.41	$ 336,213.85
Retained earnings-deficit* at beginning of year	82,326.14	253,887.71*
RETAINED EARNINGS AT END OF YEAR	$ 435,695.55	$ 82,326.14

Provisions for depletion of mining claims and depreciation of plant and equipment amounting to $152,517.96 for 1959 and $159,892.65 for 1958, and amortization of deferred exploration expense amounting to $13,290.89 for 1959 and $9,347.01 for 1958, are included in costs and expenses.

Note A - No income taxes are payable on income for 1959 and 1958 due to loss carry-forward from prior years and percentage depletion in excess of depletion charged against income in the foregoing statement.

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OTHER INFORMATION

--ooOoo--

ORGANIZATION DATA

VITRO MINERALS CORPORATION

December 31, 1959

Incorporated:
November 30, 1945 under the laws of the State of Delaware

Principal office:
261 Madison Avenue, New York, N. Y.

Principal operations:
States of Utah and Wyoming

Nature of business:
Mining, milling and processing of uranium ore from owned and leased ore claims and development and exploration related thereto

Date of annual shareholders meeting:
Third Wednesday in May

Directors:

J. Carlton Ward, Jr.	New York, N. Y.
C. J. Potter	Indiana, Pa.
H. V. Fritchman	Indiana, Pa.
W. B. Hall, Jr.	New York, N. Y.
Peter Iselin	New York, N. Y.
E. B. Hotchkiss	New York, N. Y.
F. B. Jewett, Jr.	New York, N. Y.

Officers:

J. Carlton Ward, Jr.	Chairman of the Board
C. J. Potter	President
E. B. Hotchkiss	Executive Vice President
W. B. Hall, Jr.	Vice President
R. C. Cole	Vice President
R. T. Ruder	Treasurer
W. H. Denne, Jr.	Secretary
H. V. Fritchman	Assistant Secretary
G. H. Young	Assistant Secretary
J. M. Hopkins	Assistant Secretary
D. R. Pickard	Controller

Authorized and issued capital stock:
2,000 shares of common stock, par value $100.00 per share authorized; issued and outstanding-1,200 shares

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O. M. E.
RECEIVED JUN 28 1960

DATE	INITIALS	CODE

Vitro MINERALS CORPORATION

261 MADISON AVENUE · NEW YORK 16, N. Y. · MURRAY HILL 2-5700

June 27, 1960

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

Dear Mr. Johnson:

Attached you will find four copies of "Application for Financial Assistance in Minerals Exploration" on MME Form 40 as called for in Title 30, Code of Federal Regulations, Chapter III, for the exploration of beryllium minerals in the Spors Mountain area, Juab County, Utah. Two of the applications include copies of all geologic or engineering reports, assay maps or technologic information on this property as required in Part 3 (g) of the above form. These data do not need to be returned. We have also attached as per 2 (c), five copies of executed lien and subordination agreements on MME Form 52.

The exploration project proposed under this application calls for a 2-phase program. Phase I, in the amount of $44,108 consists of drilling on 500-foot centers and certain additional exploration and related work, and Phase II, in the amount of $44,108 calls for additional drilling and related exploratory work in the mineralized areas located by the Phase I drilling. The total cost of this loan application is, therefore, $88,216.

We respectfully request your favorable consideration of this application.

Very truly yours,

Eugene B. Hotchkiss

Eugene B. Hotchkiss
Executive Vice President

EBH:ns

Enc: Orig. and 4 copies of
MME Form 52

BANKERS TRUST COMPANY

NEW YORK

TELEPHONE MURRAY HILL 2-7900
529 FIFTH AVENUE
NEW YORK 17, N. Y.

JOHN L. FENTON
ASSISTANT VICE PRESIDENT

June 27, 1960

Vitro Corporation of America
261 Madison Avenue
New York 16, New York

Attention: Mr. Raymond T. Ruder
Vice President-Finance

Gentlemen:

With regard to your request for a loan for $100,000 to Vitro Minerals Corporation to finance the further exploration for beryllium ore deposits, we believe that such a borrowing is not the type of loan in which a commercial bank would be interested, since it apparently would be neither short term nor self-liquidating. Accordingly, we must decline your loan application at this time.

Very truly yours,

John L. Fenton

Assistant Vice President

WALKER BANK & TRUST COMPANY

ESTABLISHED 1859 MEMBER FEDERAL RESERVE SYSTEM

SALT LAKE CITY, UTAH
June 22, 1960

Mr. Gavin H. Young, General Manager
Vitro Minerals Corporation
600 West 23rd South Street
Box 67
South Salt Lake City, Utah

Dear Mr. Young:

Careful consideration has been given to the request contained in your letter of June 21, 1960 for a loan of $44,000.00 on a ten-year basis, with interest at 6½% per annum for the purpose of exploring for beryllium minerals in Juab County, Utah.

We regret that our present loan program would not permit us to make or participate in such a loan.

Very truly yours,

W. M. Scott
Vice President

WMS:bm

June 21, 1960

Mr. Wallace M. Scott
Vice President
WALKER BANK & TRUST COMPANY
Salt Lake City, Utah

Dear Mr. Scott:

In accordance with our preliminary discussion yesterday, Vitro Minerals Corporation would like to apply to the Walker Bank & Trust Company of Salt Lake City, Utah for a loan in the amount of forty-four thousand dollars ($44,000) payable in ten years with an interest rate of 6½%.

Vitro Minerals Corporation proposes to match the proceeds of the loan with its own funds and use the total amount of eighty-eight thousand dollars ($88,000) to explore for beryllium minerals in Juab County, Utah. The money will be spent for trenching and non-core rotary drilling of the favorable deposits together with the necessary sampling, assaying, and supervision required. All work will be conducted upon 54 unpatented mining claims, which Vitro Minerals Corporation hold under a lease and option agreement from Mr. C. L. Whitelock of Payson, Utah.

We will happy to furnish more detailed information concerning either the exploration program or the loan application.

I appreciate your assistance in this matter and hope I may have your answer to this loan request at your earliest convenience.

Very truly yours,

VITRO MINERALS CORPORATION

CAVIN H. YOUNG
General Manager

CHY:bas

APPLICATION
FOR FINANCIAL ASSISTANCE IN MINERAL EXPLORATION
UNDER
UNITED STATES DEPARTMENT OF THE INTERIOR
OFFICE OF MINERAL EXPLORATION

WHITELOCK CLAIM GROUP
SPORS MOUNTAIN AREA
JUAB COUNTY, UTAH

VITRO MINERALS CORPORATION
600 WEST 33RD SOUTH
SALT LAKE CITY 15, UTAH

- OR -

POST OFFICE BOX 15437
SOUTH SALT LAKE CITY, UTAH
TELEPHONE - INGERSOL 7-5419

JUNE 21, 1960

- - - - - - - - - - - - - -

VITRO MINERALS CORPORATION

600 West 33rd South
Salt Lake City 15, Utah

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1. FINANCIAL ELIGIBILITY

   (a) Evidence of request for credit
   (b) Name and address of parent companies
   (c) Vitro's method of furnishing their share of the exploration loan

2. APPLICANT'S RIGHTS IN LAND

   (a) Interest in lands and mineral rights
   (b) Legal description
   (c) Lien and Subordination Agreements

3. PHYSICAL DESCRIPTION

   (a) Exploration operations
   (b) Interest in operations
   (c) Past and current production
   (d) Ore reserves
   (e) Geologic report
   (f) Geologic report
   (g) Geologic report

4. ACCESSIBILITY OF PROPERTY

   (a) Directions to property
   (b) Shipping and supply points

5. EXPLORATION WORK

   (a) Proposed program
   (b) Access road
   (c) Starting date

6. EXPERIENCE

7. ESTIMATE OF COSTS

   (a) Independent contracts
   (b) Personal services
   (c) Operating materials and supplies
   (d) Operating equipment
   (e) Initial rehabilitation and repairs
   (f) New buildings, fixtures, and installations
   (g) Miscellaneous

MME Form 40
Dec. 1958

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Budget Bureau No. 42-R1368
Approval expires Dec. 31, 1963

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

Pursuant to Public Law 85-701 (72 Stat. 700; 30 U.S.C. 641)

NAME OF APPLICANT *(Full legal name and mailing address as they should appear on contract if one is executed.)*

VITRO MINERALS CORPORATION
600 West 33rd South
Salt Lake City 15, Utah

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER: 6094

DATE RECEIVED: 6-28-60

REGION: III

DIVISION CODE: 500

BUSINESS ORGANIZATION *(Check one)*

- INDIVIDUAL [ ]
- CORPORATION [X]
- PARTNERSHIP [ ]
- OTHER *(Specify)* [ ]

STATE IN WHICH FIRM IS ORGANIZED: DELAWARE

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
Messrs.		
C. J. Potter	P. O. Box 729, Indiana, Pa.	President
E. B. Hotchkiss	261 Madison Ave., New York 16, N. Y.	Executive Vice President
W. B. Hall	" " " " " " "	Vice President
R. C. Cole	600 West 33rd South, S. L. C., Ut.	Vice President
W. H. Denne, Jr.	261 Madison Ave., New York 16, N. Y.	Secretary
R. T. Ruder	" " " " " " "	Treasurer

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE: Beryllium Minerals

ESTIMATED COST OF PROJECT: $ $88,216.00

PROPERTY NAME	LOCATION COUNTY	STATE
See Appendix "A"	Juab	Utah

GENERAL INSTRUCTIONS

Before filling out this application, please read the *OME Regulations for Obtaining Federal Assistance in Financing Explorations for Mineral Reserves* (30 CFR Chap. III). To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit four copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 2, existing mine workings and geology in item 3, and the proposed exploration work in item 5. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 3(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Office of Minerals Exploration, Department of the Interior, Washington 25, D. C., or with the nearest OME Field Office.*

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, and that he would not ordinarily undertake the proposed exploration under current conditions and circumstances at his sole expense.

6/27/60
DATED

Eugene B. Hotchkiss
BY *(Signature)*

Exec V.P.
TITLE

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. Financial Eligibility:

(a) Submit evidence of efforts made within 90 days preceding the filing of this application to obtain credit from your bank of account and at least one other banking institution or other private source of credit. Such evidence shall include true copies of correspondence which show: (1) date of loan request, (2) amount and terms requested, (3) proposed use of loan funds, and (4) the replies from credit sources. If the loan was offered under terms which you consider unreasonable, state why you consider them so.

(b) List names and addresses of affiliated, parent, or controlling companies or organizations and state extent and nature of their interest.

(c) State how you propose to furnish your share of the cost of the exploration work.

2. Applicant's Rights in Land:

(a) State your interest in the land and mineral rights, whether owner, lessee, purchaser under contract, or other. If you are not the owner, submit one true copy of the lease, contract, or other document (with address of owner) under which you control the property. Describe all liens, mortgages, or other encumbrances on the land and state book and page number and official place where recorded.

(b) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all adjacent land which you own or control. Describe any part of the land or workings which should not be subject to Government royalty and liens. If the land consists of unpatented claims, state book and page number for each recorded location notice, including amended locations, and official place where recorded. State all the names by which you know the property.

(c) For all land or mineral rights encumbered or not owned, submit five copies of Lien and Subordination Agreements on MME Form 52. If the agreements cannot be obtained, state reasons and provide copies of letters of refusal.

3. Physical Description:

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the land. Include existing mine workings and all production facilities.

(b) State your interest, if any, in operations described in (a).

(c) State, if you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves, giving quantities and grades and sampling methods used. Support your statement with copies of assay certificates and assay maps if available.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you have, indicating whether you require their return.

4. Accessibility of Property:

(a) To aid the OME representative who may examine the property, state name and address of person who will meet him; give directions for reaching the property; and describe accessibility of property and of any mine workings.

(b) Name the shipping and supply points and state the distances to the property.

5. Exploration Work:

(a) Describe fully the proposed exploration work giving individual footages and sizes of openings *for each item of work.* Use narrative, maps, plans, and sections as necessary. Show location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *land boundaries* or to the closest identifiable corner.

(b) If an access road must be built, show the proposed location on the property map and state the length, type and construction methods proposed.

(c) If an OME contract is executed, state how soon thereafter work would be started and finished. State your anticipated average daily or monthly rate of progress for each type of work.

6. Experience:

State your operating experience and background to conduct this exploration work and also that of the person who will supervise the work.

7. Estimate of Costs:

Furnish detailed estimates of the necessary costs *for each item of the work proposed in 5(a)* under the headings listed below with a total for each heading and the estimated total cost of the work. Costs for any work to be performed by an independent contractor should be listed separately under category (a) below. Costs for any work that is not to be performed by an independent contractor should be listed under categories (b) through (g).

(a) Independent contracts. State the total cost of any proposed independent contract for all or any part of the work, and the number of units and the unit cost for each type of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, or per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. (*Note*—If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. The cost of supervision, engineering and geological services, outside consultants, and labor should be itemized by numbers and classes of employees; rates of wages, salaries or fees; and periods of employment. State whether these services are available.

(c) Operating materials and supplies. List items of material and supplies giving quantity and cost of each. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of equipment and tools costing $50 or more per unit. Give specifications and indicate how each item is to be acquired—i.e., rented, purchased or provided by the applicant. If rented or purchased, state the estimated rental or purchase price. If furnished by the applicant, state condition and present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant which will be used in the exploration work.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration work, stating specifications and cost including labor, materials, and supervision.

(g) Miscellaneous. Describe the type and estimate the cost of repairs and maintenance of the operating equipment listed in 7(d). Do not repeat initial repairs listed in 7(e). Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories. [*Note*—The Government will not contribute to costs incurred before the date of the contract, or to costs of or incident to: (1) acquiring, using, or possessing land and any existing improvements, facilities, buildings, installations, and appurtenances, or the depreciation and depletion thereof; (2) general overhead, corporate management, interest and taxes (other than payroll and sales taxes); (3) insurance (other than employees' liability insurance); and (4) damages to persons or property (other than authorized repair to or replacement of equipment or other property used in the work).]

INT.-DUP. SEC., WASH., D.C. 50399

VITRO MINERALS CORPORATION

600 West 33rd South
Salt Lake City 15, Utah

OME LOAN APPLICATION

1. (a) See attached letters regarding request for loans

   (b) Parent Corporations:
   Vitro Corporation of America - 261 Madison Avenue, New York City 15, New York - 50%.
   Rochester & Pittsburgh Coal Company - P. O. Box 729, Indiana, Pennsylvania - 50%.

   (c) As their share of the exploration project, Vitro proposes to furnish the following:

      (1) Supervisory, geological and engineering personnel
      (2) Geological, geophysical and assaying equipment
      (3) Transportation equipment
      (4) Money

2. (a) Lessee (see attached copy of lease)

   To our knowledge there are not any liens, mortgages, or other encumbrances on the land.

   (b) Claims subject to this loan are located in Sections 5 and 8, T 13 S, R 12 W, S.L.P.M. and unsurveyed Section 32, T 12 S, R 12 W, S.L.P.M. (See following listing of claims with book and page).

   Besides the claims listed in this Application, Vitro controls additional claims in the area, both in the Whitelock lease and in leases with other principals. The cost of exploring all these claims would be excessive, and only the more developed group is included in this Application for financial assistance.

RECORDED IN JUAB COUNTY COURTHOUSE, NEPHI, UTAH

	Claim Name	Book	Page
1.	Roadside #1	177	324
2.	Roadside #2	177	359
3.	Roadside #3	177	360
4.	Roadside #4	177	361
5.	Roadside #5	177	362
6.	Emma #1	177, 178	286, 125
7.	Emma #2	178, 177	287, 126

VITRO MINERALS CORPORATION

600 West 33rd South
Salt Lake City 15, Utah

	Claim Name	Book	Page
8.	Emma #3	178, 177	288, 127
9.	Emma #4	178, 177	289, 128
10.	Emma #5	178, 177	290, 129
11.	Emma #6	178, 177	291, 130
12.	Emma #7	178, 177	292, 131
13.	Emma #8	178, 177	293, 132
14.	Emma #9	178, 177	294, 133
15.	Emma #10	178, 177	295, 134
16.	Sigma #1	177	619
17.	Sigma #2	177	620
18.	Sigma #3	177	621
19.	Sigma #4	177	622
20.	Sigma #5	177	623
21.	Sigma #7	177	625
22.	Sigma #8	177	626
23.	Sigma #9	177	627
24.	Taurus #1	177	517
25.	Taurus #2	177	518
26.	Taurus #3	177	538
27.	Taurus #4	177	539
28.	Taurus #5	177	540
29.	Taurus #6	177	541
30.	Taurus #7	177	542
31.	Taurus #8	177	543
32.	Taurus #9	177	544
33.	Taurus #10	177	545

	Claim Name	Book	Page
34.	Lambda #1	177	597
35.	Lambda #2	177	598
36.	Lambda #3	177	599
37.	Lambda #4	177	600
38.	Lambda #5	177	601
39.	Shelley #1	177	590
40.	Shelley #2		
41.	Shelley #3	177	591
42.	Shelley #4	177	592
43.	Shelley #5	177	593
44.	Shelley #6	177	594
45.	Shelley #7	177	595
46.	Shelley #8	177	596
47.	Omega #4	178	29
48.	Omega #5	178	30
49.	Omega #6	178	31
50.	Omega #7	178	32
51.	Argus #1	178	22
52.	Argus #2	178	23
53.	Argus #3	178	24
54.	Argus #4	178	25

2. (c) We will request the completion of MME Form 52 and submit five copies to be included with this application.

3. (a) The claims covered by this Application were previously explored for uranium and fluorspar. The occurrence of beryllium was unknown and overlooked during this previous work. The exploration work

consisted of pitting and drilling. Several outcrops of uranium and fluorspar were explored but neither was mined from this property.

Vitro began exploring the property for beryllium in April, 1960. Plane table geologic map and surface sampling with the berylometer were initially completed. Drilling and pitting on the more favorable zones was begun by the end of May. This work is continuing at the present time. Fourteen rotary drill holes totaling 1,988 feet and 33 hours of bulldozer work pitting outcrops and building access roads were completed by June 3, 1960. Location of this work is shown on (Plate 1).

(b) Not applicable

(c) Not applicable

(d) Vitro's exploration work to date has outlined mineralized areas on the Roadside #2 and #5 claims and Taurus #1 claim. Insufficient work has been completed to calculate ore reserves. All assaying has been done using the berylometer, but experience has shown that these assays compare favorably with chemical assays.

The following table summarizes the drilling results to date:

Claim	Hole No.	Interval From	Interval To	Apparent Thickness	Ave. Berylometer Reading	Est. % BeO	Total Depth
Taurus #1	T-1	12'	36'	24'	40	0.65	106
"	"	80	100	20	10	0.20	
"	T-2	14	22	8	10	0.20	116
"	"	80	104	24	27	0.55	
"	T-3	4	10	6	25	0.55	140
"	"	38	46	8	30	0.65	
"	"	100	134	34	56	1.15	
"	T-4	126	140	14	19	0.40	152
"	T-5	48	64	16	27	0.55	124
"	"	78	88	10	12	0.25	
"	"	110	124	14	25	0.55	
"	T-6	88	90	2	19	0.40	154

Claim	Hole No.	Interval From	Interval To	Apparent Thickness	Ave. Berylometer Reading	Est. % BeO	Total Depth
Taurus #1	T-6	144'	148'	4	113	1.35	
"	T-7	92	98	6	24	0.50	126
"	T-8	114	124	10	26	0.50	160
TOTALS	8			200'	473		
AVERAGE				25'	31	0.65% BeO	
Roadside #2	RS-1	62	70	8'	20	0.40	116
"	RS-2	146	166	-	-	Trace	182
"	RS-3	128	140	12'	36	0.70	194
"	RS-4	-	-	-	-	Barren	76
Roadside #5	RS-5	2	12	10	40	0.85	118
"	RS-6	38	66	28	66	1.35	200
TOTALS	6			78'	162		
AVERAGE				13'	27	0.55% BeO	

Copies of drill logs, cross sections, and standardization curve are attached in Appendix.

Though exploration work has not progressed to a point where ore reserves can be calculated, there are strong indications that a significant quantity of beryllium bearing material exists on these properties.

(e) Geologic Report - This new occurrence of beryllium ore discovered in southwestern Utah on the west side of Spors Mountain in central Juab County is the first reported occurrence of significant quantities of beryllium closely related to a rhyolite flow. The mineralization appears to be more widespread and concentrated than other non-pegmatite occurrences, and the mineral is easily soluble in sulfuric acid.

The exposed rocks range in age from Ordovician to Pleistocene. Most of the Spors Mountain is made up of a thick sequence of conformable Paleozoic rocks, which are mainly carbonates. Volcanic rocks, which include latite, rhyolite, volcanic breccia, lapilli tuff, dacite and rhyolite tuff, of probable Tertiary age, surround and intrude the Paleozoic rocks, commonly along faults.

All of the rocks were tilted and now strike northeast and dip northwest. These regularly dipping rocks are cut by approximately 1,000 faults, which belong to at least five periods of pre and post volcanic faulting (1).

During Pleistocene time, Lake Bonneville surrounded the area, and gravel conglomerate and marl were deposited on the flanks of the range and in the surrounding basins.

The host rock for the beryllium ore in the area is the rhyolitic tuff, which contains pebbles of dolomite, latite, some rhyolite from earlier flows and minor amounts of other rock types. The cementing material is principally montmorillonite clay particles.

The beryllium mineral is principally a silicate and is closely associated with fluorite, manganese oxide and uraniferous silica. The fluorite and beryllium mineral form the principal constituents of the ore. Veinlets of manganese oxide and uraniferous silica truncate the fluorite and beryllium mineral indicating their later age in the paragentic sequence. Iron oxide and pyrite are found associated with the contact type and high uraniferous silica deposits but are not widely distributed in the deposits.

Megascopically, the ore appears finely textured with its color varying from porcelaneous white to various shades of lavender and purple, due to the presence of fluorite. One frequent occurrence of the beryllium mineral is in nodules having a light colored envelope or outer zone rich in the beryllium mineral surrounding a fine grained purple to lavender core consisting of a mixture of the mineral and fluorite, which often contains coarser fluorite plates or septaria cracks. It is also found as concretions containing the beryllium mineral and fluorite in the form of small spheroids inside the host rock fragments around which the manganese or fluorite concretionary envelopes are formed. Another occurrence of the mineral is as a reaction rim along the contact of the rhyolitic tuff and the underlying dolomite.

In all cases the beryllium mineral is so finely interwoven with the fluorite that only a sub-microscopical sponge work of the two can be identified in the deposits. The width of the interlocking links do not exceed two to three microns.

In thick sections the fluorite and beryllium mineral aggregate shows very weak birefrangence and its diffused powder x-ray pattern indicates the new mineral is in a crystalline state but of an extremely fine grain size. The mineral aggregate consisting largely of fluorite in addition to the beryllium mineral, has a hardness of five, a conchoidal fracture, is easily fusible at 2-3 and because of the fairly high percentage of fluorite, the aggregate shows a S.G. of 2.4 - 2.62.

The beryllium mineralization appears to be confined to the rhyolite tuff. Because of limited exposures and the preliminary nature of the work, we have not postulated a theory of the source or control of the beryllium mineralization. It should be noted, however, that there is strong evidence supporting the hydrothermal theory of mineralization.

Mineralization was detected by using a berylometer, which utilizes the nuclear reaction: gamma $Be^9 \longrightarrow Be^8$ + neutron (fast). The ejected neutrons are moderated and then detected with a scintillation phosphor. The light scintillations are converted to an electrical impulse which is counted by a scaler. By comparison with the count rate from a known sample, the beryllium in an unknown sample can be determined. The gamma ray source is Antimony 124 radioisotope.

By using the above reaction, the beryllium content of surface samples and rotary drill cuttings were determined.

(1) M. H. Staltz & F. W. Osterwald, "Geology of the Thomas Range Fluorspar District, Juab County, Utah" - Geological Survey.

(f) covered in 3 (e)

(g) At least two copies of all geological and engineering reports and technological information is enclosed.

4. (a) The enclosed Index Map shows the location of the property. The claim area is easily accessible by standard automobiles.

A Vitro representative will gladly meet the OME inspecting team in Delta, Utah and take them to the property. Notification of the time of your pending visit should be made to the following address:

VITRO MINERALS CORPORATION
600 West 33rd South
Salt Lake City 15, Utah
Telephone - Ingersol 7-5419

(b) Delta is the closest shipping and supply point to the property. The property is approximately 46 miles northwest of Delta, Utah.

5. (a) Phase I of the proposed exploration project under this Application calls for drilling twenty four (24) non-core holes through the rhyolitic tuff bed into the underlying dolomite. These holes will be located on 500 foot centers in the vicinity of the rhyolite-dolomite contact, which in most places is covered by alluvium. The location of these drill holes are shown on the enclosed map.

A second phase drilling program is requested totaling the same amount of footage and costs as requested in Phase I. This drilling

will be used to drill additional holes no closer than 100 foot centers in mineralized areas located by the Phase I drilling.

Each two foot section from the drill holes will be checked with the berylometer to determine the presence of beryllium mineralization. A controlled berylometer assay will be made on each mineralized section and approximately 10% of the mineralized sections will be chemically assayed as a check on the accuracy of the berylometer results.

(b) Not applicable.

(c) The work will start within thirty (30) days and be completed within four (4) months from the date of the exploration project contract.

6. Vitro Minerals Corporation has conducted a number of exploratory programs for uranium and diversified minerals in the western United States and South America. These operations are under the supervision of experienced geologists and engineers and careful and scientific attention is given to all stages of the work.

The Vitro Minerals Corporation is jointly owned by the Vitro Corporation of America and by the Rochester & Pittsburgh Coal Company. The Vitro Chemical Company, a division of the Vitro Corporation, has extensive experience and knowledge concerning the hydrometallurgical treatment of the rare metals, especially uranium, rare earths, thorium and beryllium. The Rochester & Pittsburgh Coal Company has over 75 years experience in both open pit and underground mining. The Vitro Minerals Corporation has discovered and developed a large reserve of uranium ore in Wyoming. They have successfully been exploiting this deposit for over five years and have developed an experienced and capable staff to supervise the proposed exploration program.

7. Estimate of costs

(a) Independent contracts

(1) Estimated costs for plug drilling (non-core)

Depth	Cost-ft.	Total footage	Total cost
0 - 50	$ 2.50	1,200'	$ 3,000.00
50 - 100	3.25	1,200	3,900.00
100 - 200	3.75	2,400	9,000.00
200 - up	4.00	2,400	9,600.00
TOTAL		7,200	$25,500.00

AVE. COST/FT. $3.55/ft.

(2) Estimated cost of road work and preparing locations

Bulldozer - 100 hours @ $15.00 per hour = $1,500.00

TOTAL ESTIMATED COST - CONTRACT WORK $27,000.00

(b) Labor, supervision, consultants

(1) Senior Geologist
4 months @ $750.00 per month $ 3,000.00 ?

(2) Junior Geologist
4 months @ $650.00 per month 2,600.00 x out

(3) Geologist Helper (sample preparation, surveying)
4 months @ $450.00 per month 1,800.00

TOTAL SUPERVISORY COSTS $7,400.00

(c) Will be furnished by Vitro

(d) Operating Equipment

Rental on one pickup truck
4 months @ $100.00 per month 400.00

Rental on one jeep station wagon
4 months @ $100.00 per month 400.00 ?

Trailer camp costs (field expenses)
4 months @ $1,800 per month 7,200.00 ?

TOTAL OPERATING EQUIPMENT COSTS $8,000.00

(e) Not applicable.

(f) Not applicable.

(g) Miscellaneous

(1) Analytical work
Estimated total of 360 berylometer assays
@ $1.00 each 360.00

Estimated total of 36 chemical assays ?
@ $10.00 each 360.00

(2) Drafting supplies 100.00

(3) Sample sacks - 7200 sacks @ $0.04/sack 148.00

(4)	Direct accounting costs 6 months @ $100.00 per month		$ 600.00
(5)	New Source for the berylometer		140.00
	TOTAL MISCELLANEOUS COSTS		$1,708.00
	COST OF PHASE I DRILLING	$44,108.00	
	on a cost per unit foot of drilling	6.126	
	TOTAL COST OF LOAN APPLICATION	88,216.00	

Material returned to Vitro Minerals Corp. June 27, 1962

9/6/60 Letter Smith to Connors complete with all maps and sections referred to.

2 copies

Monthly progress report Submitted 11/8/60

5 copies

2 [illegible]

11/14/60 letter Smith to Connors

2 copies

11/23/60 letter Connors to Smith

2 copies

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. ~~Assn. Solicitor, Rm. 6042~~		
2. ~~Mr. Talbert, Rm. 4448~~		
3. 130 - ~~110~~ - 100		
4. 220		
5.		
FROM: W. R. Griswold	4/23	

FOR: Check items for action desired

____ Action ____ Reply for signature of ____

____ Approval ____ Investigate X Surname

____ Comment ____ Recommendations X Signature

____ Conference ____ Rewrite File

____ Instructions Your information

FROM SOLICITOR

REMARKS:

APR 30 1962

FOR SIGNATURE

FROM SOLICITOR

APR 24 1962

FOR SIGNATURE

R. ✓

INTERIOR DEPT.

APR 24 1962

SOLICITOR

You should send this by certified or registered mail so you have a record of delivery

INT.-DUP. SEC., WASH., D.C. M50943

5/1/62

Mr. Selfridge -

Operator submitted one voucher which was not paid because of property dispute.

Why make unilateral recission? Appears that "Recission of the OME Contract" should be proper in this case. The operator would thus agree to the recission.

Should be addressed to operator and not an individual.

FEJohnson

4/23/62

I doubt if we can certify; but should include royalty agreement in termination document.

FEJohnson

Advised that no [illegible] funds [illegible] necessary in order [illegible]

5/1/62

Mr. Selfridge -

Operator submitted one voucher which was not paid because of property dispute.

Why make unilateral recission? Appears that "Recission of the OME Contract" should be proper in this case. The operator would thus agree to the recission.

Should be addressed to operator and not an individual.

FEJohnson

Re: OMC-6094

I have summoned this Notice of Rescission, but question the preference of a "notice" to an "agreement".

Also, why address notice to a person rather than the entity? Hotchkiss signed letter and prior amendments, but contract was signed by Hall.

Talbert
9/1/62

P.S.: If notice is used, registered mail with return receipt requested should be used.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED JUN 25 1962

DATE		
6/25		800 500

June 21, 1962

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Acting Field Officer, OME, Region III

Subject: OME-6094 (Beryllium)
Contract 2119
Vitro Minerals Corporation
(Whitelock Claims)
Juab County, Utah

In response to your memorandum of June 18, 1962, enclosed are the following:

1. Letter of September 6, 1960 -- Mr. Smith wrote to Mr. Connors, transmitting three copies of cross-sections and drill hole maps of work Vitro Minerals Corporation had done prior to OME approval of the contract.

2. First monthly progress report submitted on November 8, 1960, covering the period from September 19, 1960 to October 31, 1960.

3. Letter of November 14, 1960 -- Mr. Smith wrote to Mr. Connors, submitting our assays.

4. Letter of November 23, 1960 -- Mr. Connors wrote to Cecil Smith regarding berylometer assays.

Hugh M. Connors

Hugh M. Connors

Enclosures

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Letter of November 14, 1960 -- Mr. Smith wrote to Mr. Connors, submitting our assays.

Letter of November 23, 1960 -- Mr. Connors wrote to Cecil Smith regarding berylometer assays.

AEC Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/5	Grisard	500
6/6	Talbert	800
6/6	GLA.	130
6/6	On leave	110
6-6	Fenwick	100
		220
		500

JUN 6 1962

Memorandum

To: Acting Field Officer, Region , Region III

From: Chief, Division of Field Operations

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

Enclosed is the Field Office's copy of Rescission of OME Exploration Contract, dated May 9, 1962, for the subject contract, signed by the Director and Mr. Eugene B. Hotchkiss.

George C. Selfridge

(Ph)

Enclosure

GLAult/a
6-5-62
cc to: Director's Reading File
Review Committee
Docket

43683

Vitro MINERALS CORPORATION

261 MADISON AVENUE · NEW YORK 16, N.Y. · MURRAY HILL 2-5700

May 29, 1962

OFFICIAL FILE COPY
O. M. E
RECEIVED MAY 31 1962

DATE	INITIALS	
		500
5/31	Cac	210

Mr. George Fumick, Director
U. S. Department of The Interior
Office of Minerals Exploration
Washington 25, D.C.

Re: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

Dear Mr. Fumick:

I am returning herewith four (4) signed copies of the rescission of OME Contract 6094 as per your letter of May 9th.

I would appreciate your returning to me all copies of "Company Confidential" information which we have submitted to you during the negotiation of the contract and the exploration operations that were conducted thereunder.

I sincerely appreciate your very fine cooperation in this matter, and I will look forward to further connections with your organization.

Very truly yours,

VITRO MINERALS CORPORATION

Eugene B. Hotchkiss

Eugene B. Hotchkiss,
Executive Vice President

EBH:ba

Encls.

MME Form 7
(10-58)

INTERIOR DEPT.
MAY - 3 1962
SOLICITOR

MAY 9 8 1962

OFFICIAL FILE COPY

Date	Surname	Code
5/3	[illegible]	500
5/3	[illegible]	140
	[illegible]	240
	Asst. Sol. Off	
5/8	[illegible]	800
5/9	[illegible]	130
"	[illegible]	110
5-9	[illegible]	100
5/10	[illegible]	220

Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
261 Madison Avenue
New York 16, New York

FROM SOLICITOR
MAY 8 1962
FOR SIGNATURE

Re: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

Dear Mr. Hotchkiss:

With reference to your letter of April 19, 1962, enclosed is a rescission agreement for the subject contract.

If this agreement is satisfactory to you, please sign all copies, retain the Operator's copy, and return the other copies to this office.

Sincerely yours,

George Fumich, Jr.

Director

Enclosures

Copy to:
Mr. Cecil H. Smith
Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake, Utah

GLAult/a
5-3-62
cc to: Director's Reading File
Review Committee
Region III (2) w/2 copies Mr. Hotchkiss' letr. 4/19/62
Docket

RECEIVED
MAY 3 1962
ASSOC. SOLICITOR
MINERAL DIVISION

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
4/23	Griswold	500
4/30	Keller	140
4-30	Brown	140
	App'd. Col. Off.	
5/1	Faibert	800
5/1	Hildebrand	130
		110
		100
		220

NOTICE OF RESCISSION OF EXPLORATION CONTRACT

To: Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
261 Madison Avenue
New York 16, New York

Operations Under Exploration
Contract No. 2119
Docket OME-6094 (Beryllium)
dated August 22, 1960

The United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereby rescinds the subject contract, as of the date thereof, on the following grounds:

You have advised us under date of April 19, 1962, that adverse title claims have created unavoidable delays in the past and that further delays must be anticipated. Furthermore, that you are unable to determine when these conflicts might be resolved so that work under the contract might commence.

The United States of America repudiates and denies any liability under the contract, and will make no contribution to costs incurred thereunder.

Dated this _____ day of _____, 1962.

RECEIVED
APR 25 1962
ASSOC. SOLICITOR
MINERAL RESOURCES

THE UNITED STATES OF AMERICA

By _____
Director, Office of Minerals Exploration

Copy to:
Mr. Cecil H. Smith
Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake, Utah

WRGriswold/gla 4-23-62
cc to: Director's Reading File Denver Cons.
Region III (2) w/2 cys Mr. Hotchkiss' letter 4-19-62
Contract Division
Fiscal Office
Docket
Code 500

43683

Vitro MINERALS CORPORATION
600 W. 33rd SO. ST. • P. O. BOX 15437 • SOUTH SALT LAKE 9 • TELEPHONE IN 7-5414

OFFICIAL FILE COPY
RECEIVED APR 30 1962
OME
DEPARTMENT OF THE INTERIOR
APR 25 1962
REGION III
DENVER, COLORADO

April 24, 1962

4/30	cog	800
		500

Mr. Hugh M. Connors
Acting Field Officer, OME Region III
OFFICE OF MINERALS EXPLORATION
Building 20, Federal Center
Denver 25, Colorado

Re: Docket OME - 6094
Contract No. 2119

Dear Mr. Connors:

I enjoyed our recent visit in Denver and wish to thank you for your help introducing us to the other members of the Bureau of Mines.

On returning to Salt Lake, I found that our New York Office had been talking to the Washington, D. C. OME Branch and that a letter of termination had been submitted to Washington.

Thank you for your and Mr. Romslo's help in obtaining and extending our Spor Mountain contract. It is regretable that our legal problems interfered with this work. Recent drill holes, drilled for mineral discovery, has definitely established our original estimate of mineral trends along the northeast faulting. I am sure this contract would have outlined significant beryllium mineralization.

Our Wyoming OME application is awaiting signing of the Subordination Agreement by the royalty holders. It is hoped that the agreement will be signed this month, and we will be able to submit it with the drilling bids to your office the first of May.

Very truly yours,

VITRO MINERALS CORPORATION

Cecil H. Smith
CECIL H. SMITH
Exploration Manager

Selfridge

CHS:bas

OFFICIAL FILE COPY
C. M. F.
RECEIVED APR 20 1962

DATE		
4-23		100
4/23		160
		720
		500

Vitro MINERALS CORPORATION

261 MADISON AVENUE • NEW YORK 16, N. Y. • MURRAY HILL 2-5700

April 19, 1962

Mr. George Fumick, Director
United States Department of
The Interior
Office of Minerals Exploration
Washington 25, D. C.

Re: Docket OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract OME 2119

Dear Mr. Fumick:

As you are aware, we were granted a recess on November 25, 1960 under the above-captioned contract due to adverse title claims against this property. Since that time, this recess has been extended on several occasions because of the inability to resolve these matters. At the present time one case which we won in the lower court is pending before the U. S. Circuit Court of Appeals.

Since further delays in clearing the title conflicts involving these claims are obvious, and since we are unable at this point to determine when these conflicts may be resolved, it is believed that this contract should be terminated.

We would, therefore, like to suggest that the above-captioned contract be terminated, effective with the date of this letter, without prejudice as to its reinstatement at some later date.

Very truly yours,

VITRO MINERALS CORPORATION

Eugene B. Hotchkiss

Eugene B. Hotchkiss,
Executive Vice President

EBH:ol
In Duplicate

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 27 1961

DATE	INITIALS	CODE
10/27	gad	VVO
		~~500~~
"	Treasurer	500

October 24, 1961

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D.C.

From: Acting Field Officer, OME, Region III

Subject: Docket No. OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Enclosed are the Government's, Fiscal Section's, and Audit's copies of the executed Amendment No. 4 to the subject contract.

Hugh M. Connors

Hugh M. Connors

Attachment

OFFICIAL FILE COPY
O. M. E
RECEIVED OCT 19 1961

DATE	INITIALS	CODE
10/19	[illegible]	800
[illegible]	[illegible]	800
		800

Building 20 - Federal Center
Denver 25, Colorado

October 16, 1961

Mr. Cecil H. Smith
Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Smith:

Enclosed are the Government's, Fiscal Section's, Audit's, Field Office's and Operator's copies of Amendment No. 4 to the captioned contract, all of which has been signed by the Director for the Government.

If the Amendment meets with your approval, all copies are to be signed by an official of the company who is authorized to sign such documents and all copies, except the Operator's copy, are to be returned promptly to this office.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

Enclosures
TMR/lm
cc Chief, Division of Field Operations, OME
Contract Corres. File No. 2119
Chron

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
10/11		–
	Brunnell	500
10/12	Talbert	800
10/11	Selfridge	130
"	Jordan	110
		100
10-12	gad	220
		500

OCT 1 2 1961

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

In accordance with Mr. T. M. Romslo's memorandum of October 2, 1961, we are enclosing the original and four copies of a proposed Amendment No. 4 to the cited contract, signed by the Director for the Government.

If the proposed amendment is satisfactory to you and the Operator, all five copies should be signed by the Operator. Thereafter, please distribute the copies in the usual manner.

If any part of the proposed amendment does not have your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office together with the proposed changes for consideration.

/s/ George C. Selfridge

(24B)

Enclosures

GLAult/a
10-11-61
cc to: Director's Reading File
Review Committee
Docket

43683

DRAFT
10/6/61
WRGriswold/gl

Copy of draft for Docket

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

AMENDMENT NO. 3

It is agreed this _____ day of _____, 1961, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and the Vitro Minerals Corporation, hereinafter called the "Operator," that Exploration Contract No. 2119 (Docket No. 6094), dated August 22, 1960, as amended, is further amended as follows:

1. Work under the project shall be suspended during the period beginning November 23, 1960, and ending not later than May 23, 1962.

(a) The Government shall not contribute to any costs incurred by the Operator during the period of suspension nor to any costs of rehabilitation or repair which in its opinion would not have occurred had the work not been suspended.

(b) 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 1 of the contract for completion of the work is further extended from 24 months (August 22, 1961) to 30 months (February 22, 1963).

3. The maximum period for royalty payments and the lien to secure the payment thereof provided for in Article 7(b)(2) of the contract is increased from eleven (11) years to twelve (12) years from the date of the contract.

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

THE UNITED STATES OF AMERICA

By_____
Director, Office of Minerals Exploration

VITRO MINERALS CORPORATION

By_____

Title_____

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/15	[illegible]	500
6/18	[illegible]	800
6/18	[illegible]	130
"	[illegible]	110
6/18	[illegible]	100
6/18	[illegible]	220
		500

JUN 1 8 1962

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

We are enclosing two copies of a May 29 letter from the Vitro Minerals Corporation relative to the referenced rescinded contract.

We were not clear as to just what was required and consequently we phoned the company attorney here to clarify matters for us. He now has given us the attached list. Will you, therefore, forward to us your copies of the letters, sections, maps, and progress report requested, and we will transmit to Vitro along with our copies.

George C. Selfridge

Enclosures

WRGriswold/gla
6-15-62
cc to: Director's Reading File
Review Committee
Docket

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED OCT 4 1961

DATE	INITIALS	
10-4	gad	VVO
		130
		100
	Grisowed	100

October 2, 1961

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D.C.

From: Acting Field Officer, OME, Region III

Subject: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Attached are two copies of a letter from the Operator dated September 29, 1961 requesting an extension of the suspension date for an additional six months to May 23, 1962.

The request for extension of the suspension date appears to be justified.

If you concur will you please prepare the Amendment.

T. M. Romslo

Attachments

Vitro MINERALS CORPORATION
600 W. 33rd SO. ST. • P. O. BOX 15437 • SOUTH SALT LAKE • TELEPHONE IN 7-5414

OFFICIAL FILE COPY
O M. E
RECEIVED OCT 4 1961
DATE | INITIALS | CODE

OME
DEPARTMENT OF THE INTERIOR
OCT 2 1961
REGION III
DENVER, COLORADO

September 29, 1961

Mr. Hugh M. Connors
Acting Field Officer, OME
Region III, Office of Minerals Exploration
Building 20 - Federal Center
Denver 25, Colorado

Re: Docket OME - 6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spur Mountain Area)
Juab County, Utah

Dear Mr. Connors:

On May 11, 1961 the government approved Amendment No. 3 of the above contract extending our suspension date to November 23, 1961.

The clearing of our legal problems seems very slow, but headway is being made. Our principal problems were with Mr. Broadhurst and Mr. Whitelock. Depositions have been taken in these suits, and pretrial hearings are scheduled for the present court calendar.

In the meantime, a substantial part of the property included in our OME contract has been overstaked by The General Beryllium Corporation. The basis for this overstaking is not known, but we have been told by their agents that they feel they can tie up the property for at least two years and expect a settlement so that we can continue with our development program.

It is this sort of action that is delaying our resumption of the OME contract and forcing us to request an additional extension of the suspension date to May 23, 1962.

I am honestly unable to give you any idea when our many legal problems will be clarified, but as you know we were the first company to begin exploratory drilling in the area, geologic mapping and the many other preliminary steps necessary to the development of the mineral potential in this area.

DMEA-418v
OME-6094
Vitro Minerals Corporation

Vitro CHEMICAL COMPANY

A DIVISION OF VITRO CORPORATION OF AMERICA

342 MADISON AVENUE • NEW YORK 17, N. Y. • YUKON 6-2180

August 14, 1961

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 15 1961

DATE	INITIALS	CODE
8/16		100
8/16		110
8/16		800
	Bryswold	100
		400
		440
		220

Gentlemen:

WE ARE MOVING!

As of August 18th, 1961, we will be located at the corporate offices of Vitro Corporation of America, 261 Madison Avenue, New York 16, New York, on the 17th floor. Our telephone number will remain YUkon 6-2180.

Sincerely yours,

Marketing Department
VITRO CHEMICAL COMPANY

/kc

Our processing work is coming along nicely, thanks to the help and cooperation of the Salt Lake City branch of the Bureau of Mines.

I expect to be in Denver next Monday and would like to meet with you to discuss a possible OME loan on some unallocated uranium property in Wyoming. I am looking forward to seeing you and Mr. Romslo at that time.

Very truly yours,

VITRO MINERALS CORPORATION

Cecil H. Smith

CECIL H. SMITH
Exploration Manager

CHS:rc

OME
DEPARTMENT OF THE INTERIOR
OCT 2 1961
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 24 1961

DATE	INITIALS	CODE
7/24	Coe	210
"	Brisnard	500

July 20, 1961

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D.C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Enclosed are the Government's, Fiscal Section's, and Audit's executed copies of Amendment No. 3 to the subject contract.

A copy of Mr. Smith's letter is also attached.

Hugh M. Connors

Hugh M. Connors

Attachments

July 19, 1961

OME
DEPARTMENT OF THE INTERIOR
JUL 20 1961
REGION III
DENVER, COLORADO

Mr. Hugh M. Connors
Acting Field Officer, OME
Region III
UNITED STATES DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration
Building 20, Federal Center
Denver 25, Colorado

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Connors:

Enclosed please find all copies, excepting the Operator's Copy, of Amendment No. 3. These have been signed by Mr. E. B. Hotchkiss and are being returned to you as requested.

I have been trying to find someone to blame for this delay but must accept full responsibility. When the Amendment came in with your letter of May 15, 1961, I read the Amendment, very much pleased, and immediately put the entire package into our OME file. I can't promise that I won't have another lapse of memory, but will try not to.

Thank you for your assistance; let us hope we can get the drills started again soon.

Very truly yours,

VITRO MINERALS CORPORATION

COPY ORIGINAL SIGNED BY C. H. SMITH

CECIL H. SMITH
Exploration Manager

CHS:bas

Enclosures

cc: Mr. Hotchkiss

OFFICIAL FILE COPY O. M. E RECEIVED JUL 17 1961		
DATE	INITIALS	CODE
7-17	gad	VVO
7/17	[illegible]	800
		~~500~~
"	Brainard	500

Building 20 - Federal Center
Denver 25, Colorado

July 14, 1961

Mr. Cecil H. Smith
Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Smith:

On May 15, 1961 I forwarded you the Government's, Fiscal Section's, Audit's, Field Office's, and Operator's copies of Amendment No. 3 to the Captioned contract, all of which had been signed by the Acting Director for the Government.

If the Amendment met with your approval, will you please sign and return all copies, except the Operator's copy.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

HMC/lm
cc Chief, Division of Field Operations, OME
Contract Corres No. 2119
Chron

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
7/11	[illegible]	500
7/11	[illegible]	800
7/11	[illegible]	130
"	[illegible]	110
7-11	[illegible]	100
7-11	[illegible]	220
		500

JUL 1 1 1961

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

Please advise us with respect to the proposed Amendment No. 3 which you transmitted to the Operator on May 15, 1961. We have no further information in the docket to indicate the status of this matter.

/s/

George C. Selfridge

WRGriswold/gla

7-11-61
cc to: Director's Reading File
Review Committee
Docket

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Building 20, Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 18 1961

DATE	INITIALS	CODE
5/18	gad	WVO
5/18	[illegible]	800
"	[illegible]	500

May 15, 1961

Mr. Cecil H. Smith
Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Smith:

Enclosed are the Government's, Fiscal Section's, Audit's, Field Office's and Operator's copies of Amendment No. 3 to the captioned contract, all of which have been signed by the Acting Director for the Government.

If the Amendment meets with your approval, all copies are to be signed by an official of the company who is authorized to sign such documents and all copies, except the Operator's copy, are to be returned promptly to this office.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

Enclosures

cc: Chief, Division of Field Operations, OME

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
5/10	Griswold	500
5/11	Fabbri	800
5/11	[illegible]	130
"	Johnson	110
5/11	gad	220
		500

MAY 1 1 1961

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

With reference to your April 27 memorandum forwarding the April 24 letter of the subject Operator, we are enclosing the original and four copies (two pages each) of a proposed Amendment No. 3 to the contract. All copies have been signed by the Acting Director for the Government.

If the proposed amendment is satisfactory to you and the Operator, all five copies should be signed by the Operator. The Operator should retain its copy, you should retain the Field Office's copy, and the Government's, Audit's, and Fiscal Section's copies should be returned to this office.

If any part of the proposed amendment does not have your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office together with the proposed changes for consideration.

/s/ George C. Selfridge (WRG)

Enclosures

WRGriswold/gla
5/10/61
cc to: Director's Reading File
Review Committee
Docket

43683

RECEIVED
DATE
5/4 Key

Building 20 - Federal Center
Denver 25, Colorado

May 2, 1961

File

Memorandum

To: Robert W. Graham, Regional Director, Region III

From: Hugh M. Connors, Acting Field Officer, GSE, Region III

Subject: GSE Beryllium Projects

GSE Exploration projects for Beryllium in Region III are still inactive.

The Black Diamond claim near Custer, South Dakota has not yet resumed work on Stage II.

The Vitro Minerals Corporation project in the Spor Mountain area of Juab County, Utah is still in recess pending settlement of a claim boundary dispute.

OMZ 6094

Hugh M. Connors

HMC/lm
cc: Chief, Division of Field Operations, GSE (2)
A. S. Konselman for Bureau of Mines Monthly Report
File Chron

DRAFT
5/1/61
WRGriswold/gla

Docket copy

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OMK-6094

AMENDMENT NO. 3

It is agreed this _____ day of _____, 1961, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and the Vitro Minerals Corporation, hereinafter called the "Operator," that Exploration Contract No. 2119 (Docket No. 6094), dated August 22, 1960, as amended, is further amended as follows:

1. Work under the project shall be suspended during the period beginning November 23, 1960, and ending not later than November 23, 1961.

(a) The Government shall not contribute to any costs incurred by the Operator during the period of suspension nor to any costs of rehabilitation or repair which in its opinion would not have occurred had the work not been suspended.

(b) 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 1 of the contract for completion of the work is extended from 14 months (October 22, 1961) to 24 months (August 22, 1962).

3. The maximum period for royalty payments and the lien to secure the payment thereof provided for in Article 7(b)(2) of the contract is increased from ten (10) years to eleven (11) years from the date of the contract.

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

THE UNITED STATES OF AMERICA

By_____
Acting Director, Office of
Minerals Exploration

VITRO MINERALS CORPORATION

By_____

Title_____

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY O. M. E. RECEIVED MAY 1 1961		
DATE	INITIALS	CODE
5-1	gad	VVO
		130
"	Revised	500

April 27, 1961

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D.C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Attached are two copies of a letter from the Operator dated April 24, 1961 requesting an extension of the suspension date for an additional six months to November 23, 1961.

The request for extension of the suspension date appears to be justified.

If you concur will you please prepare the Amendment.

Hugh M. Connors

Hugh M. Connors

Attachments

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 1 1961

DATE	INITIALS	CODE

April 27, 1961

Mr. Cecil E. Smith
Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Smith:

This will acknowledge receipt of your letter dated April 24, 1961 regarding an extension of the suspension date on the captioned contract.

Your request has been referred to the Washington Office OME.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

HMC/lm
cc Chief, Division of Field Operations, OME (2)
Contract Corres 2119
Chron

Vitro MINERALS CORPORATION
600 W. 33rd SO. ST. • P. O. BOX 15437 • SOUTH SALT LAKE • TELEPHONE IN 7-5416

OFFICIAL FILE COPY
O. M. E
RECEIVED MAY 1 1961
DATE | INITIALS | CODE
OME
DEPARTMENT OF THE INTERIOR
APR 26 1961
REGION III
DENVER, COLORADO

April 24, 1961

Mr. Hugh M. Connors
Acting Field Officer, OME
Region III
Office of Minerals Exploration
Building 20 - Federal Center
Denver 25, Colorado

Re: Docket OME - 6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Connors:

We have recently learned that our Pretrial hearing regarding our conflict with Mr. L. E. Broadhurst has been vacated because of the absence of the judge from the city. The heavy court calendars in other states has forced the Federal Government to lend Federal Judges to help alleviate this condition. As "luck" would have it, the judge scheduled to try our case is in New York, and we do not know when he will be available.

It does appear now that we will be unable to settle our differences until after the suspension date, May 23, 1961, of our OME Contract.

We would like an extension of the suspension date for an additional six months to November 23, 1961.

Your assistance in this matter will certainly be appreciated. We are still confident of our position, if we can only get the case into the courts.

The Spors area still appears to be one of significance for the discovery of beryllium reserves. Exploration activity of other companies has greatly increased the potential, and several interesting metallurgical processes have furthered the economics of production from this area.

If you will need any additional information, please let me know.

Very truly yours,

VITRO MINERALS CORPORATION

Cecil H. Smith

CECIL H. SMITH
Exploration Manager

CHS:bas

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/30	Griswold	

January 30, 1961

Memorandum

To: Hazel Berry, Secretary, Review Committee

From: Grace L. Ault, Secretary, Division of Minerals

Subject: Amendment No. 1
OME-6094 (Beryllium)
Vitro Minerals Corporation
Spor Mountain Area
Juab County, Utah
Contract 2119

Mr. Griswold has reviewed Amendment No. 1, dated January 11, 1961, executed by the Acting Field Officer, Region III, and the Operator's representative, and approves it. Review by the Legal Division is unnecessary.

Grace L. Ault

43683

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 30 1961

DATE	INITIALS	CODE
1-30	gad	VVO
1/30	KEW	800
1 "	[illegible]	500

January 24, 1961

Mr. Cecil E. Smith
Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Smith:

Attached are the Operator's copies of Amendment No. 1 and Amendment No. 2 to the captioned contract.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

Enclosures
HMC/lm

cc Chief, Division of Field Operations, OME (2)
Contract 2119
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY O. M. E RECEIVED JAN 30 1961		
DATE	INITIALS	COPY
1-30	gad	VVO
		130
"	Received	500

January 24, 1961

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Enclosed are the Government's, Fiscal Section's and Audit's executed copies of Amendment No. 1 and Amendment No. 2 to the subject contract.

Hugh M. Connors

Hugh M. Connors

Attachments

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 23 1961

DATE	INITIALS	CODE
1-23	gad	200
1/23	[illegible]	800
"	[illegible]	500

January 19, 1961

Stephen R. Wilson
Supervising Mining Engineer
Division of Mineral Resources
Bureau of Mines
1600 East 1st South Street
Salt Lake City 12, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Whitlock Claims)
Juab County, Utah

Dear Steve:

Thank you for your memorandum of January 10, 1961 regarding the drill hole cuttings from the subject property. We are quite in accord that the metallurgical test work might be of value to all parties concerned. We see no objection to the discarding of barren samples.

We will appreciate your keeping us advised as to the progress of test work on these samples.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

HMC/lm
cc Chief, Division of Field Operations OME (2)
Contract No. 2119 Corres.
Chron

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 23 1961

DATE	INITIALS	
1-23	gad	1100
1/23	[illegible]	800
"	[illegible]	500

Building 20 - Federal Center
Denver 25, Colorado

January 18, 1961

Cecil H. Smith
Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Smith:

Enclosed are the Government's Fiscal Section's, Audit's, and Field Office's copies of Amendment No. 2 to the captioned contract, all of which have been signed by the Acting Director for the Government.

If the Amendment meets with your approval, all copies are to be signed by an official of the company who is authorized to sign such documents and all copies promptly returned to this office, upon receipt of which the Operator's copy will be forwarded you.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

Enclosures
HMC/lm
cc Chief, Division of Field Operations OME (2)
Contract Corres No. 2119
Chron

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/17	Griswold	500
1/17	Fulbright	800
1/17	SCL	130
"	Johnson	110
1-17	gad	220
		500

JAN 1 7 1961

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

We have your memorandum of January 11 (with enclosure) relative to test work on drill hole cuttings. We are quite in accord that such work might be of value to all parties concerned. We see no objection to the discarding of barren samples.

/s/
George C. Selfridge

WRGriswold/gla
1-17-61
cc to: Director's Reading File
Review Committee
Docket
Chron

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/13	61	500
1/13	Talbert	800
1/13	GCS.	130
"	Johnson	110
1-13	gad	220
		500

JAN 1 3 1961

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

With reference to your December 28, 1960, letter to the Operator covering a project recess, we have prepared a proposed Amendment No. 2 to the contract so that matters may be properly in order. The original and four copies are enclosed, all of which have been signed by the Acting Director for the Government.

If the amendment meets with your approval, please present it to the Operator for signature. Otherwise, if any proposed changes lie beyond your delegated authority, please return all copies, unsigned, with your comments.

When the amendment is executed, the Operator should retain its copy, the Field Office's copy should be retained by your office, and the Government's, Audit's, and Fiscal Section's copies should be returned to this office.

(S) George C. Selfridge

Enclosures

WRGriswold/gla
1-13-61
cc to: Director's Reading File
Review Committee
Docket
Chron

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 13 1961

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1-13	gad	2V0
~~1/19~~	~~[illegible]~~	1V0
1/13	[illegible]	800
1/17	[illegible]	500

January 11, 1961

AIR MAIL

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket OME 6094
Contract No. 2119
Vitro Minerals Corp.
Juab County, Utah

Enclosed are two copies of a memorandum from Stephen R. Wilson regarding the samples from the rotary holes drilled under the subject OME Contract.

It appears to me that the metallurgical work done by the Bureau of Mines on the Government's portion of the drillings would benefit the Government and the Operator.

Will you please advise your thoughts on this matter.

Hugh M. Connors
Hugh M. Connors
Acting Field Officer, OME
Region III

Attachments

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

DIVISION OF MINERAL RESOURCES

1600 EAST 1ST SOUTH STREET
SALT LAKE CITY 12, UTAH

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 13 1961

DATE	INITIALS	CODE

January 10, 1961

Memorandum

To: H. M. Connors, Acting Field Officer, OME, Denver, Colo.

From: Supervising Mining Engineer

Subject: Docket No. OME 6094 (Beryllium), Contract No. 2119, Vitro Minerals Corp., Juab County, Utah

Samples from the rotary holes drilled under the subject OME contract were delivered to this station by the contractor. We have stored the samples with the objective of using them for possible metallurgical test work, in the event your office has no immediate need for the samples.

Review of the logs of the holes has disclosed that the majority of the sections penetrated by the holes are essentially barren. OME holes A-2, A-3, A-4, and A-6 have zones of significant beryllium mineralization.

Metallurgists working on the Spor Mountain ore would like to use the mineralized samples from the above drill holes to continue their test work. The barren samples will be discarded, subject to your prior approval.

Stephen R. Wilson

Stephen R. Wilson

cc: H. W. Geehan
A. S. Konselman
C. H. Johnson

OME
DEPARTMENT OF THE INTERIOR
JAN 11 1961
REGION III
DENVER, COLORADO

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 13 1961

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1/30	[illegible]	800
		500

Building 20 - Federal Center
Denver 25, Colorado

January 11, 1961

Cecil H. Smith
Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake, Utah

Re: Docket OMR-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Smith:

Enclosed are the Government's, Fiscal Section's, Audit's, and Field Office's copies of Amendment No. 1 to the captioned Contract.

If the Amendment is satisfactory, please have an official of the Vitro Minerals Corporation, who is authorized to sign such documents, sign and return all copies of the Amendment to this office. We will then forward you the Operator's copy of Amendment No. 1.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

Enclosures
HMC/lm
cc Chief, Division of Field Operations OME (2)
Contract Corres No. 2119
S. R.Wilson
Chron

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 13 1961

DATE	INITIALS	CODE

EXPLORATION PROJECT CONTRACT
NEW PARK MINING COMPANY
DOCKET NO. OME-6091

AMENDMENT NO. 1

It is agreed this 11th day of January, 1961, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government", and Vitro Minerals Corporation, hereinafter called the "Operator", that Exploration Project Contract No. 2119 (Docket No. OME-6094), dated August 22, 1960, hereinafter called the "Contract" is amended as follows:

1. In EXHIBIT "A" under the heading, General Conditions, the specification "All holes shall be drilled through the rhyolite tuff host rock." is revised to read as follows:

> All holes shall be drilled through all the mineralized zones in the rhyolite tuff host rock.

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, nor the amount of any item designated maximum.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Acting Field Officer, Region III
Office of Minerals Exploration

VITRO MINERALS CORPORATION

By _____

Title _____

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 13 1961
DATE | INITIALS | CODE
OME
DEPARTMENT OF THE INTERIOR
JAN 6 1961
REGION III
DENVER, COLORADO

January 5, 1961

Mr. Hugh M. Connors, Field Officer
OME, Region III
United States Department of the Interior
Building 20 - Federal Center
Denver 25, Colorado

Re: Docket OME - 6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area), Juab
County, Utah

Dear Mr. Connors:

Vitro Minerals Corporation has temporarily suspended operation under its OME exploration project. We certainly hope to be able to reinstate this program shortly.

Our work to date has shown that significant savings can be made by both the government and Vitro, if we do not drill all our holes completely through the tuff bed in certain areas. All the mineralization on the southern part of our claims is found in the top part of the tuff bed. To complete the hole we have had to drill through from 100 feet to 300 feet of barren material. This condition is not true on the northern part of the claims, as we do know that significant mineralization exists in the Taurus area at the bottom of the tuff bed.

To expedite this project, it is requested to amend Exhibit A of our OME Contract 6094 to read:

> "All holes shall be drilled through all the mineralized zones in the rhyolite tuff host rock."

Yours very truly,

VITRO MINERALS CORPORATION

CECIL H. SMITH
Exploration Manager

CHS:bas

DRAFT
1/3/61
WRGriswold/gla

Docket copy

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

AMENDMENT NO. ~~1~~ 2

It is agreed this _____ day of _____, 1961, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and the Vitro Minerals Corporation, hereinafter called the "Operator," that Exploration Contract No. 2119 (Docket No. 6094), dated August 22, 1960, is amended as follows:

1. Work under the contract shall be suspended during the period beginning November 23, 1960, and ending not later than May 23, 1961.

(a) The Government shall not contribute to any costs incurred by the Operator during the period of suspension nor to any costs of rehabilitation or repair which in its opinion would not have occurred had the work not been suspended.

(b) 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.

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 as maximum.

THE UNITED STATES OF AMERICA
(3 spaces)

By_____
Acting Director, Office of
Minerals Exploration

VITRO MINERALS CORPORATION

By_____

Title_____

Building 20 - Federal Center
Denver 25, Colorado

December 28, 1960

ORIGINAL FILE COPY
O. M. E.
RECEIVED JAN 30 1960

DATE		
12/30	Cal	2.10
1/3/61	Received	1.30
		5.00

l H. Smith
loration Manager
tro Minerals Corporation
0 W. 33rd So. St.
. O. Box 15437
outh Salt Lake, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Smith:

This constitutes Government approval to recess the captioned exploration contract until May 23, 1961 as requested in your letter dated December 23, 1960.

Nothing in this 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 cost which is expressly designated "maximum".

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer
OME, Region III

HMC/lm
cc Chief, Division of Field Operations OME w/copy of Operator's Letter
ContractCorres No. 2119
Chron

December 23, 1960

Mr. Hugh M. Connors, Field Officer
OME - Region III
Building 20 - Federal Center
Denver 25, Colorado

Re: Docket OME - 6094 (beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain Area)
Juab County, Utah

Dear Mr. Connors:

Vitro Minerals Corporation requests a recess under our OME Exploration Contract for a period not to exceed six months. We suspended operations on November 23, 1960 and would expect to resume operations prior to May 23, 1961. We are confident that we will be able to resume operations within a few months.

Very truly yours,

VITRO MINERALS CORPORATION

CECIL H. SMITH
Exploration Manager

CHS:bas

cc: Mr. E. B. Hotchkiss

OME
DEPARTMENT OF THE INTERIOR
DEC 27 1960
REGION III
DENVER, COLORADO

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 29 1960

DATE	INITIALS	CODE
12/29	CCC	210
12/29	HMC	800
"	Grantland	500

December 27, 1960

Mr. Cecil H. Smith, Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake 15, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain area)
Juab County, Utah

Dear Mr. Smith:

Thank you for the assay results in Mr. Snyder's letter of December 9, 1960. The Bureau of Mines informs me that they now have a new source in their laboratory Berylometer and have rerun the samples with results as shown below:

Hole No.	Interval	Vitro Beryllium Analyser 1 min. Count	Vitro Beryllium Analyser 5 min. Count	Vitro Chemical	U.S.B.M. Berylometer	U.S.B.M. Berylometer New Source
OME A-2	82 - 84	0.15% BeO	0.13% BeO	0.14% BeO	0.41% BeO	0.14% BeO
OME A-2	84 - 86	0.28% BeO	0.24% BeO	0.21% BeO	0.53% BeO	0.22% BeO
OME A-2	88 - 90	0.84% BeO	0.90% BeO	0.85% BeO	1.1 % BeO	0.78% BeO
OME A-2	90 - 92	0.61% BeO	0.61% BeO	0.59% BeO	0.88% BeO	0.54% BeO

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer
OME, Region III

HMC/lm
cc Chief, Division of Field Operations, OME
Contract Corres No. 2119
Chron

(A)

Hill

Vitro MINERALS CORPORATION

600 W. 33rd SO. ST. • P. O. BOX 15437 • SOUTH SALT LAKE • TELEPHONE IN 7-5414

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

DATE		
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12/15		800
		500

December 9, 1960

Mr. Hugh M. Connors, Field Officer
OFFICE OF MINERAL EXPLORATION - Region III
Denver Federal Center, Building 20
Denver 20, Colorado

Dear Mr. Connors:

Mr. Cecil Smith has asked me to relay the results of a comparison of assay results on four two-foot intervals from OME drill hole A-2, submitted to you to check our Beryllium Analyser assays. The following is a comparison of the results:

Hole No.	Interval	Vitro Beryllium Analyser 1 min. Count	Vitro Beryllium Analyser 5 min. Count	Vitro Chemical	U.S.B.M. Berylometer
OME A-2	82 - 84	0.15% BeO	0.13% BeO	0.14% BeO	0.41% BeO
OME A-2	84 - 86	0.28% BeO	0.24% BeO	0.21% BeO	0.53% BeO
OME A-2	88 - 90	0.84% BeO	0.90% BeO	0.85% BeO	1.1 % BeO
OME A-2	90 - 92	0.61% BeO	0.61% BeO	0.59% BeO	0.88% BeO

Our chemical results check the analyser results, but not the U.S.B.M. berylometer results.

We thought you would be interested in the comparison.

Sincerely yours,

VITRO MINERALS CORPORATION

David M. Snyder

DAVID M. SNYDER
Staff Geologist

DMS:bas
W.O. (2)
Konselman (1)
Salsbury (1)

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED DEC 13 1960
DATE
12-13 gad 770
12/14 800
500
440

December 8, 1960

Mr. Cecil H. Smith, Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 17437
South Salt Lake 15, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain area)
Juab County, Utah

Dear Mr. Smith:

This has further reference to our letter dated November 28, 1960 regarding an Amendment to the captioned contract.

Our Washington Office advises that they have no objection to preparing an Amendment for recess, assuming it would be for a reasonable period of time, but because title actions sometimes drag on endlessly, they could not provide a time limit of until "this title conflict is settled".

Will you please write this office and request an Amendment for a recess for a specific period of time which you feel will be fair for all concerned. This request for an Amendment should have two copies with the original.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer
OME, Region III

HMC/lm
cc Chief, Division of Field Operations OME (2)
Corres. No. 2119
Chron

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
12/2	Griswold	500
12/2	Talbot	800
12/2	[illegible]	130
"	Johnson	110
12/2	Case	220
		500

DEC 2 1960

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

We have your two memoranda of November 28, with enclosures, relative to payment of the Operator's September 19 through October 31, 1960, voucher. In view of the possible title conflict, it would be more discreet to withhold payment at this time.

We have no objection to preparing an amendment for recess, assuming it would be for a reasonable period of time. However, we could not provide a time limit of until "this title conflict is settled". Sometimes title actions can drag on endlessly. Please advise the Operator to request a specific period of time.

(S) George C. Selfridge (SLB)

WRGriswold/gla
12-2-60
cc to: Director's Reading File
Review Committee
Docket
Chron

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
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RECEIVED DEC 1 1960

DATE	INITIALS	
12-1	gad	220
12/1	[illegible]	800
"	Discarded	500
		130

November 28, 1960

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain area)
Juab County, Utah

We are processing the initial voucher on the subject project dated September 19 through October 31, 1960. In view of the Operator's possible title conflict, mentioned in his letter of November 25, 1960 a copy of which has been forwarded you, can we recommend payment of this voucher?

Hugh M. Connors

Hugh M. Connors
Acting Field Officer

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
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RECEIVED DEC 1 1960

DATE	INITIALS	COPY
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November 28, 1960

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain area)
Juab County, Utah

Enclosed is the original and one copy of a letter from the subject Operator requesting a recess. His reasons for requesting a recess appear valid to me but because of the legal aspects involved, I believe it would be better for your office to reply to Mr. Smith.

Hugh M. Connors

Hugh M. Connors

Attachments

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED DEC 1 1960

DATE	INITIALS	COPY

November 28, 1960

Mr. Cecil N. Smith, Exploration Manager
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake 15, Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain area)
Juab County, Utah

Dear Mr. Smith:

Thank you for your letter of November 25, 1960 requesting a recess on the captioned project.

Because of the legal matters involved in this project, I am referring your request to our Washington Office and they will advise you of their action.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer
OME, Region III

HMC/lm

cc Chief, Division of Field Operations (2)
Contract 2119
Chron

Vitro MINERALS CORPORATION
600 W. 33rd SO. ST. • P. O. BOX 15437 • SOUTH SALT LAKE • TELEPHONE IN 7-5414

OFFICIAL FILE COPY
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OME
DEPARTMENT OF THE INTERIOR
NOV 28 1960
REGION III
DENVER, COLORADO

November 25, 1960

Mr. Hugh M. Connors, Field Officer
OFFICE OF MINERAL EXPLORATION - Region III
Denver Federal Center, Building 20
Denver 20, Colorado

Dear Mr. Connors:

This letter is in confirmation of our telephone conversation of this morning.

Vitro Minerals Corporation is requesting a recess of our Exploration Contract OME 6094 - No. 2119. The recess is being requested due to the adverse title claim on the properties of the Spors Mountain area. The substance of the adverse claim is not a matter of record but apparently is based on an old document, stating that all Halloysite claims located by Mr. Whitelock would be located on behalf of Mr. Broadhurst. The claims, under our OME contract, were leased for fluorspar to an associate of Mr. Broadhurst's after his agreement with Mr. Whitelock.

Though we feel there is no basis for their claim, it seems advisable to protect both Vitro and the government from embarrassment by recessing our contract until such time as this title conflict is settled.

Yours very truly,

VITRO MINERALS CORPORATION

Cecil H. Smith

CECIL H. SMITH
Exploration Manager

CHS:bas

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 1 1960

DATE	INITIALS	CODE
12-1	gad	VRO
12/1	[illegible]	800
	[illegible]	500

Building 20 - Federal Center
Denver 25, Colorado

November 28, 1960

Mr. Cecil H. Smith, Exploration Manager
Vitro Minerals Corporation
600 W. 33rd [redacted]
P. O. Box [redacted]
South Salt Lake [redacted], Utah

Re: Docket OME-6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain area)
Juab County, Utah

Dear Mr. Smith:

This will advise you that the referenced Docket No. and Contract No. shown appear on all correspondance to the Office of Minerals Exploration.

Accordingly, the OME Contract No. on the title sheet for your September, October, 1960 Progress Report has been changed from 6094 to 2119.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer
OME, Region III

TMR
~~HMC~~/lm
cc Chief, Division of Field Operations (2)
Contract 2119
Chron

OFFICIAL FILE COPY O. M. E. RECEIVED NOV 28 1960		
DATE	INITIALS	CODE
11-28	gad	VVO
		~~VVO~~
11/28	[illegible]	800
"	~~[illegible]~~	500

Building 20 - Federal Center
Denver 25, Colorado

November 23, 1960

Gerald M. Park
O.M.E. Project Geologist
Vitro Minerals Corporation
600 W. 33rd So. St.
P. O. Box 15437
South Salt Lake 15, Utah

Re: OME 6094 (Beryllium)
Contract No. 2119
Vitro Minerals Corporation
(Spor Mountain area)
Juab County, Utah

Dear Mr. Park:

This constitutes Government approval to move hole A-20 to a location approximately 200 feet west, and hole A-21 move to a point approximately north 80° west 500 feet from A-19, as requested in your letter dated November 21, 1960.

Nothing in this work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of cost which is expressly designated "maximum".

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer
OME, Region III

HMC/lm
cc Chief, Division of Field Operations (2)
with (2) copies of Operator's letter
Contract Corres 2119
Chron

OFFICIAL FILE COPY
O. M. E
RECEIVED NOV 28 1960
DATE | INITIALS

OME
DEPARTMENT OF THE INTERIOR
NOV 22 1960
REGION III
DENVER, COLORADO

November 21, 1960

Mr. Hugh M. Connors, Field Officer
OFFICE OF MINERAL EXPLORATION
Denver Federal Center
Denver, Colorado

Dear Mr. Connors:

Proposed Amended Drill Hole Location

Enclosed herewith you will find a tracing of the claims covering the area in which we would like to propose a change in the location of two drill holes. The holes were originally planned, as shown on the sketch map, for Shelley 5 and 6. The hole OME A-19 was drilled as shown, but did not intersect the type of lithology expected from a projection of the tuff outcrop, which appears 500 feet to the south. It seems possible that the bed may have been cut off by faulting, or the area intruded by hypersthene latite (pre-tuff), which would place the tuff bed farther to the west than is indicated by the present dolomite outcrop pattern. The latter, at this time, seems most probable.

It is proposed that the hole marked A-20 on the south side of Shelley 6, be moved west approximately 200 feet, and if favorable results are not obtained, the hole A-21, originally scheduled for the north side of Shelley 5 be moved to a point approximately N 80° W 500 feet of A-19.

In these proposed positions, we could possibly gain a better understanding of the sub-surface geology in that immediate area.

I hope this meets with your approval.

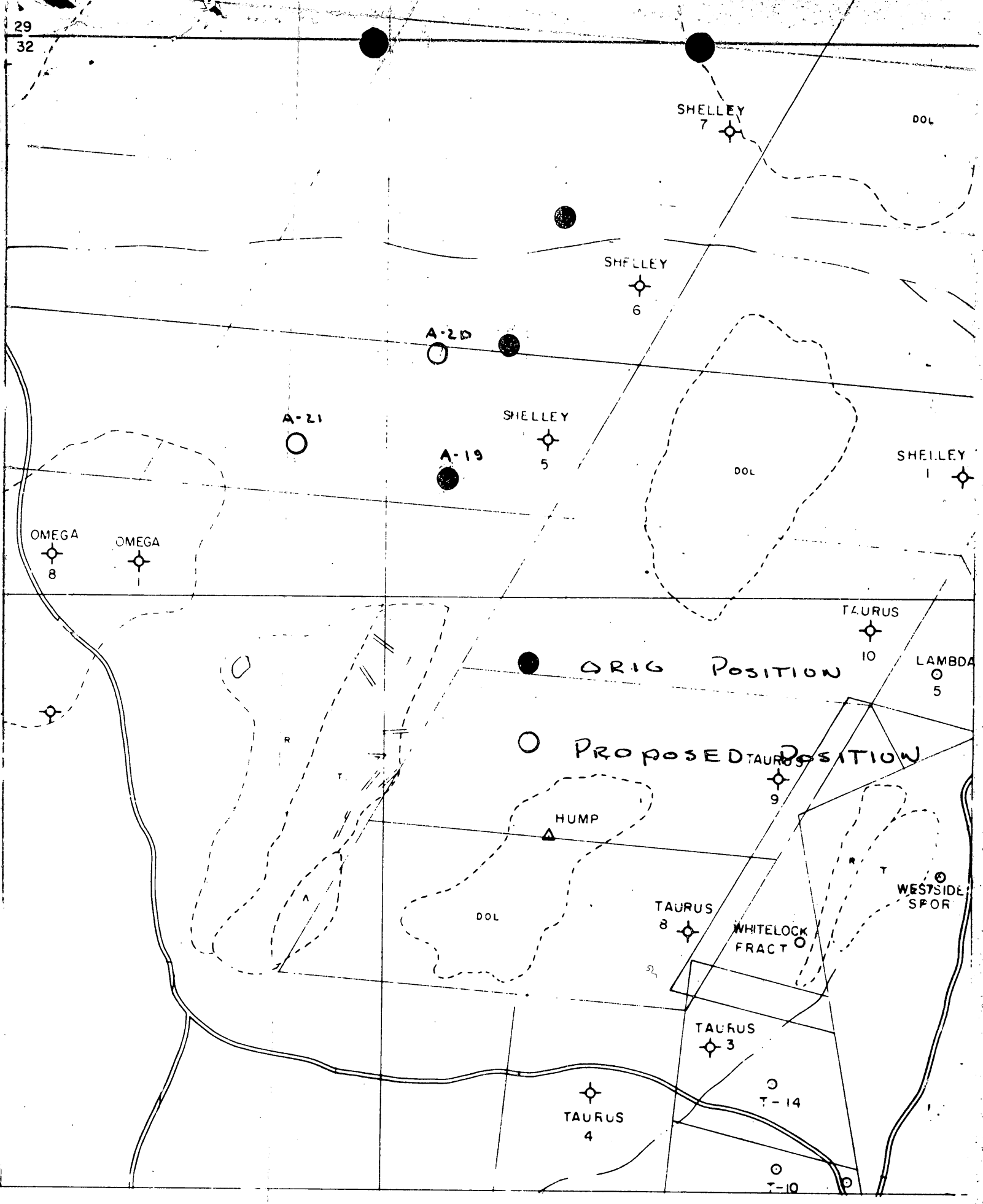
Sincerely,

VITRO MINERALS CORPORATION

GERALD M. PARK
O.M.E. Project Geologist

GMP:bas

Enclosure


29
32
SHELLEY
7
DOL
SHELLEY
6
A-20
A-21
SHELLEY
5
A-19
DOL
SHELLEY
1
OMEGA
8
OMEGA
TAURUS
10
ORIG POSITION
LAMBDA
5
PROPOSED POSITION
TAURUS
9
HUMP
DOL
TAURUS
8
WHITELOCK
FRACT
WESTSIDE
SPOR
TAURUS
3
T-14
TAURUS
4
T-10

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 29 1960

DATE	INITIALS	
9-29	gad	rvo
"	EJ	800
	~~Daniel~~	500

September 26, 1960

Mr. Hugh M. Connors, Field Officer
OFFICE OF MINERALS EXPLORATION
Denver Federal Center
Denver, Colorado

OME
DEPARTMENT OF THE INTERIOR
SEP 27 1960
REGION III
DENVER, COLORADO

Dear Mr. Connors:

In accordance with Exploration Contract OME-6094 "Beryllium," Vitro Minerals Corporation operator, began work on September 19, 1960 under this contract.

The trailer camp is being set up and drill sites will be prepared this week. Active drilling will begin October 3, 1960 and we should have some results by October 8, 1960.

Our first monthly report will cover our September work and all of October's activities.

Very truly yours,

VITRO MINERALS CORPORATION

CECIL H. SMITH
Exploration Manager

CHS:kd

W.O. (2)

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 29 1960

DATE	INITIALS	CODE
9-29	gad	220
		800
"	Returned	500
+ 2119		

Vitro MINERALS CORPORATION
600 W. 33rd SO. ST. ○ P. O. BOX 67 ○ SOUTH SALT LAKE ○ TELEPHONE IN 7-5414

September 26, 1960

Contract

OME
DEPARTMENT OF THE INTERIOR
SEP 27 1960
REGION III
DENVER, COLORADO

Mr. Hugh M. Connors, Field Officer
OFFICE OF MINERALS EXPLORATION
Denver Federal Center
Denver, Colorado

Dear Mr. Connors:

It was most enjoyable talking to you last Friday, even if it was only by telephone. I am looking forward to visiting the Topaz Beryllium claims with you and Marty Romslo in the near future.

As I explained on the phone we are planning to contract our trailer camp facilities out to Vitro Chemical Company. They will place two trailers in the field, one to be used as an office and laboratory, the other as sleeping and cooking facilities.

The Vitro Chemical Company will purchase the trailers and rent them to Vitro Minerals at a price equal to or less than we can obtain from other companies in the Salt Lake area.

This approach to the trailer camp problem will enable us to furnish adequate facilities at a much lower cost than the $1,800/month as proposed in the contract.

The Vitro Chemical Company will furnish all food, water, power and other necessary supplies for the trailer camp at cost.

Thank you for your assistance in working out the details of the trailer camp. Now all we have to do is keep our fingers crossed for a successful exploration program.

Yours very truly,

VITRO MINERALS CORPORATION

Cecil H. Smith

CECIL H. SMITH
General Manager

CHS:kd

W.O. (2)

STANDARD FORM 14
REVISED MAY 1952
PRESCRIBED BY GENERAL
SERVICES ADMINISTRATION
REG. 2-IX-203.00

TELEGRAPHIC MESSAGE

OFFICIAL BUSINESS—U.S. GOVERNMENT

FROM Vitro Minerals Corporation
Salt Lake City Utah

BUREAU

CHG. APPROPRIATION

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 28 1960

DATE	INITIALS	CODE
9-28	gad	VVO
"	[illegible]	800
"	[illegible]	500

Hugh M. Connors
Acting Field Officer, OME, Region III
Building 20 - Federal Center
Denver 25, Colorado

ACTIVELY BEGAN WORK SEPTEMBER 19, 1960 on the EXPLORATION CONTRACT OME 6094. LETTER WITH TWO COPIES WILL FOLLOW.

VITRO MINERALS CORPORATION
SALT LAKE CITY, UTAH
CECIL H. SMITH

Contract 2119
cc: Chief, Division of Field Operations (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY O. M. E. RECEIVED SEP 12 1960		
DATE	INITIALS	CODE
9-12	gad	VVO
9/12	[illegible]	800
9/13	[illegible]	500

September 9, 1960

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket OME-6094 (Beryllium)
Contract 2119
Vitro Minerals Corporation
(Whitlock claims)
Juab County, Utah

Attached are two copies of cross sections and drill hole maps on the subject property together with copies of the forwarding letter from C. H. Smith, exploration manager.

Hugh M. Connors

Hugh M. Connors

Attachments

P. S. Two copies of a geology & claim map are being forwarded under separate cover

HMC,

See Cross section and drill hole maps filed in Folder No. 3.

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
8/29	Griswold	500
"	Fisher	800
8/29	Seefridge out leave	130
"	Johnson	110
8/29	gad	220
		500

AUG 29 1960

Memorandum

To: Acting Field Officer, Region III

From: ACTING Chief, Division of Field Operations

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah
Contract 2119

We are enclosing the Field Office's copy of the contract covering the Vitro project, which has been executed by both parties concerned.

It is our understanding, from phone conversations with the representative of the company, that some of the holes delineated under Stage I of the contract may already have been completed. However, this should not present any problem since alternate holes may be substituted, with your approval. We were also advised that the Operator may wish to do some Stage I drilling at intervals of less than 500 feet. We could so provide, with an amendment, if you should feel it to be desirable.

/s/ W. R. Griswold

Enclosure

WRGriswold/gla
8-29-60
cc to: Director's Reading File
Review Committee
Docket
Chron

43683

Vitro MINERALS CORPORATION
261 MADISON AVENUE • NEW YORK 16, N. Y. • MURRAY HILL 2-5700

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 26 1960

DATE	INITIALS	CODE
8-26	gad	VVO
		VOO

August 25, 1960

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

Re: OME-6094 (Beryllium)
Whitelock Claims - Juab County, Utah

Dear Mr. Johnson:

Please find here enclosed original and three duly executed copies of OME Contract 6094.

As requested in the last paragraph of your transmittal letter of August 22nd, insertions of the missing information have been made.

Very truly yours,

Norma J. Sklarey

Norma J. Sklarey
Secretary to
Eugene B. Hotchkiss

Enclosures - 4

Audit copy
To 800 8-26-60

KB 8/26

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
8/23	gad	220
"	Griswold	500

AUG 23 1960

Memorandum

To: W. R. Griswold, Chief
Division of Minerals

From: E. D. Talbert, Acting Chief
Contract Administration and Audit Division

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah

As evidence of efforts to obtain financing from private sources of credit, the subject applicant submitted with its April 27 application for financial assistance in minerals exploration copies of the following:

(a) A June 21 letter from the applicant to the Walker Bank & Trust Company, Salt Lake City, Utah, and the bank's June 22 reply; and

(b) A June 27 letter from the Bankers Trust Company, New York, to the Vitro Corporation of America, which is one of the applicant's parents.

The correspondence with the Walker Bank & Trust Company fully meets the requirements of section 1(a) of the application form; however, the letter from the Bankers Trust Company does not.

Subsequently, the applicant submitted copies of its August 1 letter to the Bankers Trust Company and an August 10 reply. This correspondence fully meets the requirements of section 1(a) of the application form. The applicant also submitted letters dated July 7 and 8 from its parent corporations, Rochester & Pittsburgh Coal Company and Vitro Corporation of America, respectively, refusing requests for financing of the proposed exploration work.

On the basis of the foregoing correspondence, it appears that the applicant is financially eligible for federal assistance in the exploration project.

Attachment

EDTalbert/ama
August 23, 1960

Copy to: Docket
Director's Reading File
Mr. Talbert

43683

OME-6094

Application dated 6/27/60, recd 6/28/60 $88,216.00

Vitro Minerals Corporation, Salt Lake City, Utah
Owned 50% each by Vitro Corporation of America, New York City and Rochester & Pittsburgh Coal Company, Indiana, Pa.

Ltr: 6/21/60 from Vitro Minerals Corporation requests a $44,000, ten year, 6½% loan for trenching & drilling.

Reply 6/27/60 from Walker Bank & Trust Company, Salt Lake City, regrets "that our present loan program would not permit us to make or participate in such a loan". (No offer of collateral)

Ltr. 6/27/60 from Bankers Trust Company, New York, to Vitro Corporation of America denies $100,000 loan to Vitro Minerals Corporation "since it apparently would be neither short term nor self-liquidating". (no date of request; no indication of terms requested, an offer of collateral, or proposed use of funds; the request was apparently from one of parents; and amount is more than double the requirement)

Ltr. 7/7/60 from Rochester & Pittsburgh Coal Company to Vitro Minerals Corporation states "under current circumstances, unwilling to furnish all or any part of funds necessary for the exploration work".

Ltr. 7/8/60 from Vitro Corporation of America to Vitro Minerals Corporation states "under existing circumstances it is impossible * * * to comply with this request [for advance of funds for exploration program]".

Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
8/17	Duane	500
8/17	Talbot	800
8/18	E.A. Lilly on behalf	130
		~~110~~
8/22	gad	220
		500

AUG 22 1960

Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
261 Madison Avenue
New York 16, New York

Re: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah

8/22

Dear Mr. Hotchkiss:

With reference to your application of June 27, 1960, we are enclosing the original and four copies of a proposed contract covering the project in question. The contract consists of the form, Lien and Subordination Agreements signed by Chester L. Whitelock, Annex I (three pages), Exhibit A (four pages), and one map. All copies have been signed by the Acting Director for the Government.

If the proposed contract meets with your approval, all copies should be signed by a duly authorized officer of your company, the required certification made, and the corporate seal affixed.

The copy marked "Operator's Copy" should be retained for your files and the balance returned to us. In the event that you are not in accord with the terms of the proposed contract, all copies should be returned to us, unsigned, with your comments.

Please note that the date for starting the work has been left open; this should be filled in by you. Also note that on page 3 of Annex I the book and page numbers covering the recording of the Shelley #2 claim are lacking, since they were omitted in your application. Kindly see that the proper insertions are made.

Sincerely yours,

/S/ Frank E. Johnson

Acting Director

(5/6)

Enclosures

WRGriswold/gla 8-17-60
cc to: Director's Reading File
Review Committee
Region III (2)
Docket
Chron

cc: Mr. Cecil H. Smith
Exploration Manager
Vitro Minerals Corporation
600 West 33rd South Street
Salt Lake City 15, Utah

43683

Form 7
-58)

I want to retype

OFFICIAL FILE COPY

Date	Surname	Code
8/19		110

August 19, 1960

Memorandum

To: The File

From: W. R. Griswold, Chief, Division of Minerals

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitlock Claims
Juab County, Utah

The project is concerned with the search for worthwhile deposits of beryllium ore in a type of environment previously never given consideration for ores of such type. Up to recently, ores of this metal have only been found in pegmatite or pegmatitic veins. Recently, discoveries of yet undetermined importance have been made in limestones and the present project deals with an occurrence in a gently-dipping rhyolite tuff. Whether or not this occurrence will prove to be worthwhile must, of course, be considered as conjectural at the present moment. However, it is interesting from the viewpoint of mass; the possibility exists that ores may be present in substantial volume. It seems obvious that if the use of beryllium is ever to reach material proportions, we must find sources of supply of much greater volume than is possible from the pegmatites and their allied veins.

Disagree?

Therefore, all reviewers have endorsed the present project, since the possibility of mass does exist. The work has been divided into two stages, with the usual provision that Stage II work will be contingent upon favorable results being obtained under Stage I. All work is non-core drilling. The costs established in the contract are largely based upon bids submitted. The incidental allowance per foot of drilling was taken from the Applicant's figures after eliminating one geologist.

The total project estimated cost is $75,440.00, of which half is in Stage I and half in Stage II. The lands in the contract are held under lease and are covered by Consent to Lien and Subordination Agreements.

Adequate bank letters were forwarded us from the Walker Bank & Trust Company, Salt Lake City, Utah, and the Bankers Trust Company, 529 Fifth Avenue, New York 17, New York.

WRGriswold

43683

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. F. E. Johnson	8/22	FEJ
2. G. C. Selfridge		
3. 220		
4.		
5.		
FROM: George C. Selfridge	8/22	GCS

FOR: Check items for action desired

____ Action ____ Reply for signature of _____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

copy sent to 500 by M+R. GCS

George: 8-19-60

Report on the Vitro Co. beryllium sample.

Kirk

Sample was returned to Johnson Aug. 19.

9-011
(Rev. May 1958)

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
GEOCHEMISTRY & PETROLOGY BRANCH

REPORT NO. IWX-943	FOR Harold Kirkemo	DATE August 18, 1960	
JOB NO. 4769	PROJECT OR ORGANIZATION	Mineral Resources Studies, Office of Mineral Mobilization MD-309-E	
LOT NO.	REFER TO OTHER REPORTS		

X-ray identification of areas of differing color and texture on "vitroite" specimen from Topaz Mt., Utah

[illegible] data	Film No.	Identification
[illegible], glassy, compact material adjacent to massive [illegible]	15395	Mixture of bertrandite and fluorite.
[illegible], pinkish-purple, prismatic material in massive, [illegible] purple material.	15392	Mixture of fluorite and bertrandite.
White, soft, compact material adjacent to massive purple material.	15396	Bertrandite.
Brown, spherulitic areas embedded in massive purple material.	15405	Mixture of bertrandite and fluorite.
[illegible] purple material on specimen.	15427	Mixture of fluorite and small amount of bertrandite.
Black, metallic-looking spherules embedded in massive purple material. (Insufficient material available for good x-ray data.)	15391	Mixture of fluorite and an unidentified material. (No uraninite present in pattern.)
[illegible]-black, soft area adjacent to massive purple material.	15460	Mixture of fluorite, bertrandite, and an unidentified mineral.

Copies to:

M. Fleischer
I. Norton
K. Chao

By Mary E. Mrose
Mary E. Mrose

Approved William G. Schlecht
William G. Schlecht
Liaison Officer

DRAFT
8/9/60
WRGriswold/gla

MME Form 50
Feb. 1959

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

EXPLORATION CONTRACT
(Long Form)

Docket No.	Commodity	Contract No.	County	State
OME -6094	Beryllium	14-23-090-	Juab	Utah

It is agreed _____ (Date), between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and

Vitro Minerals Corporation

whose mailing address is **600 West 33rd South, Salt Lake City 15, Utah**, hereinafter called the "Operator, as follows:

ARTICLE 1. Authority and scope.--(a) This contract, entered into under the authority of Public Law 701, 85th Cong., 2d sess. (72 Stat. 700; 30 U.S.C. § 641 - 646), consists of this form, the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed. The work is a search for new or unexplored deposits of the commodity designated above. The Operator shall begin the work on or before _____ (Date), and, subject to the provisions of Article 9 and Exhibit A, shall either have completed the work within 14 months from the date of the contract or shall have incurred allowable costs (see Article 6) in a sum not less than the total cost set forth in Exhibit A.

(b) The total allowable cost of the work set forth in Exhibit A is $ 75,440.00. The Government will contribute 50 percent of the allowable costs as they are incurred, in a total sum not in excess of $ 37,720.00 in accordance with the provisions of Articles 3, 4, 5, and 6. "Costs incurred" means costs that have been paid or have become due and payable, or that the Government determines have become obligations.

(c) Interest computation.--Simple interest computed annually at the rate of _____ percent shall accrue from the dates Federal funds are made available until the period specified for payment of royalty expires, or until the amount of Federal funds contributed is fully repaid with interest.

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

ARTICLE 2. Operator's rights in land.--(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's right of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances:

Interest of Lessor

(b) 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 lien agreement of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached as follows:

Lien and Subordination Agreements signed by Chester L. Whitelock

(c) The Operator shall preserve and maintain his right, title, or 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. 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 royalty on production and liens for the payment thereof. Two true copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 7 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. Performance of the work.--(a) Operator's responsibility.--The work shall be performed diligently, efficiently, in a workmanlike manner in accordance with good mining standards, and in compliance with State laws governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work as specified in Article 1(a).

(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 (see Article 6(a), Category (1)). 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, the Government will participate in payments to the independent contractor only as to work performed in accordance with the provisions of this exploration 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 production operations during the period that royalty is payable to the Government. The Operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 4. Contribution by the Government.--(a) The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5(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 and the Operator's final report has been received, the Government may withhold such sums as are necessary to protect its interests. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. 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. 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 all pertinent books, documents, papers, and records of the Operator. 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) Monthly reports.--The Operator shall provide the Government with five copies of monthly reports in three sections as follows:

(1) Operator's Monthly Voucher claiming costs for work performed;

(2) Operator's Progress Report showing the number of units of the various types of work performed; 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 monthly report). 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 the related costs.

(d) Report of sales.--The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's 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 the Government determines that 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 preparation or completion of the same 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 6. Costs.--(a) Allowable costs.--The allowable costs of the work to which the Government will contribute are limited to:

(1) the necessary, reasonable, and direct actual costs that are estimated in Exhibit A by categories as specified in this article; and

(2) fixed costs for units of work to be performed (per foot, per hour, etc.) agreed upon in lieu of actual costs and set forth in Exhibit A.

The Government will not contribute to costs under any category or subcategory omitted from the estimate of costs in Exhibit A. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost; any excess over a fixed unit cost; and any excess over the total allowable cost of the work are not allowable. The Operator shall incur such excesses for his own account without contribution by the Government, but the Operator is not obligated to incur more than his agreed percentage of the total allowable cost of the work.

Any category or subcategory or element thereof not designated as a maximum in this article or in Exhibit A may be exceeded, provided that the total allowable cost of the work, which is a maximum, is not exceeded.

CATEGORY (1)--INDEPENDENT CONTRACTS.--(See Article 3(b)). The total of this category and the average unit cost estimated for each type of work to be performed under an independent contract are maximums.

CATEGORY (2)--PERSONAL SERVICES.

Subcategory (a)--Supervision and Technical Services--All elements of this subcategory (number of supervisors, technicians, outside consultants, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)--Labor.

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

CATEGORY (4)--OPERATING EQUIPMENT.

Subcategory (a)--Rental.--The number of each rented item [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 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.--Costs of items listed under this category include all requirements, 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 total of this category is a maximum.

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

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

CATEGORY (6)--NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).--Costs of items listed under this category include all requirements, 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 total of this category is a maximum.

CATEGORY (7)--MISCELLANEOUS.--Includes requirements and costs that do not fall within any of the first six categories, such as repairs other than initial and maintenance of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, and communications.

(b) Nonallowable costs.--The Government will not contribute to the following costs:

(1) Costs of the land, such as rental, depreciation, depletion, or other costs 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 total cost. This provision does not apply to receipts from production which are subject to the Government's royalty under the provisions of Article 7.

ARTICLE 7. Repayment by Operator.--(a) Certification.--If the Government considers that mineral or metal production from the land covered by the contract may be possible as a result of the exploration work, it shall so certify in writing to the Operator at any time not later than six months after a sufficient final report and final accounting (see Article 5) have been furnished.

(b) Royalty on production.--The Operator, whether or not the producer (for example, if the Operator either transfers or does not retain his interest in the land), shall pay to the Government a royalty on all minerals and metals mined or produced from the land as follows:

(1) irrespective of any certification of possible production--from the date of the contract until the lapse of the time within which the Government may issue such certification or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first; or

(2) if the Government issues a certification of possible production--for a period of ten years from the date of the contract, or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first.

(c) Payment of royalty.--(1) The Government's royalty shall be five percent of the ~~Operator's~~ gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrate, 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 (such as treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight payable 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. No costs of the Operator are deductible in arriving at the "gross proceeds" as that term is here used.

The term "treatment processes" means those processes (such as milling, concentrating, smelting, refining, or equivalent, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form.

(2) 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.

(d) Unsold production.--If any production (ore, concentrate, 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, concentrate, 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 thereof in the form in which and at the time 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) Lien for payment.--To secure the payment of royalty (see Article 7(b)), the Operator hereby grants to the Government a lien upon his interest in the land and upon any production of minerals and metals therefrom until the royalty claim is extinguished by lapse of time or is fully paid.

(f) 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 Government, and this estimate shall be final and binding upon the Operator.

(g) No obligation to produce.--Nothing in this contract shall be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

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

ARTICLE 8. 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, and any reasonable and necessary cost thereof will be treated as an allowable cost of the exploration. After the completion of the work, termination of the Government's obligation to contribute, or when such property is not being used for the work, the Operator shall not use it elsewhere without the written consent of the Government and without paying a reasonable rental to be fixed by the Government for its proportionate interest.

(c) Disposal of property.--Upon the completion of the work, 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, sale to others, purchase by the Operator, or sale or transfer to 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 that cost more than $500, and shall not sell at less than 25 percent of the purchase price any item of property that 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 offers. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, explosives, pipe, or rail), 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 exploration.

(d) Default of the Operator re disposal.--If within 90 days after the completion of the work, termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, 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:

(1) in writing extend the time within which the Operator must dispose of or liquidate the property;

(2) by written notice to the Operator, place upon such property what it determines to be 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; and

(3) 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 9. Termination of the Government's obligations.--(a) If the Government determines that operations at any time have failed to achieve anticipated results and further work is 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 final accounting and reporting; and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

(b) If the Government determines that the Operator is 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 final accounting and reporting; and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 9 shall not affect the Government's rights as provided for in the contract with respect to royalty and liens to secure the payment thereof, and such rights shall be fully preserved.

(d) The determinations of the Government are subject to appeal under Article 13.

ARTICLE 10. Notices to be given by the Government may be delivered to the Operator, or may be sent by certified 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 11. 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 12. Nondiscrimination.--In connection with the performance of work under this contract, the Operator agrees not to discriminate against any employee or applicant for employment because of race, religion, color, or national origin. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Operator agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Government setting forth the provisions of the nondiscrimination clause.

The Operator further agrees to insert the foregoing provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

ARTICLE 13. Disputes.--Any dispute arising under this contract which is not disposed of by agreement shall be decided by the Director, Office of Minerals Exploration, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Operator. The decision of the Director, Office of Minerals Exploration, shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Operator mails or otherwise furnishes to the Director, Office of Minerals Exploration, a written appeal addressed to the Secretary. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence.

The term "Director, Office of Minerals Exploration," as used herein includes his duly authorized representative.

ARTICLE 14. Eight-Hour Law of 1912--Overtime compensation.--This contract, to the extent that it is of a character specified in the Eight-Hour Law of 1912, as amended (40 U. S. Code 324—326) and is not covered by the Walsh-Healey Public Contracts Act (41 U. S. Code 35—45), is subject to the following provisions and exceptions of said Eight-Hour Law of 1912, as amended, and to all other provisions and exceptions of said Law:

No laborer or mechanic doing any part of the work contemplated by this contract, in the employ of the Operator or any independent contractor contracting for any part of said work contemplated, shall be required or permitted to work more than eight hours in any one calendar day upon such work, except upon the condition that compensation is paid to such laborer or mechanic in accordance with the provisions of this clause. The wages of every laborer and mechanic employed by the Operator or any independent contractor engaged in the performance of this contract shall be computed on a basic day rate of eight hours per day; and work in excess of eight hours per day is permitted only upon the condition that every such laborer and mechanic shall be compensated for all hours worked in excess of eight hours per day at not less than one and one-half times the basic rate of pay. For each violation of the requirements of this clause a penalty of five dollars shall be imposed for each laborer or mechanic for every calendar day in which such employee is required or permitted to labor more than eight hours upon said work without receiving compensation computed in accordance with this clause, and all penalties thus imposed shall be withheld for the use and benefit of the Government.

ARTICLE 15. Copeland (Anti-Kickback) Act--Nonrebate of wages.--The regulations of the Secretary of Labor applicable to contractors and subcontractors (29 CFR, Part 3), made pursuant to the Copeland Act, as amended (40 U. S. C. 276c) and to aid in the enforcement of the Anti-Kickback Act (18 U. S. C. 874) are made a part of this contract by reference. The Operator will comply with these regulations and any amendments or modifications thereof and will be responsible for the submission of affidavits required of independent contractors thereunder. The foregoing shall apply except as the Secretary of Labor may specifically provide for reasonable limitations, variations, tolerances, and exemptions.

ARTICLE 16. Changes and added provisions.--

_____

_____

_____

_____

Executed in quintuplicate the day and year first above written.

VITRO MINERALS CORPORATION
(Operator)

By _____

Title _____

THE UNITED STATES OF AMERICA

By _____
Acting Director, Office of Minerals Exploration

I, _____ (Name), certify that I am the _____ secretary of the corporation named as Operator herein; that _____ (Name), who signed this contract on behalf of the Operator, was then _____ (Title) 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]

INT.-DUP. SEC., WASH., D.C. 52370

DRAFT
WRGriswold/gla
8-9-60

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

ANNEX I

The land referred to in Article 2 of the contract consists of 54 unpatented mining claims and is outlined in green on the attached map entitled, "Vitro Minerals Corporation, Bedrock Geologic Map of the Whitelock Lease, Spor Mountain Area, Juab County, Utah." The land is situated in sections 5 and 8, T. 13 S., R. 12 W., S.L.P.M., and in unsurveyed section 32, T. 12 S., R. 12 W., S.L.P.M.

The land is held by the Operator under a Mining Lease and Option, dated April 1, 1960, granted by Chester L. Whitelock. A Lien and Subordination Agreements is attached hereto and made a part hereof.

All claims are recorded in the Juab County Courthouse at Nephi, Utah, as follows:

Claim Name	Book	Page
Roadside #1	177	324
Roadside #2	177	359
Roadside #3	177	360
Roadside #4	177	361
Roadside #5	177	362
Emma #1	177, 178	286, 125
Emma #2	178, 177	287, 126
Emma #3	178, 177	288, 127
Emma #4	178, 177	289, 128

Claim Name	Book	Page
Emma #5	178, 177	290, 129
Emma #6	178, 177	291, 130
Emma #7	178, 177	292, 131
Emma #8	178, 177	293, 132
Emma #9	178, 177	294, 133
Emma #10	178, 177	295, 134
Sigma #1	177	619
Sigma #2	177	620
Sigma #3	177	621
Sigma #4	177	622
Sigma #5	177	623
Sigma #7	177	625
Sigma #8	177	626
Sigma #9	177	627
Taurus #1	177	517
Taurus #2	177	518
Taurus #3	177	538
Taurus #4	177	539
Taurus #5	177	540
Taurus #6	177	541
Taurus #7	177	542
Taurus #8	177	543
Taurus #9	177	544
Taurus #10	177	545

Claim Name	Book	Page
Lambda #1	177	597
Lambda #2	177	598
Lambda #3	177	599
Lambda #4	177	600
Lambda #5	177	601
Shelley #1	177	590
Shelley #2		
Shelley #3	177	591
Shelley #4	177	592
Shelley #5	177	593
Shelley #6	177	594
Shelley #7	177	595
Shelley #8	177	596
Omega #4	178	29
Omega #5	178	30
Omega #6	178	31
Omega #7	178	32
Argus #1	178	22
Argus #2	178	23
Argus #3	178	24
Argus #4	178	25

DRAFT
8/9/60
WRGriswold/gla

EXPLORATION CONTRACT
VITRO MINERALS CORPORATION
OME-6094

EXHIBIT A

The purpose of the project is to explore for ores of beryllium by non-core drilling from the surface, which shall be done in two stages. All of Stage I work shall be done as outlined herein and as much of Stage II as may be approved in advance by the Government. Stage II work shall be contingent upon favorable results having been obtained under Stage I.

General Conditions

Drilling shall be done to a size of not less than 4-3/4 inches of non-core hole.

The Government will not contribute to the cost of an incompleted drill hole.

The Government will not contribute to the cost of any hole drilled closer than 100 feet to the property boundary.

When drilling is being done in the rhyolite tuff, or in any other rock which may be found to serve as a host rock for beryllium ore, all cuttings shall be saved and properly stored and made available to the Government. In cases where samples are to be sent for assay, the sample shall first be split and the remaining half made available to the Government.

Each two-foot section from the drill holes shall be checked with a berylometer to determine the presence of beryllium mineralization. A controlled berylometer assay shall be made on each mineralized section and approximately 10 percent of the mineralized sections shall be chemically assayed as a check

of the berylometer results. Care shall be taken in the use of the berylometer to prevent the "drifting" which seems to appear in certain instruments after several hours of continuous operation.

All holes shall be drilled through the rhyolite tuff host rock.

The record of all logging, together with copies of all assays, shall be submitted with the Operator's monthly reports.

The work shall be supervised by an experienced mining engineer or geologist who shall devote full time to the project work. The Operator shall also provide such other technical services and labor as are required to complete the project work.

The locations of all drill holes are subject to prior approval of the Government.

The bulldozer used for road work and location preparation shall be of not less than D-6 size or similar size of other make.

An adequate trailer camp will be maintained for the housing and food of employees.

Description of the Work

Stage I

The work shall consist of approximately 24 non-core holes, totalling not to exceed 7,200 feet and located roughly as shown on the attached map, noted in Annex I. However, any of such hole locations may be changed with the prior approval of the Government.

Bulldozing shall be done as necessary for road work and preparation of drill locations. The Government will contribute to the cost of not to exceed 100 hours of such bulldozing.

Stage I holes shall be spaced at roughly 500-foot intervals.

Stage II

An additional 7,200 feet of drilling may be done at locations given prior approval by the Government. No Stage II drilling shall be done at a spacing of less than 100 feet.

Bulldozing shall be done as necessary for road work and preparation of drill locations. The Government will contribute to the cost of not to exceed 100 hours of such bulldozing.

Estimated Costs

Stage I

Actual Costs

Category (1) Independent Contracts		
2,200 feet non-core drilling,		
@ $3.10/ft.	$22,320.00	
100 hours bulldozing @ $15.00/hr.	1,500.00	
Trailer camp costs,		
4 months @ $1,800.00/month	7,200.00	$31,020.00
Category (3) Operating Materials and Supplies		
None except		
3,600 sample sacks at $0.04 each		144.00
Category (4) Operating Equipment		
None except		
Subcategory (a) Rental		
Rental of one pickup truck,		
4 months @ $100.00/month	$ 400.00	
Rental of one jeep station wagon,		
4 months @ $100.00/month	400.00	800.00

Category (7) Miscellaneous

None except

356 berylometer assays @ $1.00 each	$ 356.00	
36 chemical assays for BeO @ $10.00 each	360.00	$ 716.00

Fixed Unit Costs

Incidental allowance in lieu of Categories (2) through (7) except sample sacks and sample analyses and rental of truck and jeep, @ $0.70/ft. for 7,200 feet of drilling	5,040.00
Estimated Cost of Stage I	$37,720.00

Stage II

Actual Costs

Category (1) Independent Contracts

7,200 feet non-core drilling, @ $3.10/ft.	$22,320.00	
100 hours bulldozing @ $15.00/hr.	1,500.00	
Trailer camp costs, 4 months @ $1,800.00/month	7,200.00	$31,020.00

Category (3) Operating Materials and Supplies

None except	
3,600 sample sacks at $0.04 each	144.00

Category (4) Operating Equipment		
None except		
Subcategory (a) Rental		
Rental of one pickup truck,		
4 months @ $100.00/month	$ 400.00	
Rental of one jeep station wagon		
4 months @ $100.00/month	400.00	$ 800.00
Category (7) Miscellaneous		
None except		
356 beryllometer assays @ $1.00 each	356.00	
36 chemical assays for BeO		
@ $10.00 each	360.00	716.00
Fixed Unit Costs		
Incidental allowance in lieu of		
Categories (2) through (7) except		
sample sacks and sample analyses		
and rental of truck and jeep, @		
$0.70/ft. for 7,200 feet of drilling		5,040.00
Estimated Cost of Stage II		$37,720.00

S U M M A R Y

Total Cost of Stage I	$37,720.00
Total Cost of Stage II	37,720.00
Total Estimated Cost of Project	$75,440.00
Government Participation at 50%	$37,720.00

Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
8/8	Griswold	500
"	Johnson	110
8/8	gad	220
		500

AUG 8 1960

AIR MAIL

Mr. Cecil H. Smith
Exploration Manager
Vitro Minerals Corporation
600 West 33rd South Street
Salt Lake City 15, Utah

Re: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah

Dear Mr. Smith:

This will acknowledge receipt of your August 3 letter, with enclosures. We shall now proceed with the processing of your application. However, we are sure you realize that no final action could be taken until we receive copies of the additional bank correspondence as outlined in our July 22 letter.

In a phone conversation August 3 Mr. Eugene B. Hotchkiss, executive vice president of your company, advised the undersigned that this matter would be cared for. Hence, we will assume that this material will reach us in the near future.

Sincerely yours,

Frank E. Johnson (for)

Acting Director

cc to: Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
261 Madison Avenue
New York 16, New York

WRGriswold/gla
8-8-60
cc to: Director's Reading File
Region III (2) w/2cc Mr. Smith's letter August 3, 1960, and enclosures
Docket
Chron

see reply + Gelson's notes 8/11/60 left hand side

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
7/22	Griswold	500
7/22	Talbot	800
7/22	Selfridge	120
"	Johnson	110
7/22	gad	220
		500

JUL 22 1960

Vitro Minerals Corporation
600 West 33rd South
Salt Lake City 15, Utah

Re: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah

Gentlemen:

With reference to our letter to you of July 1, our requirements were partially covered by a letter, dated July 8, from your New York office transmitting the requested financial statement and the two letters from the parent companies. The letter stated that the required drill bids and the breakdown of trailer camp costs would be forwarded to us by the Salt Lake City office, but so far they have not been received.

In order to obviate any unnecessary delay, there is one other matter which you should care for at this time. In reviewing the application of Vitro Minerals Corporation, we find only the correspondence with one bank is acceptable. A letter from the Bankers Trust Company of New York, dated June 27, 1960, to Vitro Corporation of American was submitted. This letter apparently is a reply to a request for a loan of $100,000.00 made by Vitro Corporation of America. As we require copies of correspondence between the applicant and two financial institutions, it is suggested that you submit a copy of your financial statement to another bank requesting the terms under which it would make a loan in the same amount as requested from the Walker Bank and Trust Company by Vitro Minerals Corporation. Copies of the letter to this bank and its reply should be furnished to this office.

Early submission of the information requested will expedite the processing of your application.

Sincerely yours,

(signed) FRANK E. JOHNSON

(fl)

Acting Director

cc to: Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
261 Madison Avenue
New York 16, New York

WRGriswold/FEJohnson/gla
7-22-60
cc to: Docket
Dir. Reading File
Region III (2) w/2 cys Vitro Minerals Corporation, New York, let. 7/8/60
Docket
Chron

43683

see letter 8/3/60 left hand side

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 13 1960

DATE	INITIALS	CODE
7-13	gad	VVO
		130
7/13	FEJ	110
	Original	500

July 11, 1960

AIR MAIL

Memorandum:

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D.C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
(Whitelock claims)
Juab County, Utah

I concur with Harold Kirkemo's recommendation that the cited application be given prompt and favorable consideration because of the possible economic importance of the general area for the occurrence of beryllium. I also recommend approval of the applicant's proposed work program.

The recommendations are largely based on information contained in the well-prepared application, and Clemmons's Preliminary Report on the mineralization, mining, and concentration potentialities of the beryllium occurrence in the Spor Mountain area, West Central Utah. Copies of the report and its attached sections by S. R. Wilson and Carl Schack are enclosed.

Clemmons concludes that: "too little is currently known about the extent, minability and grade of the deposits to enable dependable assessment of their potentiality. There is a possibility that in the ultimate analysis, they might constitute an appreciable domestic reserve of beryllia, albeit of relatively low grade. Exploration is indicated, at least until such time as a conclusion can be reached as to whether or not the deposits will be economically minable. Concurrently, metallurgical work will be needed to determine whether or not the material can be economically treated for beryllia recovery."

W. R. Griffitts, one of the U.S.G.S. geologists mentioned by Kirkemo, reviewed the application. He concluded that the description of the geology, though brief, agrees with the survey's and that the logs and

FIELD ON-SITE REPORT

sections included with the application - "now makes me optimistic that a highly important beryllium deposit may be present." Regarding the applicant's statement (page 6) that Pleistocene gravel, conglomerate, and marl deposited on the flanks of the range, he stated that it is not emphasized, however that these young sediments form a blanket over most of the mineralized tuff bed." As to the proposed method of assay, he reported "it may be well to check the beryllium content of the tuff by several methods because several private assayers have had trouble making accurate beryllium determinations on unusual materials."

For your information, preliminary work with the Berylometer by the Bureau of Mines, Region III, shows that a 'drifting' in the results obtained with their particular instrument occurs after several hours of continuous operation. Up to then, the results obtained by repeatedly assaying a given sample are acceptable.

It is suggested that the applicant's proposed method of assaying is acceptable since inaccuracies in the Berylometer results should be picked up by chemically assaying ten percent of the samples.

Mr. Geehan had talked to me, prior to receipt of the application, regarding the possibilities of OME participation in testing the area under consideration. He expressed the opinion that the area held great promise of containing significant amounts of beryllium.

Our investigations also include a review of U.S.G.S. Bulletin 1069, Geology of the Thomas Range Fluorspar District, Juab County, Utah.

Hugh M. Connors

Hugh M. Connors
Acting Field Officer
OME, Region III

Copy

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 13 1960
DATE | INITIALS | CODE

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Bureau of Mines
Region III

Salt Lake City Metallurgy
Research Center

1600 East ~~1st South~~ Street
Salt Lake City 12, ~~Utah~~

June 24, 1960

Memorandum

To: Marling J. Ankeny, Director, Bureau of Mines

From: Research Director, Salt Lake City Metallurgy Research Center, Region III

Subject: Preliminary report on mineralization, mining, and concentration potentialities of the beryllium occurrence in the Spor Mountain area, west central Utah

You will recall asking for a report on the subject occurrence after you visited the area about two weeks ago.

I have summarized our joint view of the situation in this memorandum. As a first attachment for considering the geology and mining potentialities of the area there is a section prepared by Steve Wilson of the Mineral Resources group. A second section, prepared by Carl Schack, presents such metallurgical information as we have been able to gather in the intervening short period of time.

The beryllium occurrences on the western slope of Spor Mountain, Thomas Range of west central Utah, comprise a completely new type of beryllium mineralization. Preliminary data indicate that the alumina content of a magnesium montmorillonite-type clay, formed by the decomposition of a volcanic tuff, has been partially and irregularly replaced by beryllia. There is some evidence, not as yet authenticated, that the deposits could be extensive. Whether or not the material would be economically mineable in large tonnage quantities remains to be determined, as outcrops thus far examined appear to vary widely and rapidly in beryllium content. The developers believe they can outline appreciable tonnage of ore containing 0.5 to 0.6 percent BeO.

Current evidence indicates that the maximum grade product that could be obtained--montmorillonite in which all alumina had been replaced by beryllia--would contain about 7 percent BeO. However, due to the apparent variability, it seems likely that the average grade product that can be attained will be appreciably less than theoretical.

It seems likely that physical beneficiation can be used only to reject hard gangue from the berylliferous clay fraction. It probably will be impractical to separate berylliferous clay from unaltered clay.

Preliminary data indicate that the beryllia can be recovered from the clay by extractive metallurgical methods. Again we cannot anticipate the economic feasibility of this approach on the basis of present limited data on average grade.

In summary, too little is currently known about the extent, mineability, and grade of the deposits to enable dependable assessment of their potentiality. There is a possibility that in the ultimate analysis they might constitute an appreciable domestic reserve of beryllia, albeit of relatively low grade.

Exploration is indicated, at least until such time as a conclusion can be reached as to whether or not the deposits will be economically mineable. Concurrently, metallurgical work will be needed to determine whether or not the material can be economically treated for beryllia recovery.

B. H. Clemmons

Enclosures
cc: C. W. Merrill
R. W. Geehan
S. R. Wilson

SPOR MOUNTAIN, UTAH

MINING

General Geology

The Thomas Range area was mapped by the Geological Survey during 1951-52 as a result of discovery of several flurospar deposits on Spor Mountain, the western segment of the Thomas Range. The information appears in Bulletin 1069, "Geology of the Thomas Range Fluorspar District, Juab County, Utah," by M. H. Staatz and F. W. Osterwald.

Commercial fluorspar deposits occur in Ordovician and Silurian dolomite beds, principally at the higher elevations of Spor Mountain. A wide variety of tertiary volcanic rocks is present on Spor Mountain. They virtually surround the mountain on the flanks, and in general parallel the sedimentary rocks, with northeast strike and dip to the northwest.

Investigations to date indicate that beryllium mineralization is found chiefly in rhyolite tuff, which in some areas is exposed at the surface and in other areas is covered by variable thicknesses of rhyolite and recent Lake Bonneville sediments. In the areas drilled, the tuff lies on an erosional surface of Devonian dolomite.

The beryllium-bearing tuff deposits controlled by Vitro Minerals Corp. lie on the westerly slope of Spor Mountain, a short distance west and southwest of the commercial fluorspar occurrences. Investigations in three general areas over a total strike length in excess of 10,000 feet indicate that the rhyolite and tuff beds increase in thickness downdip to the northwest.

The beryllium-bearing tuff is a highly altered and brecciated rock containing considerable clay. In most occurrences the rock is soft and friable, in sharp contrast to the overlying rhyolite, which is extremely hard and abrasive. The tuff contains many irregular patches and nodules of light to dark purple fluorite.

Insofar as is known, beryllium mineralization is not present in the sediments that underlie the tuff. A minor amount has been noted in the rhyolite.

Extent of Exploration

Exploration by Vitro Minerals Corp. has been confined principally to three areas--Taurus, Roadside, and Blue Chalk. The claims covering the three areas were originally located for fluorite, which occurs in association with the beryllium mineralization. Bulldozer trenching was performed by the locator in searching for commercial fluorite deposits in the Taurus and Roadside areas.

Vitro Minerals Corp. obtained a lease on the claims in the three areas, as of April 1, 1960. Since the effective date of the lease a plane-table geologic map has been completed and surface sampling accomplished with a Berylometer. Surface trenching with a bulldozer, and rotary drilling were started in May 1960, and both are in progress at present. Approximately 5,000 feet of drilling has been completed in 35 holes, to date.

Exploration has been confined to areas of outcropping beryllium-bearing tuff or to areas a short distance downdip where the tuff has

only moderate cover of Lake Bonneville sediments and rhyolite. The Taurus, Roadside, and Blue Chalk areas and the intervening areas not yet explored cover a zone along the tuff outcrop greater than 2 miles.

Potential of the District

Exploration accomplished by Vitro Minerals Corp. in the Thomas Range, Juab County, Utah, in searching for workable deposits of beryllium ores, consists of surface trenching and rotary drill holes. The work has been concentrated near the outcrops of northwesterly dipping tuff beds, in areas most easily accessible to exploration.

Investigation has been conducted principally in three general areas, the Taurus, Roadside, and Blue Chalk, extending from north to south a distance in excess of 2 miles. Bulldozer trenching has revealed zones containing beryllium near the surface, and shallow drill holes have penetrated rhyolite overlying the tuff, the full thickness of the tuff bed, and a few feet into the underlying Devonian dolomite.

The mineralized tuff bed dips to the northwest at angles ranging from 15° to 25°. Assuming continuity of the tuff to the northwest, toward Fish Springs Valley, a large area of possible beryllium-bearing tuff is present. However, because the dip of the flow rocks is greater than the slope of the surface, and because the thickness of the beds appears to increase downdip, the distance from the surface to the tuff bed can be expected to be much greater to the northwest, downdip.

Exploration completed to date indicates that the tuff is erratically mineralized in different zones relative to the top and bottom of the tuff bed. In the Taurus area the tuff cut in the drill holes averages approximately 110 feet thick. Mineralization is present principally in zones near the top of the bed and a few feet from the bottom, at the lower contact with the Devonian dolomite. Holes drilled in the Roadside area have cut the tuff bed in thicknesses from 100 to 150 feet. Most of the beryllium mineralization in this area appears to be near the middle and top of the bed. The tuff bed in the Blue chalk area is much thinner than in the other areas. Here the bed, as shown in the drill holes, ranges from 25 to 50 feet in thickness. Beryllium mineralization is found principally near the middle of the bed, but also occurs near the top and bottom.

The beryllium content of samples taken by Vitro field men from surface trenches and drill holes has been determined by use of the Berylometer. Work accomplished to date near the outcrops of mineralized tuff in the most accessible areas has indicated that a moderate tonnage of tuff averaging approximately 0.5 percent BeO could be mined by open-pit methods. However, investigation of the tuft outcrops between the Taurus, Roadside, and Blue Chalk areas is necessary before a more reasonable estimate of the potential of the outcrop areas can be made. If this investigation is favorable, holes should be drilled downdip

to determine the extent of the mineralized tuff. If the tuff is present downdip, and is mineralized, a large tonnage is possible. However, underground mining will undoubtedly be necessary a short distance below the outcrop because of the increased cover of Lake Bonneville sediments and rhyolite to the northwest. An acceptable grade of ore will be difficult to maintain in mining both at the surface and underground because of the apparent erratic distribution of the beryllium mineralization.

Stephen R. Wilson

SPOR MOUNTAIN, UTAH

METALLURGY

The Samples Studied

Eight samples from beryllium occurrences on the west side of Spor Mountain have been examined. Three of the samples were channel cuts taken from trenches on the Roadside, Blue Chalk (Vitro), and Miller (independent) claims. The latter is located approximately one-half mile south of the Roadside prospect. As these represented different types and grades of beryllium-bearing tuff, each was studied in considerable detail. The other five samples were hand specimens, selected as representing unusual mineral facies of the berylliferous tuff. These were given only cursory examination.

The beryllium contents of the five specimens, as determined by a berylometer, are given in table 1, and incomplete chemical analyses of the three channel samples are given in table 2. Our berylometer assays, in the range above 0.1 percent BeO, check closely with normal analytical results.

TABLE 1. - Beryllium content of selected mineral specimens (hard materials)

Specimen	Analysis, percent BeO
Fluorite nodule	0.1
Siliceous nodule	.6
Black stained tuff	.1
Tan colored tuff	.8
Pink colored tuff	3.0

TABLE 2. - Chemical analyses of channel samples

Sample	Assay, percent				
	BeO	Al_2O_3	MgO	CaO	SiO_2
Roadside (Vitro)	0.18	7.9	6.9	6.8	55.1
Blue Chalk (Vitro)	.88	10.5	2.7	4.9	66.8
Miller (independent)	2.36	9.2	5.5	5.2	61.2

A detailed mineralogic study has been partly completed on the Roadside, Blue Chalk, and Miller claim samples. The pertinent facts developed by this study are as follows: The three samples are mineralogically similar as all three are altered volcanic tuffs. The principal minerals present are montmorillonite clay, volcanic glass, quartz, chalcedony, sanidine, feldspars, and minor amounts of fluorite, gypsum, calcite, mica, iron, and manganese oxides.

On the basis of preliminary chemical, X-ray, and differential thermal analyses of carefully prepared mineral products, it was concluded that the beryllium occurs in the magnesium montmorillonite clay. The element seems to have replaced aluminum in the crystal lattice of the clay mineral, as little or no beryllium was extracted by water leach or ion exchange leaching with ammonium acetate or chloride.

Analyses for beryllium in enriched clay fractions from each of the three samples revealed that the beryllium content of the clay is quite irregular. A clean clay fraction from the Miller ore contained 5 percent BeO, whereas clay fractions isolated from the Blue Chalk and Roadside claim samples assayed from as little as 0.1 to over 6 percent BeO.

The information obtained in the as yet incomplete studies suggests the following origin for the beryllium. The volcanic tuff, after

being emplaced, was subjected to weathering, whereby part of the volcanic glass in the tuff was altered to a magnesium montmorillonite. Subsequently, the tuff was invaded by beryllium-bearing hydrothermal solutions that irregularly replaced some to nearly all of the allumium in the lattice of the montmorillonite clay. Limited information precludes establishment at this time of any relationship between the beryllium content of the tuff and the amount of fluorite, secondary quartz, or other possible minerals emplaced by the postulated hydrothermal process.

The Possibility of Beneficiating the Ores

Little is known as yet about the nature and grade of ore that ultimately might be mined from the deposits, or in fact, whether the seemingly highly variable berylliferous material can be economically mined. As a consequence, the three available samples, which differ widely in grade and in proportions of the component minerals, probably are not fully representative. Hence, only tentative conclusions can be made as to the possibilities of upgrading the ores by mineral dressing methods.

The beryllium apparently occurs as an integral part of some of the montmorillonite clay in the ores. As tentatively defined by the mineralogic and chemical studies, the degree of beryllium replacement of aluminum in the clay is erratic. The aluminum in some of the clay has been almost completely replaced by beryllium and apparently in some clay in the same sample, hardly at all. When practically all the aluminum has been replaced, the clay contains about 7 percent BeO. This would, therefore, be the maximum grade of product that could be

anticipated from physical treatment, if such methods can be effectively applied at all.

The three samples that have been studied are all finely crystalline. The clay, an alteration product formed by incomplete weathering of the volcanic glass in the tuff, is disseminated throughout the samples and closely associated with the other minerals. In general, the clay component is soft and friable, but part of the clay has been silicified by secondary quartz and chalcedony to form relative hard and tough fragments.

These varying mineralogic and physical characteristics of the different samples seriously limit the feasibility of effectively beneficiating the ores by mineral dressing methods. There is little hope of finding a method for separating low-beryllium clay from high-beryllium clay. The silicified nature of some of the berylliferous clay, the close association with the other minerals, and the almost amorphous nature of the clay preclude effective liberation and segregation of the clay as a separate product.

The three samples examined have contained from 30 to 40 percent of magnesium montmorillonite clay. If more thorough exploration of the deposits shows that silicification of the clay is relatively uncommon, then it may be feasible to upgrade the tuff perhaps twofold by wet attrition grinding and sizing methods. Gravity, magnetic, electrostatic, and flotation methods do not appear to be promising.

A preliminary study was made to determine the general conditions required to dissolve the beryllium in the ores. The sample from the

Blue Chalk claim of the Vitro Chemical Co., which contained 0.9 percent B_eO, was selected for testing.

Attempts to water leach or effect a cation exchange between beryllium and ammonius ions were unsuccessful. The results of these tests also suggest that the beryllium has replaced aluminum in the clay lattice rather than the exchangeable cations such as magnesium and calcium.

Direct leaching of the ore with sulfuric acid at 70° C. dissolved only 50 percent of the beryllium. Only 40 percent of the beryllium was extracted by the standard Copaux fluoride fusion-acid leach procedure used by Brush Beryllium Co. despite use of a large excess of flux.

Extraction of over 95 percent of the beryllium was obtained when the ore was mixed with concentrated sulfuric acid, the mixture cured at 220° C., and then water leached. A total of about 75 pounds of acid per pound of beryllium extracted was used. Only exploratory tests were made with the acid cure procedure. Process details such as optimum amounts of acid, curing temperature and time, and amount of water needed for effective leaching and washing of the residue have not been defined.

Based on the promise that the sample used in the preliminary leaching tests is typical of the ores of the ares, the following generalizations probably are valid. (1) High extraction of beryllium is possible by an acid cure procedure. Acid requirements are likely to be in the range of 1,000 to 1,500 pounds per ton of ore processed. (2) The acid cure-water leach procedure dissolves not only beryllium

but many other constituents of the clay and the tuff. The resulting solution is of low-beryllium tenor and contaminated with large amounts of impurities. (3) Solution purification and beryllium recovery methods applicable to such low-grade and complex leach solutions have not been devised and are likely to be complicated and expensive. (4) There is little doubt that a chemical process can be developed for recovery of a high-grade beryllium product. Considerable research will be necessary on samples fully representative of typical grade ore before meaningful estimates can be made on expected recovery and quality of end product and on process details. Owing to the low-grade and complex nature of the ores and the indicated complicated chemical processing that would be required, production costs will be high.

Recommendations for Additional Laboratory Studies

The limited laboratory investigations that have been in progress for only 2 weeks have permitted formulating only tentative conclusions about the nature of the ores and their response to processing. Predicated on current understanding of the problems that need to be investigated, defined, and resolved, a three-step program of laboratory research is suggested. It comprises the following stages:

1. Continuation of the present limited studies on available but not necessarily representative samples. The purpose of these studies will be to arrive at definite conclusions about the mineralogic and physical nature of the ores, and to delineate in a general way the processing problems likely to be encountered in recovering high-purity beryllium products from the ores.

2. When sufficient field work has been completed so that the size, grade, and nature of the ore zones are reasonably well defined, additional representative samples should be obtained for detailed bench-scale research. This phase of the research program will be directed to determination of the precise conditions for effective leaching, solution purification, and product recovery. The possibility of upgrading representative ore by mineral dressing procedures also should be reexamined.

3. The final phase of the program would be directed to evaluation of the technical and economic feasibility of processing typical ore by round-the-clock pilot scale mill tests of the methods devised by the bench-scale research.

Carl Schack

Vitro MINERALS CORPORATION
261 MADISON AVENUE · NEW YORK 16, N. Y. · MURRAY HILL 2-5700

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O. M. E.
RECEIVED JUL 11 1960

DATE	INITIALS	CODE
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July 8, 1960

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

Re:OME-6094 (beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah

Dear Mr. Johnson:

I am enclosing herewith a copy of the audited financial statement of Vitro Minerals Corporation for the year ending December 31, 1959 and letters from our two parent companies stating their disinclination to furnish the funds necessary for the beryllium exploration program. This is in conformity with the request in your letter of July 1, 1960 directed to our Salt Lake City office.

The three bids for contract drilling and the breakdown of the trailer camp costs that you requested in the same letter will be forwarded to you from our Salt Lake City office.

Sincerely yours,

Eugene B. Hotchkiss

Eugene B. Hotchkiss
Executive Vice President

EGH:ec
Enc.

(See attachments filed left-hand side)

MME Form 7
(10-58)

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7/1	Gnaudl	500
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7/1	Johnson	110
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JUL 1 1960

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah

The cited application is being referred to you for consideration and recommendations. Copies of a memorandum, dated June 30, by Harold Kirekmo, USGS, relating to the project, are enclosed for your information. We endorse his suggestion that the proposed program be discussed with the Survey geologists who have just completed the field examination. It may be that you will also desire to discuss the proposed program with representatives of the Applicant in case you are not in accord with the proposed work outline.

The Applicant advised us that it will not be possible to work during the severe winter months, for obvious reasons. Hence, will you kindly let us have your comments at the earliest possible date.

An extra copy of the application is enclosed for your convenience.

As you know, Mr. Ankeny and Mr. Geehan recently visited this property and possibly someone else from the Bureau of Mines. It might be well to also discuss the proposal with Mr. Geehan and anyone else in the Bureau who is familiar with the area.

Enclosures

George C. Selfridge
by KJ

WRGriswold/gla
7-1-60
cc to: Director's Reading File
Review Committee
Harold Kirkemo, USGS
Docket
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MME Form 7
(10-58)

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JUL 1 1960

Vitro Minerals Corporation
600 West 33rd South
Salt Lake City 15, Utah

Re: OME-6094 (beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah

Gentlemen:

The application for assistance in exploring the subject property has been reviewed by the Division of Minerals of the Office of Minerals Exploration, and referred to Mr. H. M. Connors, Acting Field Officer, Region III, Office of Minerals Exploration, Building 20, Denver Federal Center, Denver 25, Colorado.

To complete your application, kindly provide us with three bids from independent contractors covering the contemplated drilling. The bids should specify the size of the non-core hole.

In your cost estimate you lump your "Trailer camp costs (field expenses)" at four months @ $1,800 per month. Please provide a reasonable breakdown on this item.

Also, please send us a copy of a recent financial statement of your company, showing assets and liabilities. In addition, we require letters from your two parent companies stating that, under current circumstances, they will not furnish the funds necessary for the exploration work.

The Regional Office will notify you in case other information concerning the application is needed.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

cc to: Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
261 Madison Avenue
New York 16, New York

WRGriswold/EEJohnson/gla/bih
July 1, 1960
cc to: Docket
Dir. Reading file
Review Committee
Region III (2)

43683

MME Form 7
(10-58)

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Vitro Minerals Corporation
600 West 33rd South
Salt Lake City 15, Utah

Re: OME-6094 (Beryllium)
Vitro Minerals Corporation
Whitelock Claims
Juab County, Utah

Gentlemen:

The application for assistance in exploring the subject property has been reviewed by the Division of Minerals of the Office of Minerals Exploration, and referred to Mr. H. M. Connors, Acting Field Officer, Region III, Office of Minerals Exploration, Building 20, Denver Federal Center, Denver 25, Colorado.

To complete your application, kindly provide us with three bids from independent contractors covering the contemplated drilling. The bids should specify the size of the non-core hole.

In your cost estimate you lump your "Trailer camp costs (field expenses)" at four months @ $1,800 per month. Please provide a reasonable breakdown on this item.

Also, please send us a copy of a recent financial statement of your company, showing assets and liabilities. In addition, we require letters from your two parent companies stating, ~~in effect, that they are not prepared to advance further funds to your concern at this time~~ for the exploration work.

The Regional Office will notify you in case other information concerning the application is needed.

Sincerely yours,

that, under current circumstances, they will not furnish the funds necessary for the exploration work.

Acting Director

cc to: Mr. Eugene B. Hotchkiss
Executive Vice President
Vitro Minerals Corporation
261 Madison Avenue
New York 16, New York

WRGriswold/gla
6-30-60
cc to: Director's Reading File
Review Committee
Docket
Chron
Region III (2)

43683

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 30 1960
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IN REPLY REFER TO:

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

June 30, 1960
Re: OME 6094 (Beryllium)
Whitelock claims
Vitro Minerals Corp.
Juab County, Utah

Memorandum

To: W. R. Griswold, Office of Minerals Exploration

From: Harold Kirkemo, U. S. Geological Survey

Subject: Review of application for exploration assistance

In a well prepared application Vitro Minerals Corporation proposes drilling 48 non-core drill holes on a two-stage program of exploration in search of beryllium-bearing ore on its claims on the west side of Spors Mountain. Total cost of the program is estimated at about $88,200 and work would be completed within four months from the date of the exploration contract.

Considering the thorough presentation of all results of exploration completed by the Vitro Minerals Corporation since April 1960, and the possible economic importance of this general area for the occurrence of beryllium, I recommend prompt and favorable consideration of this application.

A field examination of this area was made June 14-19, 1960, by geologists from the Denver office of the U. S. Geological Survey. Their examination of the area was helped by David M. Snyder and Benjamin Dickerson of Vitro Minerals Corporation. This on-site inspection of the Applicant's property within the month should make it unnecessary to request a field examination in considering this application.

I suggest that Mr. Connors, OME Field Officer, discuss this application and proposed exploration program with J. J. Norton, W. R. Griffiths, or M. H. Staatz, geologists, Geological Survey.

Harold Kirkemo

Harold Kirkemo

June 28, 1960

Vitro Minerals Corporation
600 West 33rd South
Salt Lake City 15, Utah

Subject: OME-6094

Gentlemen:

Your application for exploration assistance, dated June 27, 1960, submitted to our Washington office, has been assigned Docket Number OME-6094. Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Allen S. Dakan, Chief
Division of Administrative Management

Cy to: Vitro Minerals
New York Office
Region III

MINING LEASE AND OPTION

THIS AGREEMENT made this 1st day of April, 1960, by and between CHESTER L. WHITELOCK of Payson, Utah, herein called Lessor, and VITRO MINERALS CORPORATION, with offices at Salt Lake City, Utah, herein called Lessee,

WITNESSETH:

1. In consideration of Ten ($10) Dollars, receipt of which is hereby acknowledged, Lessor, as owner, does hereby let and demise to Lessee, upon the following terms, all of the real property described in Exhibit A hereto attached and made a part hereof by reference.

2. The original term of this lease is for twenty (20) years from the date first above written, subject to prior termination as hereinafter provided.

3. Lessor hereby grants Lessee the exclusive right for thirty (30) days from the date hereof to enter upon said property for the purpose of such mineral exploration, survey and examination as Lessee deems necessary.

4. Lessor, as soon as possible, but not more than ten (10) days from the date hereof, shall furnish Lessee with all documents of title and interest to the property, as well as any survey thereof, in Lessor's possession or control.

5. Before the end of the said exploration period of thirty (30) days, Lessee shall notify Lessor in writing whether it thereafter will continue this lease in force. Failure to give such notice will thereupon terminate this agreement.

6. If Lessee exercises said option to continue this lease agreement, it shall make payment to Lessor, at the time said notice to continue is given, of the sum of Twenty Five Hundred Dollars ($2,500), and it shall thereupon retain the right to exclusive

possession of the property. Within ninety days after the date hereinabove first written, Lessee either shall pay Lessor the further sum of Twenty Five Hundred Dollars ($2,500) or shall forfeit and surrender possession of the property, and this agreement shall thereupon terminate. Upon said payment, this agreement and Lessee's right of exclusive possession will continue in full force and effect. With said payment, Lessee shall give Lessor written notice of what mining claims in Exhibit "A" it elects to retain hereunder. Any claims not so retained shall be thereby released from this agreement.

7. Lessee will conduct its mining operations under this lease in a miner-like fashion, and will endeavor to find, develop and extract commercial ores from the property.

8. Upon all ores sold or shipped by Lessee from the property, it shall pay Lessor the following royalties: Ten per cent (10%) of the net mill returns, or if sold to a smelter, Ten per cent (10%) of the net smelter returns, all less unreimbursed freight costs paid by Lessee. Royalties shall be due and payable by the 10th of the month following the month Lessee receives ore payment.

9. Lessee shall have the exclusive control of all mining operations upon the above property, including but not limited to exploratory and development work, ore extraction and marketing.

10. Lessor, upon request of Lessee, shall make available to Lessee all interest Lessor may have in any rights of way across property of others for the purpose of transporting ore to market.

11. All taxes, assessments and other burdens validly levied or asserted by any public authority against Lessee's property and rights shall be paid in full and as due solely by Lessee. Lessee shall pay, as due, all expenses, charges and liabilities connected in any manner with its operations hereunder, lienable or

otherwise, and will protect Lessor and all said property from establishment of any such liability connected with such operations. Any severance or mine occupation taxes assessed upon Lessee's mining operations hereunder shall be prorated between Lessor and Lessee according to the percentage of the ore payments hereinabove reserved as royalty.

12. Lessee shall comply with all applicable statutes and regulations with respect to labor employed by the Lessee under this lease agreement.

13. Lessee shall at all times keep posted upon the property notices stating that the Lessee is occupying the premises under lease from the Lessor and that the title and interest of Lessor is not subject to any claim or encumbrance arising from the Lessee's operations thereon and Lessor is not liable for such claims.

14. During reasonable times while this lease is in force and effect, Lessor and/or his representatives shall be authorized at Lessor's and their own risk to go upon the property and go through any mines or workings thereon for the purpose of making examinations, inspections, surveys, and to take ore samples therefrom.

Lessee shall furnish Lessor a copy of each ore settlement sheet.

15. During this lease, Lessee agrees to perform all necessary annual labor upon the leased properties retained and file proofs thereof prior to the end of each assessment year.

16. Lessor warrants that he has the sole and unrestricted right to enter into this agreement and to lease the property interests herein described, and that he has no knowledge of any royalty or other interest or claim in conflict with or adverse to his property interests or possession or title to the mining claims, but in no event does Lessor warrant title to the property.

17. At any time while this lease agreement is in effect, Lessee shall have the option to purchase all of Lessor's right, title and interest in the property for the sum of One Hundred Fifty Thousand ($150,000), payable within thirty (30) days after the effective date of the notice exercising said option. Lessee shall exercise said option by at least thirty (30) days written notice to Lessor by registered United States mail. Conveyance shall be by a proper duly executed bargain and sale deed delivered to Lessee at the time of payment of the said purchase price.

Any and all payments and royalties, including those set forth in paragraph 6 hereof, paid or due Lessor at any time under this agreement shall be credited upon the purchase price. No royalties shall be due Lessor from and after the effective date of said notice, and this lease shall thereupon terminate.

18. Default on the part of Lessee in performance of the provisions hereof shall not thereby render this lease null and void, but in such case Lessor may notify Lessee in writing of such breach and Lessee shall have thirty (30) days thereafter in which to cure such default.

19. 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 Lessee, it being agreed, however, that upon the removal of the cause of suspension the work hereunder shall be promptly resumed.

20. Lessee may renew this lease for successive periods of five (5) years each up to an additional total of thirty (30) years upon giving Lessor written notice thereof at least sixty (60) days prior to the end of the lease term and any renewal term.

21. Lessee at any time, upon thirty (30) days written notice to Lessor, shall have the right to cancel and terminate this agreement as to any or all of the claims herein leased, and upon said termination all rights and obligations of the parties not already accrued as to said property designated shall cease; except that no such notice shall be given within sixty (60) days prior to the end of any annual assessment period unless the annual labor for such period has been performed.

22. Unless otherwise herein provided, notice to be given under this agreement shall be made in writing as follows:

(a) To Lessor - 494 South Main Street, Payson, Utah.

(b) To Lessee - 600 West 33rd South Street,
Salt Lake City, Utah

All notices shall be deemed given as of the date of mailing, postage prepaid.

23. Upon termination of this agreement for any cause, Lessee 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 its structures and buildings not permanently affixed to the land.

24. Either party shall have the right to assign and transfer his or its interest in this agreement, but neither party shall be required to recognize any transfer or change of ownership, however occurring or accomplished, until fifteen (15) days after being furnished by registered United States mail with written notice thereof.

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

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year herein first above written.

Witness:

Chester L. Whitelock

VITRO MINERALS CORPORATION

Asst. Secretary

By Eugene B. Whitelock
Exec. Vice President

Blanche Whitelock, as the wife of the above Lessor, Chester L. Whitelock, does hereby accept and ratify the above lease and option agreement, and agrees that any interest she may hold in any of the property thereby leased is subject to each and every term and provision thereof.

DATED this 1st day of April, 1960.

Blanche Whitelock

STATE OF UTAH)
COUNTY OF Utah) ss.

Be it known that on the 1st day of April, 1960, before the undersigned, a Notary Public in and for the State and County aforesaid, personally came and appeared Chester L. Whitelock and Blanche Whitelock, his wife, to me known as the same persons described in and who executed the above Mining Lease and Option, and who acknowledged the same to be their free act and deed for the purposes therein set forth.

IN WITNESS WHEREOF I have hereunto set my hand and official seal the day and year last above written.

Allen L. Hodgson
NOTARY PUBLIC
Residing at Payson, Utah

My Commission Expires:
May 4, 1962

[illegible]

[illegible]

✓ [illegible] No. 1 to 2

[illegible] No. 1 to 3

[illegible] No. 3 to 5

✓ [illegible] No. 1 to 5

[illegible] No. 2 and 3

✓ [illegible] No. 1 to 20

✓ [illegible] No. 1 to 10 1-5

✓ [illegible] No. 1 to 10

[illegible] No. 1 to 12

[illegible] No. 1 and 2

Spitzbergen No. 1 to 9

Jest No. 1 to 6

Sunday No. 1 to 12

✓ [illegible] 4-7

✓ [illegible]

✓ [illegible]

✓ [illegible]

✓ [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS #1 C. E. _____

HOLE NO. T-1 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	PROBED ASSAY	SAMPLE READING	LITHOLOGY
8 - 10	6			
12 - 14	11			
14 - 16	13			
16 - 18	13			
18 - 20	9			
20 - 22	110			
22 - 24	170			
24 - 26	82			
26 - 28	45			
28 - 30	22			
30 - 32	16			
32 - 34	6			
34 - 36	19			
36 - 38	4			
38 - 40	1			
40 - 42	1			
42 - 44	0			
44 - 46	5			
46 - 48	0			
48 - 50	3			
50 - 52	0			
52 - 54	0			
54 - 66	0			

application

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS #1 O. E. _____

HOLE NO. T-1 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING	PROBED ASSAY	SAMPLE READING	LITHOLOGY
66 - 68	0			
68 - 70	0			
70 - 72	6			
72 - 74	6			
74 - 76	8			
76 - 78	4			
78 - 80	6			
80 - 82	12			
82 - 84	11			
84 - 86	8			
86 - 88	11			
89 - 90	10			
90 - 92	10			
92 - 94	11			
94 - 96	9			
96 - 98	10			
98 - 100	7			
100 - 102				
102 - 104				
104 - 106				

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS C. E. _____

HOLE NO. T-2 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	PROBED ASSAY	SAMPLE READING	LITHOLOGY
0 - 2	12			
2 - 4	17			
4 - 6	4			
6 - 8	18			
8 - 10	5			
10 - 12	0		0	
12 - 14	0		0	
14 - 16	7			
16 - 18	16			
18 - 20	4		6	
20 - 22	10		10	
22 - 24	2		5	
24 - 26	5		5	
26 - 28	0		1	
28 - 30	0		0	
30 - 32	5			
32 - 34	12			
34 - 36	2			
36 - 38	0			
38 - 40	1			
40 - 42	3			
42 - 44	4			
44 - 46	1			

application

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G. E. _____

HOLE NO. T-2 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED		SAMPLE READING	LITHOLOGY
	READING	ASSAY		
46 - 48	0			
48 - 50	0			
50 - 52	2			
52 - 54	3			
54 - 56	0			
56 - 58	0			
58 - 60	3			
60 - 62	0			
62 - 64	0			
64 - 66	5			
66 - 68	0			
68 - 70	0			
70 - 72	0			
72 - 74	0			
74 - 76	0			
76 - 78	7			
78 - 80	2			
80 - 82	19			
82 - 84	24			
84 - 86	26			
86 - 88	22			
88 - [illegible]	23			
	18			

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G. E. _____

HOLE NO. T-2 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	PROBED ASSAY	SAMPLE READING	LITHOLOGY
92 - 94	24			
94 - 96	30			
96 - 98	32			
98 - 100	28			
100 - 102	34			
102-104	41			
104 - 106	0			
106 - 108	1			
108 - 110	3			
110 - 112	1			
112 - 114	0			
114 - 116	5			

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G. E. _____

HOLE NO. T-3 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED		SAMPLE READING	LITHOLOGY
	READING	ASSAY		
46 - 48	2			
48 - 50	0			
50 - 52	0			
52 - 54	3			
54 - 56	0			
56 - 58	0			
58 - 60	0			
60 - 62	0			
62 - 64	0			
64 - 66	1			
66 - 68	0			
68 - 70	3			
70 - 72	0			
72 - 74	0			
74 - 76	4		0	
76 - 78	1			
78 - 80	6		0	
80 - 82	1		0	
82 - 84	1		3	
84 - 86	0		2	
86 - 88	0		0	
88 - 90	5			
90 - 92	0		9	

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS O. E. _____

HOLE NO. T-3 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED		SAMPLE READING	LITHOLOGY
	READING cpm	ASSAY		
0 - 2	0			
2 - 4	2			
4 - 6	48			
6 - 8	14			
8 - 10	13			
10 - 12	7			
12 - 14	1			
14 - 16	7			
16 - 18	5			
18 - 20	4			
20 - 22	2			
22 - 24	9			
24 - 26	0			
26 - 28	4			
28 - 30	4			
30 - 32	0			
32 - 34	1			
34 - 36	0			
36 - 38	0			
38 - 40	12			
40 - 42	50			
42 - 44	45			
44 - 46	12			

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G. E. _____

HOLE NO. T-3 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING	PROBED ASSAY	SAMPLE READING	LITHOLOGY
92 - 94	5			
94 - 96	0		7	
96 - 98	3		3	
98 - 100	5			
100 -102	102			
102 - 104	74			
104 - 106	72			
106 - 108	32			
108 - 110	50			
110 - 112	53			
112 - 114	56			
114 - 116	55			
116 - 118	48			
118 - 120	37			
120 - 122	33			
122 - 124	28			
124 - 126	19			
126 - 128	20			
128 - 130	8			
130 - 132	16			
132 - 134	8			
134 - 136	2			
136 - 138	0			
138 - 140	0			

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G. E. _____

HOLE NO. T-4 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	PROBED ASSAY	SAMPLE READING	LITHOLOGY
0 - 2	0			
2 - 4	7			
4 - 6	0			
6 - 8	0			
8 - 10	1			
10 - 12	4			
12 - 14	2			
14 - 16	0			
16 - 18	0			
18 - 20	4			
20 - 22	0			
22 - 24	1			
24 - 26	5			
26 - 28	0			
28 - 30	0			
30 - 32	5			
32 - 34	0			
34 - 36	0			
36 - 38	0			
38 - 40	2			
40 - 42	4			
42 - 44	0			
44 - 46	0			

application

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS O. E. _____

HOLE NO. T-4 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED		SAMPLE READING	LITHOLOGY
	READING	ASSAY		
46 - 48	0			
48 - 50	0			
50 - 52	0			
52 - 54	1			
54 - 56	0			
56 - 58	0			
58 - 60	0			
60 - 62	2			
62 - 64	1			
64 - 66	0			
66 - 68	0			
68 - 70	0			
70 - 72	0 ?			
72 - 74	5			
74 - 76	5			
76 - 78	1			
78 - 80	1			
80 - 82	5			
82 - 84	0			
84 - 86	2			
86 - 88	0			
88 - 90	2			
90 - 92	0			

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS C. E. _____

HOLE NO. T-4 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED		SAMPLE READING	LITHOLOGY
	READING	ASSAY		
92 - 94	0			
94 - 96	5			
96 - 98	2			
98 - 100	0			
100 - 102	6			
102 - 104	3			
104 - 106	2			
106 - 108	3			
108 - 110	0			
110 - 112	0			
112 - 114	1			
114 - 116	4			
116 - 118	1			
118 - 120	0			
120 - 122	0			
122 - 124	5			
124 - 126	2			
126 - 128	10			
128 - 130	29			
130 - 132	41			
132 - 134	21			
134 - 136	16			
136 - 138	9			

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS C. E. _____

HOLE NO. T-4 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED		SAMPLE READING	LITHOLOGY
	READING	ASSAY		
138 - 140	10			
140 - 142	1			
142 - 144	0			
144 - 146	1			
146 - 148	4			
148 - 150	4			
150 - 152	3			

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS C. E. _____

HOLE NO. T-5 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED		SAMPLE READING	LITHOLOGY
	READING cpm	ASSAY		
0 - 36	0			
36 - 38	0			
38 - 40	4			
40 - 42	0			
42 - 44	0			
44 - 46	0			
46 - 48	4			
48 - 50	22			
50 - 52	96			
52 - 54	54			
54 - 56	72			
56 - 58	32			
58 - 60	11			
60 - 62	11			
62 - 64	11			
64 - 66	0			
66 - 68	4			
68 - 70	6			
70 - 72	11			
72 - 74	3			
74 - 76	0			
76 - 78	0			
78 - 80	10			

application

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G. E. _____

HOLE NO. T-5 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING	PROBED ASSAY	SAMPLE READING	LITHOLOGY
80 - 82	26			
82 - 84	7			
84 - 86	10			
86 - 88	10			
88 - 90	5			
90 - 92	2			
92 - 94	3			
94 - 96	0			
96 - 98	2			
98 - 100	0			
100 - 102	3			
102 - 104	2			
104 - 106	1			
106 - 108	1			
108 - 110	1			
110 - 112	21			
112 - 114	16			
114 - 116	7			
116 - 118	7			
118 - 120	4			
120 - 122	35			
122 - 124	28			

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G.E. _____

4,795.1 - Elevation

HOLE NO. T-6 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
0 - 40	-			Rhyolite
40 - 42	0			"
42 - 44	3			Tuffaceous - gray - bentonitic
44 - 46	0			"
46 - 48	2			"
48 - 50	2			"
50 - 52	0			"
52 - 54	2			"
54 - 56	0			"
56 - 58	6			"
58 - 60	4			"
60 - 62	0			"
62 - 64	1			"
64 - 66	2			"
66 - 68	0			"
68 - 70	1			"
70 - 72	3			"
72 - 74	0			"
74 - 76	3			Rhyolite
76 - 78	4			"
78 - 80	0			"
80 - 82	9			"

application

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G.E. _____

4,794.1 - Elevation

HOLE NO. T-6 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
126 - 128	0			Rhyolite
128 - 130	0			"
130 - 132	0			"
132 - 134	0			"
134 - 136	3			"
136 - 138	0			"
138 - 140	1			"
140 - 142	0			"
142 - 144	0			"
144 - 146	211			"
146 - 148	16			"
148 - 150	4			"
150 - 152	0			"
152 - 154	0			"

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G.E. _____

4,790.0 - Elevation

HOLE NO. T-7 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED cpm READING	ASSAY	SAMPLE READING	LITHOLOGY
0 - 10	-			All tan rhyolite 2 - 6 White rhyolite 8 - 10
10 - 12	0			Gray rhyolite - red alt.
12 - 14	14			" "
14 - 16	0			"
16 - 18	0			"
18 - 20	0			"
20 - 22	0			"
22 - 24	0			"
24 - 26	3			"
26 - 28	2			Clay - red and gray
28 - 30	0			"
30 - 32	0			"
32 - 34	0			Rhyolite with gray and red alt.
34 - 36	0			"
36 - 38	0			"
38 - 40	0			"
40 - 42	0			"
42 - 44	0			"
44 - 46	0			"
46 - 48	0			"
48 - 50	0			"
50 - 52	2			" application

PROPERTY WHITELOCK

LOCATION CLAIM TAURUS G.E.

4,790.0 - Elevation

HOLE NO. T-7 TOTAL DEPTH DATE

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING	ASSAY	SAMPLE READING	LITHOLOGY
52 - 54	2			Rhyolite - gray and red
54 - 56	0			"
56 - 58	0			"
58 - 60	0			"
60 - 62	0			"
62 - 64	0			"
64 - 66	0			"
66 - 68	0			"
68 - 70	0			"
70 - 72	0			Rhyolite - Gray
72 - 74	5			"
74 - 76	2			"
76 - 78	3			"
78 - 80	0			"
80 - 82	0			"
82 - 84	0			"
84 - 86	2			"
86 - 88	0			"
88 - 90	3			Tuff - gray-white - Bentonitic
90 - 92	9			"
92 - 94	15			"
94 - 96	29			"

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G.E. _____

4,795.1 - Elevation

HOLE NO. T-6 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
82 - 84	0			Rhyolite
84 - 86	1			"
86 - 88	2			"
88 - 90	19			"
90 - 92	6			"
92 - 94	3			"
94 - 96	0			"
96 - 98	0			"
98 - 100	0			"
100 - 102	0			"
102 - 104	0			"
104 - 106	0			"
106 - 108	0			"
108 - 110	4			"
110 - 112	6			"
112 - 114	4			"
114 - 116	0			"
116 - 118	0			"
118 - 120	0			"
120 - 122	0			"
122 - 124	0			"
124 - 126	3			"

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS C.E. _____

4,790.0 - Elevation

HOLE NO. T-7 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING	ASSAY	SAMPLE READING	LITHOLOGY
96 - 98	30			Tuff - gray-white - Bentonitic
98 - 100	6			Rhyolite "
100 - 102	0			"
102 - 104	0			"
104 - 106	0			"
106 - 108	0			"
108 - 110	0			"
110 - 112	0			"
112 - 114	0			"
114 - 116	0			"
116 - 118	0			"
118 - 120	0			"
120 - 122	0			"
122 - 124	0			"
124 - 126	0			"
126 - 128	0			"
		HOLE WENT BLIND		

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G.E. _____

4,785.3 - Elevation

HOLE NO. T-8 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
0 - 2	0			All tan rhyolite
2 - 4	0			"
4 - 6	0			"
6 - 8	0			Rhyolite - white
8 - 10	0			"
10 - 12	0			" with tan
12 - 14	0			"
14 - 16	0			"
16 - 18	0			"
18 - 20	0			Rhyolite - gray
20 - 22	0			"
22 - 24	0			"
24 - 26	0			"
26 - 28	0			Rhyolite - pink and red
28 - 30	0			"
30 - 32	0			"
32 - 34	0			"
34 - 36	0			"
36 - 38	9			"
38 - 40	0			"
40 - 42	0			"
42 - 44	0			" application

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS G.E. _____

4,785.3 - Elevation

HOLE NO. T-8 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
44 - 46	0			Rhyolite - red and pink
46 - 48	0			"
48 - 50	0			"
50 - 52	0			"
52 - 54	0			Rhyolite-weathered or tuff
54 - 56	0			"
56 - 58	0			"
58 - 60	0			"
60 - 62	0			"
62 - 64	0			"
64 - 66	0			"
66 - 68	0			"
68 - 70	0			"
70 - 72	0			Rhyolite - red
72 - 74	0			"
74 - 76	0			"
76 - 78	0			"
78 - 80	0			"
80 - 82	0			"
82 - 84	0			"
84 - 86	0			"
86 - 88	0			"

PROPERTY WHITELOCK

LOCATION CLAIM TAURUS C.E.

4,785.3 - Elevation

HOLE NO. T-8 TOTAL DEPTH DATE

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
88 - 90	0			Rhyolite - red
90 - 92	3			"
92 - 94	0			"
94 - 96	0			"
96 - 98	0			"
98 - 100	0			"
100 - 102	0			"
102 - 104	0			"
104 - 106	0			"
106 - 108	0			"
108 - 110	0			"
110 - 112	0			"
112 - 114	0			" and tuff - bentonit
114 - 116	30			" "
116 - 118	29			" "
118 - 120	22			" "
120 - 122	26			" "
122 - 124	23			" "
124 - 126	2			Tuff - white and pink
126 - 128	2			"
128 - 130	2			"
130 - 132	0			"

PROPERTY WHITELOCK

LOCATION _____ CLAIM TAURUS _____ G.E. _____

4,785.3 - Elevation

HOLE NO. T-8 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
132 - 134	0			Tuff - White and pink
134 - 136	0			Rhyolite - gray
136 - 138	10			"
138 - 140	24			"
140 - 142	3			"
142 - 144	1			"
144 - 146	0			Rhyolite - White/purple
146 - 148	10			"
148 - 150	2			"
150 - 152	0			"
152 - 154	0			"
154 - 156	0			"
156 - 158	3			"
158 - 160	2			"

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,817.3 - Elevation

HOLE NO. RS - 1 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
0 - 2	0			All tan
2 - 4	0			"
4 - 6	0			Rhyolite - pink alt.
6 - 8	0			"
8 - 10	3			"
10 - 12	0			"
12 - 14	0			"
14 - 16	0			"
16 - 18	0			"
18 - 20	0			"
20 - 22	3			Clay - white andpink
22 - 24	2			"
24 - 26	0			"
26 - 28	0			Rhyolite buff
28 - 30	0			"
30 - 32	0			"
32 - 34	0			"
34 - 36	0			"
36 - 38	0			"
38 - 40	0			Clay - pink & tuffaceous
40 - 42	0			"
42 - 44	0			"

application

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,817.3 - Elevation

HOLE NO. RS-1 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cmp	ASSAY	SAMPLE READING	LITHOLOGY
44 - 46	0			Rhyolite - buff
46 - 48	0			"
48 - 50	0			"
50 - 52	0			"
52 - 54	0			"
54 - 56	0			"
56 - 58	0			"
58 - 60	2			"
60 - 62	3			Tuff - black and pink
62 - 64	9			"
64 - 66	16			Rhyolite - black - staining
66 - 68	36			"
68 - 70	18			"
70 - 72	0			Rhyolite - pink - tuffaceous
72 - 74	3			"
74 - 76	0			"
76 - 78	9			"
78 - 80	3			"
80 - 82	2			"
82 - 84	3			Tuff - white-pink bentonitic
84 - 86	0			"
86 - 88	0			"

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,817.3 - Elevation

HOLE NO. RS-1 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY _____ GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
88 - 90	0			Tuff - white and pink - Bent.
90 - 92	9			"
92 - 94	0			"
94 - 96	0			"
96 - 98	2			"
98 - 100	0			"
100 - 102	8			"
102 - 104	0			Rhyolite - tan buff
104 - 106	0			"
106 - 108	0			"
108 - 110	0			light gray
110 - 112	0			"
112 - 114	0			"
114 - 116	0			TD 116
116 - 118	0			
118 - 120	0			

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,815.6 - Elevation

HOLE NO. RS -2 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING CPM	ASSAY	SAMPLE READING	LITHOLOGY
0 - 2	0			All tan
2 - 4	0			"
4 - 6	5			Tuff - tan - Bent.
6 - 8	3			"
8 - 10	2			"
10 - 12	2			"
12 - 14	0			Tuff - white and pink
14 - 16	0			"
16 - 18	0			"
18 - 20	0			"
20 - 22	1			"
22 - 24	2			"
24 - 26	0			"
26 - 28	0			"
28 - 30	0			"
30 - 32	0			"
32 - 34	0			"
34 - 36	0			"
36 - 38	4			"
38 - 40	3			"
40 - 42	2			"
42 - 44	0			"

application

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,815.6 - Elevation

HOLE NO. RS-2 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
44 - 46	0			Tuff - White and pink
46 - 48	0			"
48 - 50	0			"
50 - 52	0			"
52 - 54	0			"
54 - 56	0			Tuff with stringers
56 - 58	0			"
58 - 60	0			"
60 - 62	0			"
62 - 64	0			"
64 - 66	0			"
66 - 68	0			"
68 - 70	0			Tuff with white/ls.
70 - 72	0			"
72 - 74	0			"
74 - 76	2			"
76 - 78	2			"
78 - 80	0			"
80 - 82	4			"
82 - 84	2			"
84 - 86	3			"
86 - 88	0			"

PROPERTY WHITELOCK

LOCATION CLAIM ROADSIDE G.E.

4,815.6 - Elevation

HOLE NO. RS-2 TOTAL DEPTH DATE

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING CPM	ASSAY	SAMPLE READING	LITHOLOGY
88 - 90	0			Tuff - white/ls.
90 - 92	0			"
92 - 94	0			"
94 - 96	0			"
96 - 98	0			"
98 - 100	12			Rhyolite-tuff - pink w/ls.
100 - 102	5			"
102 - 104	0			"
104 - 106	0			"
106 - 108	0			"
108 - 110	0			"
110 - 112	0			"
112 - 114	0			"
114 - 116	0			"
116 - 118	0			"
118 - 120	0			"
120 - 122	0			"
122 - 124	0			"
124 - 126	0			"
126 - 128	0			"
128 - 130	0			"
130 - 132	0			

PROPERTY WHITELOCK

LOCATION CLAIM ROADSIDE G.E.

4,815.6 - Elevation

HOLE NO. RS-2 TOTAL DEPTH DATE

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
132 - 134	2			Rhyolite -tuff - pink w/ls.
134 - 136	3			"
136 - 138	0			"
138 - 140	0			"
140 - 142	0			"
142 - 144	0			"
144 - 146	0			"
146 - 148	6			"
148 - 150	2			"
150 - 152	0			"
152 - 154	4			"
154 - 156	0			"
156 - 158	4			"
158 - 160	4			"
160 - 162	4			"
162 - 164	5			"
164 - 166	2			"
166 - 168	0			"
168 - 170	0			"
170 - 172	0			"
172 - 174	0			Tuff - brown
174 - 176	2			

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,815.6 - Elevation

HOLE NO. RS-2 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING CPM	ASSAY	SAMPLE READING	LITHOLOGY
176 - 178	0			Tuff - brown
178 - 180	0			"
180 - 182	0			Ls. black

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,813.8 - Elevation

HOLE NO. RS-3 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
0 - 2	0			Tan - limy
2 - 4	0			
4 - 6	0			"
6 - 8	0			Rhyolite lt. purple, med. grd
8 - 10	0			"
10 - 12	0			"
12 - 14	0			"
14 - 16	0			"
16 - 18	0			"
18 - 20	0			"
20 - 22	0			"
22 - 24	0			"
24 - 26	0			med. sed. qutz. cry. Rhyolite pink, fn. gr.
26 - 28	0			"
28 - 30	0			" w/ls.
30 - 32	0			Rhyolite - lt. purple w/qzt.
32 - 34	0			"
34 - 36	0			"
36 - 38	0			"
38 - 40	0			"
40 - 42	1			"
42 - 44	0			"
44 - 46	0			"

application

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADWIDE G.E. _____

4,813.8 - Elevation

HOLE NO. RS-3 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
46 - 48	0			Rhyolite - lt. purple
48 - 50	0			"
50 - 52	0			"
52 - 54	0			"
54 - 56	0			"
56 - 58	0			"
58 - 60	0			"
60 - 62	0			R hy. lt. purp. w/mod. qrtz.
62 - 64	0			" w/red clay
64 - 66	0			Rhy. red alt.
66 - 68	0			"
68 - 70	2			"
70 - 72	4			"
72 - 74	0			"
74 - 76	0			"
76 - 78	0			Rhy tan - fn grain
78 - 80	0			rhy "
80 - 82	0			Tuff - rhy. lt. tan - pink
82 - 84	0			"
84 - 86	0			"
86 - 88	0			Rhy - lt. purp. fe staining
88 - 90	0			

PROPERTY WHITELOCK

LOCATION CLAIM ROADSIDE C.E.

4,813.8 - Elevation

HOLE NO. RS-3 TOTAL DEPTH DATE

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
90 - 92	0			Rhyolite - lt. purp. staining
92 - 94	0			"
94 - 96	0			Tuff tan-pink w/rhy.
96 - 98	0			"
98 -100	0			Tuff - lt. pink Bentonitic
100 - 102	0			"
102 - 104	0			"
104 - 106	0			Rhy. tan-gray
106 - 108	0			"
108 - 110	0			"
110 - 112	0			"
112 - 114	0			"
114 - 116	0			"
116 - 118	0			Tuff- pink with staining
118 - 120	0			"
120 - 122	0			Rhy alt. bent in mn stain
122 - 124	0			"
124 - 126	0			"
126 - 128	0			Tuff pink w/mn stain
128 - 130	9			"
130 - 132	41			"
132 - 134	73			"

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,813.8 - Elevation

HOLE NO. RS-3 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING CPM	ASSAY	SAMPLE READING	LITHOLOGY
134 - 136	62			Tuff - pink w/mn stain
136 - 138	20			"
138 - 140	14			"
140 - 142	0			Tuff - pink w/ls string.
142 - 144	0			"
144 - 146	0			"
146 - 148	0			"
148 - 150	0			"
150 - 152	0			"
152 - 154	0			"
154 - 156	5			"
156 - 158	0			"
158 - 160	0			"
160 - 162	0			Tuff - pink w/sil streaks and ls.
162 - 164	0			"
164 - 166	0			"
166 - 168	0			"
168 - 170	3			"
170 - 172	0			"
172 - 174	0			"
174 - 176	0			"
176 - 178	0			"

PROPERTY WHITELOCK

LOCATION CLAIM Roadside G.E.

4,813.8 - Elevation

HOLE NO. RS-3 TOTAL DEPTH DATE

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING CPM	ASSAY	SAMPLE READING	LITHOLOGY
178 - 180	0			Pre tuff ls. tan-buff Soil profile
180 - 182	0			"
182 - 184	0			"
184 - 186	0			Cont. qtz. frag.
186 - 188	0			"
188 - 190	0			"
190 - 192	0			"
192 - 194	0			TD 194

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,819.4 - Elevation

HOLE NO. RS - 4 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
0 - 2	0			All tan
2 - 4	0			"
4 - 6	0			"
6 - 8	0			Tuff - pink - Bentonitic w/sili nodul
8 - 10	6 9			"
10 - 12	0			" 2/fluorite stained pebbles
12 - 14	0			"
14 - 16	2			"
16 - 18	4			"
18 - 20	0			"
20 - 22	0			"
22 - 24	0			"
24 - 26	0			"
26 - 28	0			"
28 - 30	11			"
30 - 32	3			"
32 - 34	0			"
34 - 36	0			"
36 - 38	0			"
38 - 40	1			"
40 - 42	0			Tuff - tan-pink Bent. w/calc nod
42 - 44	1			" minor amounts of weathered Bo

a/pplication

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,819.4 - Elevation

HOLE NO. RS - 4 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
44 - 46	0			Tuff - tan-pink Bent. w/cal nod
46 - 48	0			"
48 - 50	0			"
50 - 52	4			"
52 - 54	0			"
54 - 56	3			"
56 - 58	0			"
58 - 60	0			"
60 - 62	0			Tuff - tan - Bent. w/calc frag.
62 - 64	0			"
64 - 66	0			"
66 - 68	0 4			"
68 - 70	0			"
70 - 72	2			"
72 - 74	4			"
74 - 76	0			TD -76

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,822.6 - Elevation

HOLE NO. RS - 5 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
0 - 2	0			All tan - ls.
2 - 4	76			"
4 - 6	18			Tuff - pink Bent., w/bio w/wt. ca frag. in fluorite nod.
6 - 8	90			"
8 - 10	7			"
10 - 12	10			"
12 - 14	3			"
14 - 16	2			"
16 - 18	2			"
18 - 20	2			"
20 - 22	0			Tuff. pink. Bent. w/calc frag + ls
22 - 24	0			"
24 - 26	0			"
26 - 28	0			"
28 - 30	0			Tuff pink Bent. w/wt black-gray ls. calc frag.
30 - 32	0			"
32 - 34	2			"
34 - 36	2			"
36 - 38	5			"
38 - 40	3			"
40 - 42	0			Tuff-tan-pink-w/wt. cal frag. ls.
42 - 44	0			" abundant gray ls.

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,822.6 - Elevation

HOLE NO. RS - 5 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
44 - 46	0			Tuff - tan-pink- w/wt. cal fra
46 - 48	0			"
48 - 50	4			"
50 - 52	3			"
52 - 54	0			"
54 - 56	2			"
56 - 58	0			"
58 - 60	0			"
60 - 62	0			"
62 - 64	0			"
64 - 66	0			"
66 - 68	0			"
68 - 70	0			"
70 - 72	0			"
72 - 74	0			"
74 - 76	0			"
76 - 78	0			"
78 - 80	0			"
80 - 82	0			Tuff - tan-pink w ls. frag gry.
82 - 84	0			"
84 - 86	0			"
86 - 88	0			"

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE 5 G.E. _____

4,822.6 - Elevation

HOLE NO. RS - 5 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
88 - 90	0			Tuff - tan-pink w ls. frag. gr
90 - 92	0			"
92 - 94	0			"
94 - 96	0			"
96 - 98	0			"
98 - 100	0			"
100 - 102	9			abundant ls. Tuff - pink-tan w/grn bent clay
102 - 104	4			"
104 - 106	0			"
106 - 108	0			"
108 - 110	0			"
110 - 112	0			"
112 - 114	0			"
114 - 116	0			Ls. - tan
116 - 118	0			TD - 118

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G. E. _____

4,804.1 - Elevation

HOLE NO. RS - 6 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	PROBED ASSAY	SAMPLE READING	LITHOLOGY
0 - 2	0			All tan
2 - 4	0			Rhy. - buff - red - slt. weathered
4- 6	0			" Dry samples appear purple
6 - 8	0			"
8 - 10	0			"
10 - 12	0			"
12 - 14	0			"
14 - 16	0			"
16 - 18	0			"
18 - 20	0			"
20 - 22	0			"
22 - 24	0			"
24 - 26	0			"
26 - 28	0			"
28 - 30	0			"
30 - 32	0			" dark min.
32 - 34	0			amphibolse. " appears to be one of
34 - 36	0			"
36 - 38	0			Tuff- pink - tan - Fe stain a bd Bio
38 - 40	10			"
40 - 42	33			w/ d bd Bio & Fe stai " w/purp nod. fluorite
42 - 44	0			"
44 - 46	19			"

application

PROPERTY WHITELOCK

LOCATION 4,804.1 CLAIM ROADSIDE / G.E.

HOLE NO. RS - 6 TOTAL DEPTH DATE

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm		ASSAY	SAMPLE READING	LITHOLOGY
46 - 48	76				Fe stain Tuff - tan Bent. w/flur. nod.
48 - 50	83				Tuff - tan-pink - flu. nod. abo
50 - 52	114				"
52 - 54	136				"
54 - 56	105				"
56 - 58	92				"
58 - 60	68				"
60 - 62	78				"
62 - 64	38				stained n Tuff, pink w/cal frag. Beo w/fl
64 - 66	34	21			"
66 - 68	4				"
68 - 70	11	4			"
70 - 72	0				"
72 - 74	0				"
74 - 76	0				"
76 - 78	0				"
78 - 80	1				"
80 - 82	1				The tuff in unmineralized zone h
82 - 84	0				grayer color - the min zone due more calc nod. & less ls. frag.
84 - 86	1				"
86 - 88	0				"

PROPERTY WHITELOCK

LOCATION _____ CLAIM ROADSIDE G.E. _____

4,804.1 - Elevation

HOLE NO. RS - 6 TOTAL DEPTH _____ DATE _____

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
88 - 90	5			Tuff - unmineralized zone - graye color - the min zone due to more
90 - 92	0			calc nod. & less ls. frag. "
92 - 94	2			"
94 - 96	0			"
96 - 98	0			"
98 - 100	0			Tuff wt-pink w/int. clc nod. "
100 - 102	0			"
102 - 104	7			" Bent frag are smaller
104 - 106	0			"
106 - 108	0			"
108 - 110	0			"
110 - 112	0			"
112 - 114	0			"
114 - 116	5			"
116 - 118	0			"
118 - 120	0			"
120 - 122	1			w/med. Bio and other dark min. Tuff w/gry ls. frag.
122 - 124	0			"
124 - 126	0			"
126 - 128	0			"
128 - 130	4			"

PROPERTY WHITELOCK

LOCATION CLAIM ROADSIDE G.E.

4,804.1 - Elevation

HOLE NO. RS - 6 TOTAL DEPTH DATE

PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING cpm	ASSAY	SAMPLE READING	LITHOLOGY
130 - 132	0			s/med. Bio and other dark min. Tuff white w/gray ls. frag.
132 - 134	2			"
134 - 136	0			"
136 - 138	0			"
138 - 140	0			"
140 - 142	0			Tuff White-pink in gray ls. frag int. calc. nod. abd. dark min.
142 - 144	0			"
144 - 146	0			"
146 - 148	0			"
148 - 150	0			"
150 - 152	0			"
152 - 154	0			"
154 - 156	2			"
156 - 158	0			"
158 - 160	0			"
160 - 162	0			Tuff - white-pink w/gray ls. frag & wt. calc mod. abd dark min.
162 - 164	0			"
164 - 166	3			"
166 - 168	0			"
168 - 170	0			Tuff wt.-gray w/pink cast in ls. frag. and abd dark min.
170 - 172	3			"

PROPERTY WHITELOCK

LOCATION

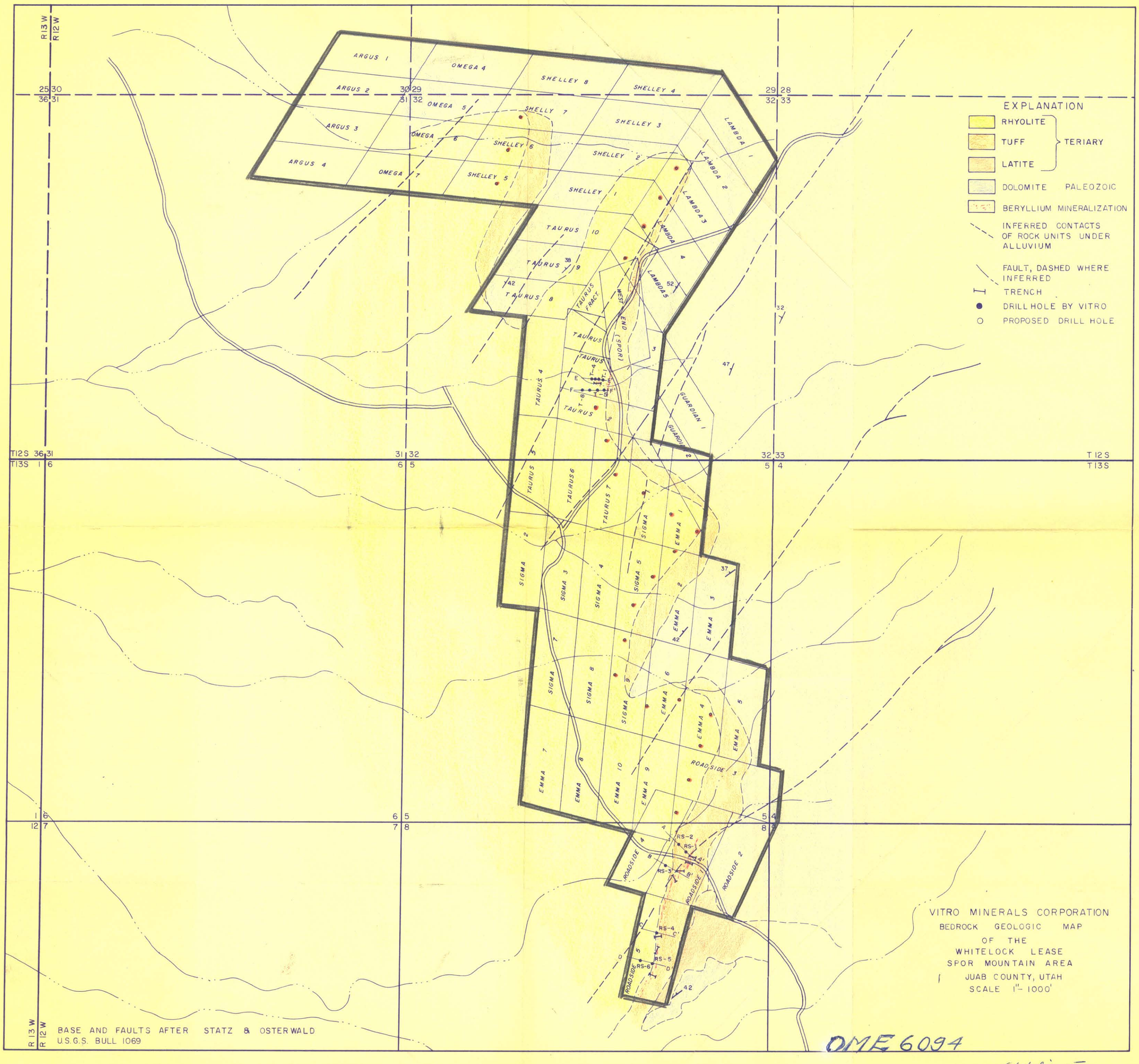
CLAIM ROADSIDE G.E.

4,804.1 - Elevation

HOLE NO. RS - 6 TOTAL DEPTH DATE

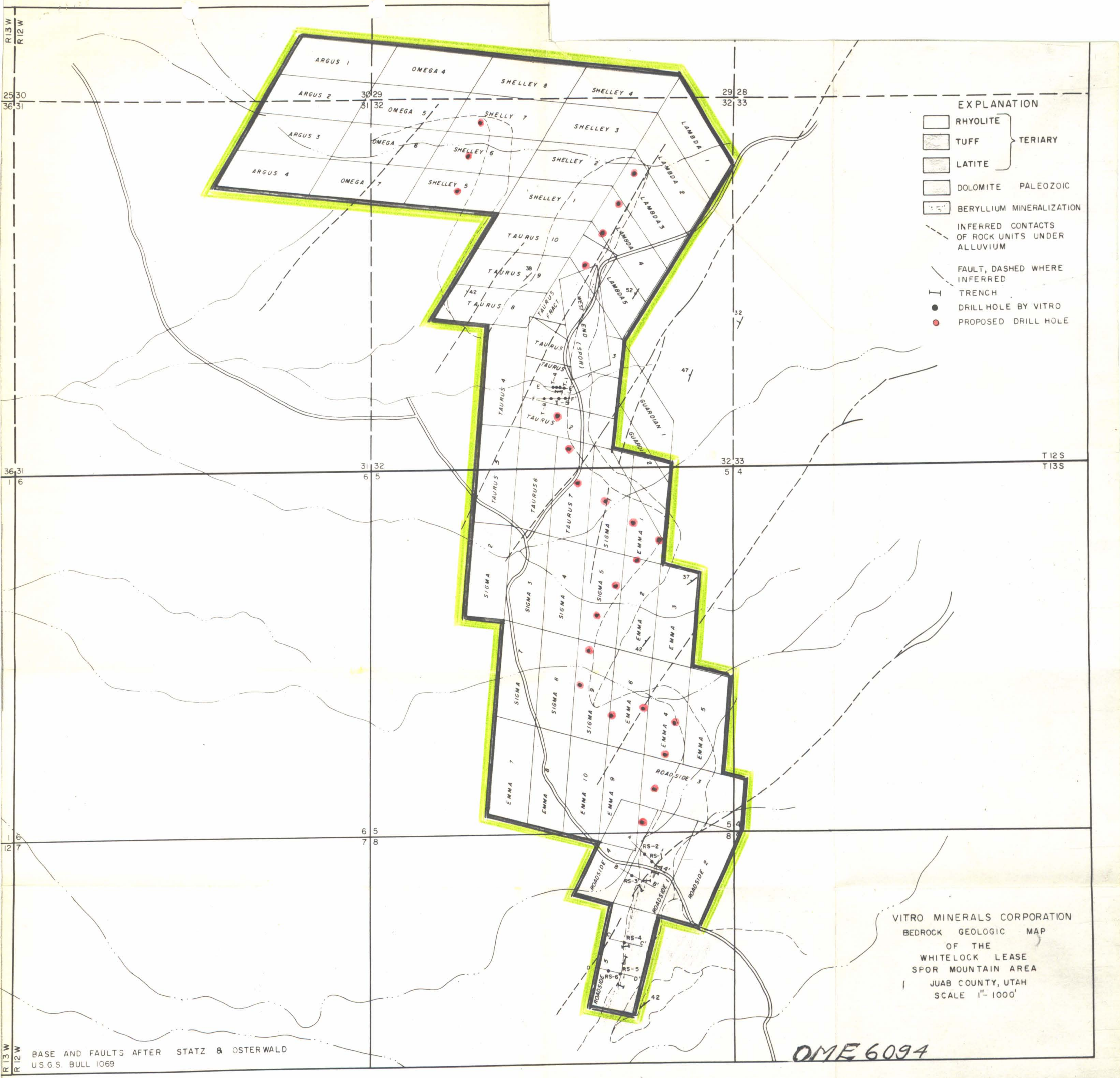
PROBED BY GMP DESCRIBED BY GMP

DEPTH	PROBED READING CPM	ASSAY	SAMPLE READING	LITHOLOGY
172 - 174	3			Tuff - gray w/pink cast in ls. frag. & abd dark min.
174 - 176	2			"
176 - 178	0			"
178 - 180	2			"
180 - 182	1			"
182 - 184	0			"
184 - 186	0			"
186 - 188	0			Tuff - gray, lt. w/ls frag. abd dk min.
188 - 190	0			"
190 - 192	0			Tuff, white-yellow w/ls
192 - 194	0			"
194 - 196	0			"
196 - 198	0			Tuff-ls. cont. abd. ls. frag.
198 - 200	1			Drilling hard.



OME 6094

application


R13W R12W
ARGUS 1
OMEGA 4
SHELLEY 8
SHELLEY 4
ARGUS 2
OMEGA 5
SHELLY 7
SHELLEY 3
ARGUS 3
OMEGA 6
SHELLEY 6
SHELLEY 2
LAMBDA 1
LAMBDA 2
ARGUS 4
OMEGA 7
SHELLEY 5
SHELLEY 1
LAMBDA 3
TAURUS 10
LAMBDA 4
TAURUS 9
LAMBDA 5
TAURUS 8
TAURUS FRACT
WEST END (SPOR)
TAURUS
TAURUS 4
TAURUS 2
GUARDIAN 1
GUARDIAN 2
TAURUS 5
TAURUS 6
TAURUS 7
SIGMA 1
EMMA 1
SIGMA 2
SIGMA 3
SIGMA 4
SIGMA 5
EMMA 2
EMMA 3
SIGMA 7
SIGMA 8
SIGMA 9
EMMA 6
EMMA 4
EMMA 5
EMMA 7
EMMA 8
EMMA 10
EMMA 9
ROADSIDE 3
ROADSIDE 4
ROADSIDE 1
ROADSIDE 2
ROADSIDE 5
RS-1 RS-2 RS-3 RS-4 RS-5 RS-6
T12S
T13S
EXPLANATION
RHYOLITE
TUFF
LATITE
TERIARY
DOLOMITE PALEOZOIC
BERYLLIUM MINERALIZATION
INFERRED CONTACTS OF ROCK UNITS UNDER ALLUVIUM
FAULT, DASHED WHERE INFERRED
TRENCH
DRILL HOLE BY VITRO
PROPOSED DRILL HOLE
VITRO MINERALS CORPORATION
BEDROCK GEOLOGIC MAP
OF THE
WHITELOCK LEASE
SPOR MOUNTAIN AREA
JUAB COUNTY, UTAH
SCALE 1"- 1000'
BASE AND FAULTS AFTER STATZ & OSTERWALD
U.S.G.S. BULL 1069
OME 6094