DEC 27 1955
BUREAU OF MINES
Denver, Colorado
RECEIVED
JAN 3 1956

EXPLORATION PROJECT CONTRACT
VAUGHEY AND VAUGHEY
DOCKET NO. DMMA-3750
CONTRACT NO. IDM-2068 AMENDMENT NO. 1

It is agreed this 7th day of November, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Vaughey and Vaughey, a partnership consisting of E. A. Vaughey, V. H. Vaughey and V. T. Blackburn, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. IDM-2068, Docket No. DMMA-3750, dated September 6, 1955, hereinafter called the "Contract," that:

In lieu of drilling 23 holes as stipulated in Exhibit "A" under Stage I of the work only 22 holes will be drilled. Hole No. 2 on the "Mine No. 7" claim, as shown on the map, "Figure 2" attached to the contract, will not be drilled because of difficult terrain conditions.

It is further agreed that: Instead of drilling holes Nos. 3 and 4 at the locations shown on the map, "Figure 2" attached to the contract, the holes will be drilled at the locations as shown on the map entitled "Map of Part of the Contrada and Mike Claims Vaughey and Vaughey Property Harry Co. Utah Showing Proposed Changes in Drill Hole Locations" which is attached hereto and made a part of this amendment.

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

Executed in triplicate the day and year first above written.

VAUGHEY AND VAUGHEY, a partnership

By _____
E. A. Vaughey, partner

By _____
V. H. Vaughey, partner

By _____
V. T. Blackburn, partner

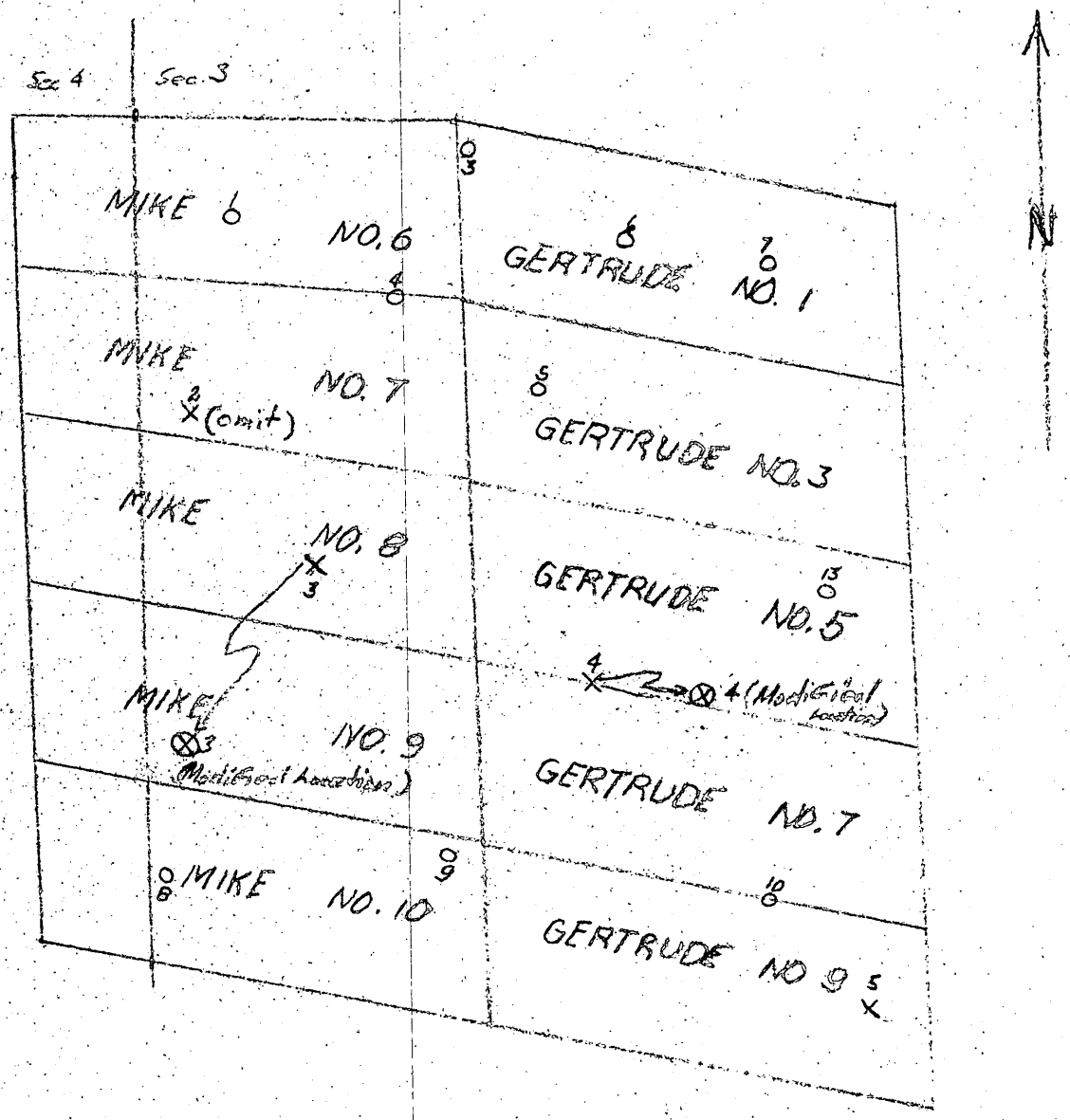
UNITED STATES OF AMERICA

By _____
V. M. Traver
Executive Officer, DMMA
Field Team, Region III

Clearance
2/8/56

See Traver memo
12/28/55

DMEA Project No 3730
Contract No IDM-E868



Map of Part of Hon Gertrude & Mike Claims
Vachey & Vachey Property Emery Co., Utah
Showing Proposed Changes in Drill hole locations

0 — 600 Ft. — 1200 Ft.
Scale

6 Hole Already Drilled
4 × Proposed drill hole

⊗ Modified position of Proposed drill hole (arrow shows change in location)

Division copy 1

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SEP 16 1955

MF-200
(Revised June 1954)

Docket No. DMEA - 3730

Commodity Uranium

Contract No. Idm-E 868

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this SEP 6 1955 day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Vaughey and Vaughey, a partnership, consisting of E. A. Vaughey, W. M. Vaughey, and W. T. Blackburn, whose mailing address is 1650 Denver Club Building Denver 2, Colorado, hereinafter called the "Operator," as follows:

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

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

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

(b) The Operator represents and undertakes that:

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

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

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: Consent to Lien of Lessor.

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

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of uranium. The work to be performed is described in Exhibit "A." The Operator on or before October 15, 1955 shall commence the work, and on or before February 1, 1956 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A" except as otherwise provided in Exhibit "A" with respect to Stages of work.

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $31,824.00 The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $23,868.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

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

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 9.
And see Article 13.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

To the extent that costs are set forth in Exhibit "A" as "Fixed Unit Costs" they are in lieu of the actual costs that otherwise would be estimated and allowable under the provisions of Article 6 of this contract.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitchell Dow
Administrator, Defense Minerals
Exploration Administration

VAUGHEY AND VAUGHEY
(Operator)

By E. A. Vaughey (partner)
E. A. Vaughey

By W. M. Vaughey (partner)
W. M. Vaughey

By W. T. Blackburn (partner)
W. T. Blackburn

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

.....

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
VAUGHEY AND VAUGHEY
DOCKET NO. DMEA-3730

ANNEX I

The land referred to in Article 2 of the Contract form consists of 37 unpatented mining claims recorded in the office of the County Recorder, Emery County, Utah, as follows:

Name of Claim		Location Notice Recorded Book	Page
Mike No. 1		J 74	443
Mike No. 2		"	444
Mike No. 3		"	445
Mike No. 4		"	446
Mike No. 5		"	447
Mike No. 11		"	448
Mike No. 12		"	449
Mike No. 13		"	450
Gertrude No. 11		"	451
Gertrude No. 12		"	452
Gertrude No. 13		"	453
Gertrude No. 14		"	454
Mike No. 6	Amended	"	455
Mike No. 7	"	"	456
Mike No. 8	"	"	457
Mike No. 9	"	"	458
Mike No. 10	"	"	459
Hilda No. 1	"	"	460
Hilda No. 2	"	"	461
Hilda No. 3	"	"	462
Hilda No. 4	"	"	463
Hilda No. 5	"	"	464
Hilda No. 6	"	"	465
Hilda No. 7	"	"	466
Hilda No. 8	"	"	467
Hilda No. 9	"	"	468
Hilda No. 10	"	"	469
Gertrude No. 1	"	"	470
Gertrude No. 2	"	"	471
Gertrude No. 3	"	"	472

Name of Claim (Cont'd.)		Location Notice Recorded Book	Page
Gertrude No. 4	Amended	J 74	473
Gertrude No. 5	"	"	474
Gertrude No. 6	"	"	475
Gertrude No. 7	"	"	476
Gertrude No. 8	"	"	477
Gertrude No. 9	"	"	478
Gertrude No. 10	"	"	479

The above claims are situated in Secs. 34 and 35, T. 21 S., R. 14E., and in Secs. 3, 4, and 10, T. 22 S., R. 14 E., S.L.B. & M., and are shown on the attached claim map, Fig. 2.

The Operator holds the land under a lease recorded in Book J 78, page 53, an amendment to the lease recorded in Book J 79, page 480, and an amendment and supplement to the lease dated June 27, 1955.

EXPLORATION PROJECT CONTRACT
VAUGHEY AND VAUGHEY
DOCKET NO. DMEA-3730

EXHIBIT "A

Description of the Work

The object of this project is to discover uranium ore deposits that might occur in the Salt Wash member of the Morrison formation. In the region where this project is located, the uranium mineralization is generally confined to an irregular lenticular sand bed about 175 feet above the base of the Morrison formation. Within this 30-foot thick sand bed the ore may occur in 3 or more zones. It is estimated that drill holes averaging 300 feet in depth will be required to penetrate the ore-bearing horizon.

The work shall be performed in three successive stages as indicated below. The Operator shall perform all the work under Stage I, and shall perform so much of each succeeding stage as is approved in advance in writing by the Government, based upon the results of the completed stage or stages of work.

Stage I

Stage I consists of bulldozing access roads and preparing twenty-three (23) drill sites. The approximate locations of the drill sites are shown, marked X, on the attached map, Fig. 2, entitled "Claim Map Showing Proposed Drill Holes, Vaughey and Vaughey Property ... June 22, 1955. One (1) vertical hole shall be drilled from each drill site. The spacing of holes is expected to range from approximately 500 to 1,500 feet.

It is estimated that 5,670 feet of noncore and 1,230 feet of core drilling will be required to complete the twenty-three drill holes authorized for Stage I. However, if the footages estimated for Stage I drilling are not sufficient to complete the twenty-three (23) holes then, with prior written Government approval, part of the footages authorized for Stage II drilling may be used to complete the Stage I drilling.

Not in excess of 8 hours of bulldozing shall be performed, and not in excess of 18 samples shall be

chemically analyzed to determine the U_3O_8 and V_2O_5 content, under this stage of the contract.

Stage II

Stage II consists of bulldozing access roads and preparing twenty-five (25) sites for drilling to delineate ore-bearing structures discovered in Stage I. Not more than one (1) vertical hole shall be drilled from each site. Holes drilled from these sites shall not be closer than 300 feet to any other drill hole.

Not in excess of twenty-five (25) holes, totaling not in excess of 6,750 feet of noncore and 750 feet of core drilling, shall be performed in this stage.

Not in excess of 9 hours of bulldozing shall be performed, and not in excess of 17 samples shall be chemically analyzed to determine the U_3O_8 and V_2O_5 content, under this Stage II.

Stage III

Stage III consists of bulldozing access roads and preparing ten (10) sites for drilling to further delineate ore-bearing structures discovered in the preceding stages. Holes drilled from these sites shall not be closer than 50 feet to any other hole. Not more than one (1) vertical hole shall be drilled from each of these sites, and not more than a total of 2,700 feet of noncore and 300 feet of core drilling, shall be performed in this Stage III.

Not in excess of 3 hours of bulldozing shall be performed, and not in excess of 7 samples shall be chemically analyzed to determine the U_3O_8 and V_2O_5 content, under this Stage III.

MF-203
Revised March 24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Vaughey and Vaughey, partners
Docket No. DMEA-3730
Contract No. Idm-E
Contract Date

CONSENT TO LIEN

To the United States of America:

RECEIVED
SEP 16 1955

Referring to that certain land in the County of Emery of Utah, described as follows:1/

Mining claims: Mike Nos. 1 through 13; Hilda Nos. 1 through 10; and Gertrude Nos. 1 through 14, lying in Sections 34 and 35, T. 21 S., R. 14 E., and in Sections 3, 4, and 10, T. 22 S., R. 14 E., in Green River Mining District. Location notices for these claims are recorded in Book J 74 at pages 443 through 479.

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

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

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

None

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

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

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

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

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

5. Added provision: _____

_____

_____

_____

_____

_____

_____

_____

Dated this _____ day of SEP 6 1955, 195_.

Paul Alex [Seal] Fred Zanett [Seal]
Paul Alex Fred Zanett

Devel Halderman [Seal]
Devel Halderman

Angelo Zanett [Seal]
Angelo Zanett

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

_____
[Corporate Seal]

General Provisions

1. A supervisor and at least one helper shall be employed full time under this contract.

2. Hole No. 11 and Hole No. 22 in Stage I shall be cored from the surface to the bottom; and all other holes in Stages I, II, and III shall be core drilled through the inferred 30-foot thick ore-bearing sandstone bed in the Salt Wash member. All other drilling shall be noncore drilling.

3. All holes shall be logged and probed for radioactivity. Records of such logging and probing, together with assay certificates, shall be submitted with the Operator's monthly progress report.

4. The Government shall not contribute to the cost of any uncompleted hole, to the cost of any hole that bottoms less than AX core size, or to the cost of any hole which cannot be probed with radiometric logging equipment.

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

6. Mineralized portions of the core shall be split, the Operator using one-half for assay purposes; the other one-half shall be stored for Government use with the rest of the core in boxes properly labeled as to drill hole number. Markers shall be placed in the sections of the core to indicate the depth represented.

7. The supervision, the extent and method of sampling, the location of drill sites and drill holes, the direction and extent of drilling, and the drilling method, are all subject to Government approval.

8. Bulldozing shall be performed with a D-6 bulldozer, or equivalent unit.

Estimated Costs of the Project

Actual Costs

(Categories 2 through 7 of the contract form do not apply to this contract.)

Category (1) Independent Contracts

Stage I

Access roads and drill sites, 8 hours of bulldozing @ $12.00/hr.	$ 96.00	
Nonecore drilling 5,670 feet @ $1.45/ft.	8,221.50	
Core drilling 1,230 feet @ $3.00/ft.	3,690.00	$12,007.50

Stage II

Access roads and drill sites, 9 hours of bulldozing @ $12.00/hr.	108.00	
Nonecore drilling 6,750 feet @ $1.45/ft.	9,787.50	
Core drilling 750 feet @ $3.00/ft.	2,250.00	12,145.50

Stage III

Access roads and drill sites, 3 hours of bulldozing @ $12.00/hr.	36.00	
Nonecore drilling 2,700 feet @ $1.45/ft.	3,915.00	
Core drilling 300 feet @ $3.00/ft.	900.00	4,851.00

Fixed Unit Costs

The Government will contribute to the costs of "Incidental allowance" and "Chemical analyses" on the basis of the fixed unit costs set forth below, as they accrue, in lieu of actual costs. The fixed unit cost for "Incidental allowance" includes all costs whatsoever that are not included in the estimates for Independent Contracts

and analyses of samples, and covers such items as supervision, technical services, labor, materials and supplies, equipment, etc., which would otherwise be allowable under Categories (2) through (7) of the contract form.

Stage I		
Incidental allowance for each foot of drilling completed, 6,900 feet @ $0.15/ft.	$ 1,035.00	
Chemical analyses for U_3O_8 and V_2O_5, 18 samples @ $5.00 each sample	90.00	$ 1,125.00
Stage II		
Incidental allowance for each foot of drilling completed, 7,500 feet @ $0.15/ft.	1,125.00	
Chemical analyses for U_3O_8 and V_2O_5, 17 samples @ $5.00 each sample	85.00	1,210.00
Stage III		
Incidental allowance for each foot of drilling completed, 3,000 feet @ $0.15/ft.	450.00	
Chemical analyses for U_3O_8 and V_2O_5, 7 samples @ $5.00 each sample	35.00	485.00
Estimated Total Cost of Project		$31,804.00
Government Participation @ 75%		$23,868.00

[x] Audited

[ ] Certified

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of 8/3/56
Incl. Voucher for Nov., 1953

[X] Actual Cost

[ ] Agreed Unit Costs

Name Vaughey and Vaughey

Docket No. DMEA-3730

State Utah

Commodity Uranium

Idm-E No. 868

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) Non-core	15120'	24012.00	6219'	8731.50	8731.50
Drilling (Specify) Core	2280'	7362.00	1616'	5083.05	5083.05
Surface Excavation					
Underground Excavation					
Roads and Trails		240.00		96.00	96.00
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Analyses - U_3O_8 - V_2O_5		210.00			
Totals		$31,824.00		$13,910.55	$13,910.55

Prepared by F. M. Murphy

71626

Project Summary Report

By: F. M. Murphy Date: August 1, 1956

1. Docket No. DMEA-3730 (Uranium)
   Contract No. Idm-E868

   Operator: Vaughey and Vaughey, a Partnership which consists of
   E. A. Vaughey, W. M. Vaughey, and W. T. Blackburn
   1650 Denver Club Building
   Denver 2, Colorado

   Operator's Property Rights: Lease on 37 unpatented mining claims, the "Mike," "Gertrude," and "Hilda" groups, situated in secs. 34 and 35, T. 21 S., R. 14 E., and in secs. 3, 4, and 10, T. 22 S., R. 14 E., S.L.B.&M., Emery County, Utah

2. Contract dated: September 6, 1955

   Amendment No. 1 - dated November 7, 1955, permits drilling 22 holes instead of 23 in Stage I, also, changes location of drill holes Nos. 3 and 4.

   Work Authorized - Stage I (23 holes) Stage II (25 holes) Stage III (10 holes)

	Units	Cost	Units	Cost	Units	Cost
Access roads and drill sites						
Bulldozer @ $12/hr.	8	$96.00	9	$108.00	3	$36.00
Non-core drilling @ $1.45/ft.	5670	$221.50	6750	9787.50	2700	3915.00
Core drilling @ $3/ft.	1230'	3690.00	750	2250.00	300	900.00
Incidental allowance @ $0.15/ft.						
Chemical analyses @ $5/sample	6900'	1035.00	7500	1125.00	3000	450.00
	18	90.00	17	85.00	7	35.00
Stage Total Cost		$13132.50		$13355.50		$5336.00

Estimated Total Cost of the Project $31,824.00
Government Participation @ 75% $23,868.00

Work Completed - 22 holes under Stage I

1616 ft. core drilling @ $3/ft.	$4,848.00	
1742 ft. non-core drilling @ $1.298/ft.	2,262.15	
4477 ft. " " " @ $1.235/ft.	5,529.15	
7835 ft. incidental allowance @ $0.15/ft.	1,175.25	
8 hrs. bulldozing @ $12/hr.	96.00	
Adjustment for core drilling	398.00	
Total Cost Stage I		$14,308.55
Government Participation @ 75%		$10,731.41

3. Audit Report of Review: February 8, 1956
   Total cost as billed by contractor..... $14,308.55
   Exceptions by Finance Office $398.00
   Herewith 0.00 ... 398.00
   Total Accepted Cost $13,910.55
   Government Participation @ 75% $10,432.92

4. Excerpts from Field Team Report, dated July 11, 1956:

Sedimentary rocks exposed on the property consist of shale, conglomerate, and sandstone of the lower Cretaceous Burro Canyon formation, and the Upper Jurassic Brushy Basin shale member of the Morrison formation. In the immediate project area, the beds generally strike north and dip gently to the east. Several minor, steep-dipping, normal faults with northwesterly strikes were observed in the area.

Previous to the contract, the Applicant drilled 19 holes on the property and mineralization was reported to have been found in the Salt Wash member of the Morrison formation in seven of the holes.

The Field Team terminated the contract after Stage I because:

1. Of the 22 holes drilled, none penetrated mineralized material (i.e. 0.02% U_3O_8).

2. Evaluation of all data obtained from logging the drill core and cuttings indicated that 21 holes penetrated a type of sandstone which is considered unfavorable for the occurrence of ore deposits. Hole 1 may have penetrated a favorable type sandstone, but this is not certain because the coring started in the sand unit and the total thickness of the sand unit is not known.

3. Studies of the adjacent outcrops and mines reveal that the area is not favorable for the occurrence of significant ore deposits. Only small pods of ore grade material, not constituting minable ore, are likely to be found on the subject property.

The exploration work did not result in a discovery or development of a significant quantity of Uranium ore. No certification is recommended by the Field Team.

F. M. Murphy

FMMurphy/izm 8-1-56
cc to: Docket (original)
Admr.'s Reading File
Mr. Johnson
Code 700
Mr. Murphy

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

224 New Customhouse
Denver 2, Colorado

October 31, 1956

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3730, Contract Idm-E868, Vaughey and Vaughey - MEMORANDUM OF EXPLANATION

Enclosed is one copy of MEMORANDUM OF EXPLANATION for the above contract which clarifies the intent of the parties relative to payment for drilling on an average unit cost basis for each type of drilling within each stage of work.

Also enclosed is one copy of a relative letter dated October 25, 1956 from the Chairman, Operating Committee, to the Executive Officer, Region III.

Original signed by
W. M. TRAVER

W. M. Traver

Enclosures

JDC:jy
cc: Chm. Op. Comm. (2)
Corresp. E868)
Contract E868) w/copy memo and
Harshman) Chm's. letter
Hasler)
Shaw (2)) w/two copies of memo
Townsend) and Chm's. letter
Chron.

See letter of 10-25-56 in Contract 3397 3730

Division Copy

Chamber
Murphy
Ellis
Rohr
Appd. Sol. Off.
Kilcoyne
Elfrey

EXPLORATION PROJECT CONTRACT
VAUGHEY AND VAUGHEY
DOCKET NO. DMEA-3730

MEMORANDUM OF EXPLANATION

Mailed 10/25/56 Washington, D. C.

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Vaughey and Vaughey are parties to Exploration Project Contract Idm-E868 (Docket No. DMEA-3730), dated September 6, 1955.

The contract provides that the Government will contribute to the unit costs of drilling performed under independent contracts that do not exceed the estimated costs for each unit (per foot of drilling) set forth in Exhibit "A". The contract provides further that the Government's contribution to costs will be made as they are incurred, based upon monthly vouchers. However, it was the intent of the parties at the time the exploration project contract was negotiated and executed that the unit costs set forth under Category (1) under any stage prescribed in Exhibit "A" represent the maximum average cost per foot for each classification of drilling performed and accepted rather than the maximum cost per foot of each classification of drilling performed, as evidenced by the Operator's application and the DMEA Field Team's report of examination filed in the contract docket.

The Operator incurred costs on the basis of this understanding and the Government has made payment on the basis of this understanding.

C. O. Mittendorf

Administrator, Defense Minerals
Exploration Administration

8/7/56

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

RECEIVED
AUG - 6 1956

August 3, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Final Report, DMEA Docket 3730 (Uranium), Vaughey and Vaughey (Ouray Ventures Property) Emery County, Utah

I have reviewed the final report, DMEA Docket 3730, Vaughey and Vaughey (Ouray Ventures Property) Emery County, Utah, dated July 11 and received in this office July 27, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The Field Team recommend that no certification of the subject property be made, inasmuch as 6,219 feet of plug bit and 1,616 feet of core drilling did not result in the discovery of uranium ore.

We concur in the recommendation of the Field Team.

The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

John E. Crawford

700

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

AUG - 2 1956

Vaughey and Vaughey
1650 Denver Club Building
Denver 2, Colorado

Re: Docket No. DMEA-3730 (Uranium)
Contract No. Idm-5868
Ouray Ventures Property
Emery County, Utah

Gentlemen:

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

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

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

Sincerely yours,

G. O. Mittendorf

Administrator

FMMurphy/izm 8;1;56
cc to: Messrs. Paul Alex, Devel Halderman, Angelo Zanett, & Fred Zanett d/b/a Ouray Ventures, Ouray, Colorado
Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Mr. Johnson
DMEA Field Team, Reg. III (2)
Contract Admr. & Audit Div.
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

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

Messrs. Paul Alex,
Devel Halderman,
Angelo Zanett, and Fred Zanett
d/b/a Ouray Ventures
Ouray, Colorado

AUG - 2 1956

Re: Docket No. DMEA-3730 (Uranium)
Contract No. Idm-E368
Vaughey and Vaughey
Ouray Ventures Property
Emery County, Utah

Gentlemen:

Reference is made to the Owners' Consent to Lien which you executed on September 6, 1955, in connection with the DMEA contract for an exploration project on your property in Emery County, Colorado.

For your information, there is enclosed a copy of our letter of this date to Vaughey and Vaughey, advising that the Government retains no claim or lien against the property described in the contract or on any future production therefrom.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure
FMMurphy/izm 8-1-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
DMEA Field Team, Reg. III (2)
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

7-27-56

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

RECEIVED
JUL 23 1956

224 New Customhouse
Denver 2, Colorado

July 18, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 3730 (Uranium), Contract Ldn-2068, Vaughey and Vaughey (Surny Ventures Property), Emery County, Utah - FINAL REPORT

Enclosed are the original and three copies of a joint engineering and geologic report, dated July 11, 1956, pertaining to work completed under the subject contract, and transmittal of the report, dated July 17, 1956, from John F. Shaw and E. H. Barshman.

The original and one copy of the Operator's final report were forwarded to your office by memorandum of March 15, 1956.

The contract was considered to be completed upon completion of the work authorized under Stage I.

Final payment to the Operator was processed by this office March 13, 1956, in conformance with the Report of Review of contract expenditures by the Contract Administration and Audit Division, dated February 8, 1956, which was released to this office February 17, 1956.

The exploration work completed consisted of eight hours of bulldozing time preparing access roads and drill sites and the drilling of twenty-two holes involving 6,219 feet of plug drilling and 1,616 feet of core drilling, at a total accepted cost of $13,920.55, toward which the Government contributed to the extent of 75%, or an amount of $10,438.92.

The exploration work did not result in a discovery or development of a significant quantity of uranium ore. Therefore no certification of such is to be recommended.

W. M. Trever
W. M. Trever

7/27/56

Enclosures

E. H. Barshman
E. H. Barshman

Final Field
Team Report

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REGION III

BUILDING 20
DENVER FEDERAL CENTER
DENVER 2, COLORADO

RECEIVED
JUL 23 1956
DMEA
Date Rec'd.
JUL 18 1956
BUREAU OF MINES
Denver, Colorado

July 17, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw
E. N. Harshman

Subject: Docket DMEA 3730 (Uranium), Contract Idm-E868, Vaughey and Vaughey, Ouray Ventures Property, Emery County, Utah

Enclosed are the original and 9 copies of a final engineering and geologic report by Carl Belser, Mining Engineer, Bureau of Mines, and Carl H. Roach, Geologist, Geological Survey, covering the work performed under contract Idm-E868.

Vaughey and Vaughey applied for exploration assistance to explore their Ouray Ventures Property in Emery County, Utah, by 17,100 feet of drilling at a total estimated cost of $32,965.00. A modified three-stage contract consisting of 17,400 feet of drilling at an estimated cost of $31,824.00 was prepared. Twenty-two stage I holes were drilled under the contract at a total cost of $14,308.55. Government participation was $10,731.41. Stage I drilling did not disclose any ore and the contract was terminated at the completion of stage I.

It is recommended that no additional DMEA funds be expended on this property and that no certification of discovery be issued.

John F. Shaw
John F. Shaw
Supervising Mining Engineer

E. N. Harshman
E. N. Harshman
Member Field Team

Reviewed
DMEA OPERATING COMMITTEE

(date)

Enclosure

cc: 9
EHHarshman
Idm-E868
Chron.

JFS:ph

RECEIVED
JUL 23 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON
SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FINAL REPORT
REGION III

DMEA 3730

Contract Idm-2868

CUBAY VENTURES PROPERTY

Vaughey and Vaughey

Emery County, Utah

Uranium

Reviewed by
7/27/56
(date)

Joint Engineering and Geologic Final Report

By

Carl H. Roach, Geologist
Geological Survey

Carl Belser, Mining Engineer
Bureau of Mines

July 11, 1956

DMEA 3730
Contract Idm E-868

OURAY VENTURES PROPERTY
VAUGHEY AND VAUGHEY
EMERY COUNTY, UTAH

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Ore deposits..... 5
Geologic interpretation of the drilling..... 7
The project..... 7
Factual data..... 9
Conclusions and recommendations..... 9

ILLUSTRATIONS

Figure	Follows page
1. Location map, Ouray Ventures Property, Vaughey and Vaughey, Emery County, Utah (DMEA 3730).....	2
2. Claim map showing drill holes, Vaughey and Vaughey, Ouray Ventures Property, Emery County, Utah (DMEA 3730).....	11

ANNEX

Table No.	Page
1. Stage I holes.....	10

DMEA 3730

RECEIVED
JUL 23 1956

OURAY VENTURES PROPERTY
Vaughey and Vaughey
Emery County, Utah

INTRODUCTION AND SUMMARY

Vaughey and Vaughey a partnership composed of E. A. Vaughey and W. M. Vaughey and W. T. Blackburn, 1650 Denver Club Building, Denver 2, Colorado, on March 8, 1955, made application for aid in an exploration project on their Ouray Ventures Property in Emery County, Utah. The applicant's project called for drilling 17,100 feet in 57 holes at a total estimated cost of $32,965.00. A field examination was made on April 26, 1955, by R. W. Osterstock of the Geological Survey and M. H. Howes of the Bureau of Mines.

A modified three-stage contract, including 17,400 feet of drilling at a total estimated cost of $31,824.00, was signed September 6, 1955. Drilling started on October 6, 1955, and stage I drilling was completed on November 14, 1955. Drilling of stage II and stage III holes was not approved by the field team.

Sedimentary rocks are exposed on the property. These consist principally of shale, conglomerate, and sandstone of the Burro Canyon formation of Lower Cretaceous age and the Brushy Basin shale member of the Morrison formation of Upper Jurassic age. In the immediate project area, the beds generally strike north and dip gently to the east. Several minor, steep-dipping, normal faults with northwesterly strikes have been observed in the area. Previous to issuing of the contract, Vaughey and Vaughey drilled 19 holes on the Ouray Ventures property and uranium mineralization is reported to have been found in the Salt Wash sandstone member of the Morrison formation in seven of the holes.

Twenty-two stage I holes were drilled under the contract as a total cost of $14,308.55. The Government participation was 75 percent, or $10,731.41. No ore was penetrated by the 22 holes and no chemical assays were made. The Field Team terminated the contract after completion of stage I drilling.

RECOMMENDATIONS

Because no ore was found by stage I drilling, the examining team recommends that no discovery be certified.

Further drilling is not recommended.

LOCATION AND ACCESSIBILITY

The property consists of 37 unpatented claims in secs. 34 and 35, T. 21 S., R. 14 E., Salt Lake meridian, Emery County, Utah (figs. 1 and 2). The San Rafael River is less than 1 mile to the west. Erosion of the original flat terrain has formed wide, shallow, winding arroyos and low mesas. Vegetation is scarce and is comprised for the most part of desert plants. The climate is arid. Altitudes range from 4,400 to 4,600 feet and work can be carried on throughout the year. A fair dirt road, 3 miles in length, connects the property with State Highway 24 from whence it is 12 miles to the Denver and Rio Grande Western Railroad at Green River, Utah.

PROPERTY

The 37 unpatented claims are recorded in the records of the County Recorder of Emery County, Utah, as follows:

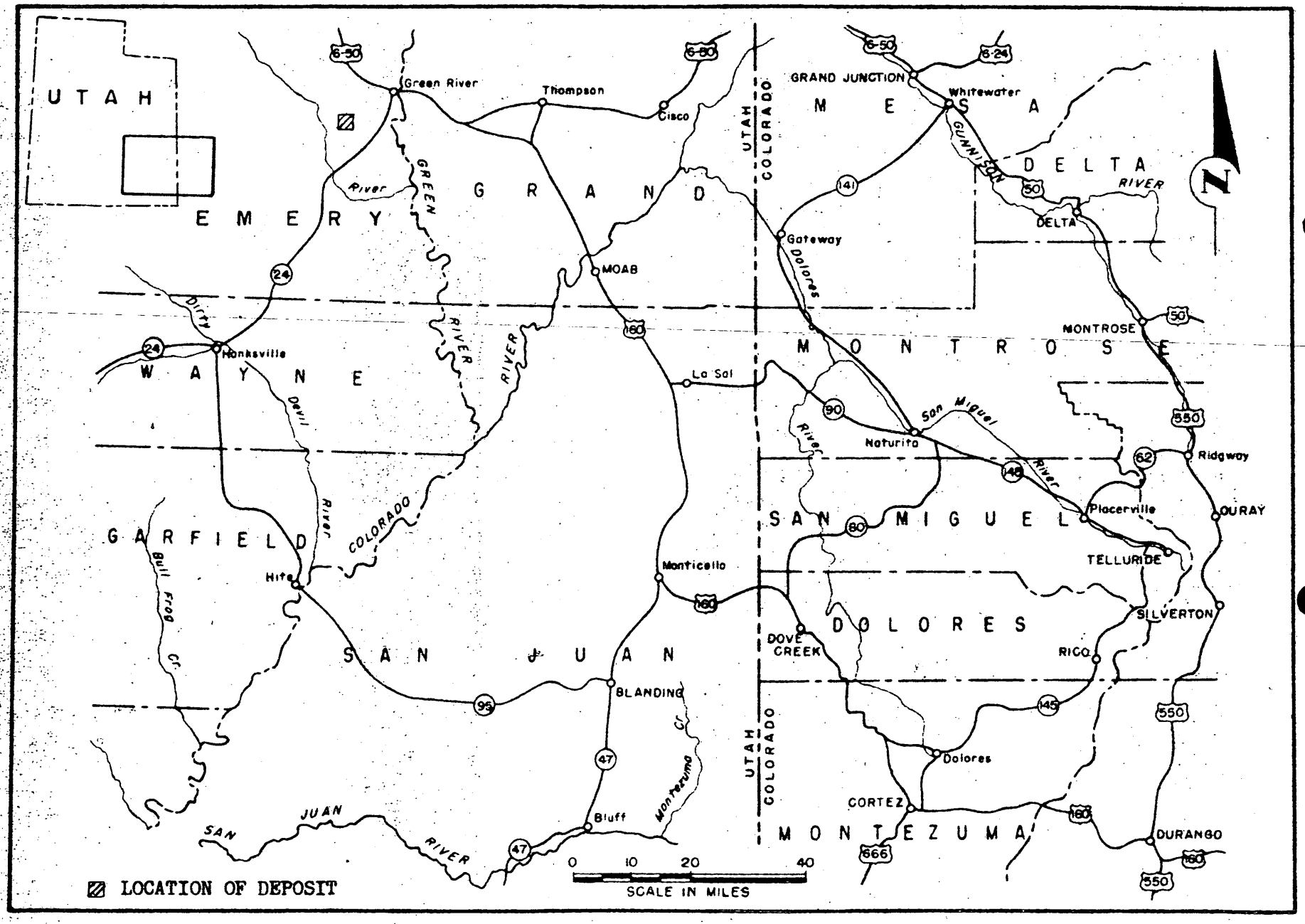


FIGURE 1 - LOCATION MAP, OURAY VENTURES PROPERTY, VAUGHEY AND VAUGHEY, EMERY COUNTY, UTAH. DMEA 3730, CONTRACT Idm-E868

Claim	Book	Page	Type of Filing
Mike No. 1	374	443	Location Notice
Mike No. 2	374	444	Do.
Mike No. 3	374	445	Do.
Mike No. 4	374	446	Do.
Mike No. 5	374	447	Do.
Mike No. 11	374	448	Do.
Mike No. 12	374	449	Do.
Mike No. 13	374	450	Do.
Gertrude No. 11	374	451	Do.
Gertrude No. 12	374	452	Do.
Gertrude No. 13	374	453	Do.
Gertrude No. 14	374	454	Do.
Mike No. 6	374	455	Amended Location Notice
Mike No. 7	374	456	Do.
Mike No. 8	374	457	Do.
Mike No. 9	374	458	Do.
Mike No. 10	374	459	Do.
Hilda No. 1	374	460	Do.
Hilda No. 2	374	461	Do.
Hilda No. 3	374	462	Do.
Hilda No. 4	374	463	Do.
Hilda No. 5	374	464	Do.
Hilda No. 6	374	465	Do.
Hilda No. 7	374	466	Do.
Hilda No. 8	374	467	Do.
Hilda No. 9	374	468	Do.
Hilda No. 10	374	469	Do.
Gertrude No. 1	374	470	Do.
Gertrude No. 2	374	471	Do.
Gertrude No. 3	374	472	Do.
Gertrude No. 4	374	473	Do.
Gertrude No. 5	374	474	Do.
Gertrude No. 6	374	475	Do.
Gertrude No. 7	374	476	Do.
Gertrude No. 8	374	477	Do.
Gertrude No. 9	374	478	Do.
Gertrude No. 10	374	479	Do.

RECEIVED
JUL 23 1956

The above claims were leased by Paul Alex, Deval Walderman, Angelo Zanett, and Fred Zanett to Vaughey and Vaughey on October 16, 1954. The lease is recorded in book J-78, page 53. An amendment and supplement to the lease, dated June 27, 1955, is recorded in book J-79, page 480.

HISTORY

An exploratory program consisting of drilling 19 holes was completed early in 1955 and a DMEA exploratory project of drilling 22 holes was completed on November 14, 1955. No production has been made.

GEOLOGY

The property is on the east flank of the San Rafael Swell, a large northerly trending anticline in Emery County, Utah. Rock strata cropping out on the property are sedimentary in origin and dip gently to the east. Numerous normal faults with small vertical displacement occur in the general area, however, they apparently are not related to the distribution of uranium-vanadium ore deposits.

The formations exposed on, or near, the property, in ascending order, are: the Jurassic Summerville formation, the Jurassic Morrison formation, the Lower Cretaceous Burro Canyon formation, the Upper Cretaceous Dakota (?) sandstone, and the Upper Cretaceous Mancos shale. The Jurassic Morrison formation contains all of the known ore deposits in the area, and is the only formation which will be discussed in detail.

The Jurassic Morrison formation on the Vaughey and Vaughey property is composed of two members, the upper is the Brushy Basin member and the lower is the Salt Wash member. The Brushy Basin member is about 300 feet thick and consists mainly of varicolored mudstone and siltstone interbedded with minor amounts of conglomerate, fine-grained sandstone, and a few thin beds of limestone. Rocks of the Brushy Basin member form most of the rock outcrops on the property.

The Salt Wash member underlies the Brushy Basin member with a gradational contact which is very difficult to determine accurately. It is not exposed on the property but crops out about one mile to the west where it is about 200 feet thick and consists mainly of ledges of sandstone separated by relatively thin layers of mudstone. Although the ledges of sandstone are traceable for considerable distances, they are actually composed of a series of coalescing lenses of sandstone, each lens being partly surrounded by mudstone. Some of the lenses of sandstone contain minor layers, or "splits" of mudstone, and in places much carbonaceous material is with the sandstone.

Most of the known uranium-vanadium ore deposits in the area occur in the upper series of sandstone lenses of the Salt Wash member of the Jurassic Morrison formation. This series of coalescing sandstone lenses has been named the "ore-bearing sandstone", and it is this unit that was being tested by the DMEA drilling program. The ore-bearing sandstone in the vicinity of the Vaughey and Vaughey property is characterized by an abundance of "trough and fill", or festoon type of bedding. The saucer shape and relatively impermeable nature of the festoon surfaces has caused the presence of perched water tables, in an area where the ore-bearing sandstone is usually dry and occurs several hundred feet above the local ground water table.

ORE DEPOSITS

The Vaughey and Vaughey property is near the western edge of the Greenriver mining district, near an area where several small uranium deposits occur. In many respects, the Salt Wash ore deposits in this area are similar in manner of occurrence to those of the Uravan Mineral Belt in southwestern Colorado. However, they differ in that no moderately

large-size deposits have been found. The area is characterized by the occurrence of many small sized pods of ore-grade material, many of which should not be classified as ore deposits. Many of the pods of ore are saturated in perched water tables. Underground observations in several of the nearby mines reveal that the pods of ore-grade material have been localized by festoon bedding structures. These structures are small and have a high frequency of occurrence which accounts for the many small ore pods, and their great density of occurrence. The water associated with these deposits was probably retained by the saucer shaped, relatively impermeable festoon surfaces, and was drained from the ore-bearing sandstone of surrounding areas which are characterized by a more open type of bedding structure. The grade of the ore is good, but it is likely that all of the deposits in this area are very small and occur in clusters.

The small ore bodies tend to occur near the thicker parts (greater than 40 feet) of the sandstone lenses in the ore-bearing sandstone. The mudstone below the ore-bearing sandstone is normally red, however, in the vicinity of ore deposits the mudstone has been altered to gray-green. No ore deposits are associated with the ore-bearing sandstone where it is red; they are found in a gray or brown sandstone depending upon the degree to which the sandstone has been oxidized.

The ore bodies in this area have been localized by intersecting festoon surfaces. The long axis of the ore bodies coincides with the line of intersection of the two festoon surfaces forming the localizing structure. Since the festoon scours have a dominant northerly trend, it follows that the individual ore bodies have a northerly trend. This trend of ore bodies can be seen both on the outcrop to the west of the subject property and in the nearby mines.

GEOLOGIC INTERPRETATION OF THE DRILLING

The contract authorized the drilling of 23 holes in the stage I. Twenty-two of these holes were drilled. Geologic data obtained from this drilling indicate that the chances of finding commercial ore deposits are not good, and in a memorandum dated December 12, 1955, it was recommended that the DMEA Field Team, Region III, terminate the contract immediately. The following observations were pertinent in reaching the decision to recommend termination of the contract:

(1) Of the 22 holes drilled, none penetrated mineralized material by U. S. Geological Survey standards (ie. >0.02 percent eU_3O_8).

(2) An evaluation of all data obtained from logging the drill core and cuttings reveals that of the 22 holes drilled, 21 penetrated a type of sandstone which is considered as unfavorable for the occurrence of ore deposits because of the thinness of the sandstone units and the abundance of red mudstone associated with the sandstone. Hole 1 may have penetrated a favorable type sand, but this is unknown because the coring started in the sand unit and the total thickness of the sand unit is unknown.

(3) Studies of the adjacent outcrops and mines reveal that the area is not favorable for the occurrence of significant ore deposits. Only very small pods of ore grade material, not constituting minable ore, are likely to be found on the subject property.

THE PROJECT

The applicant proposed to explore the area in a three-stage program consisting of 17,100 feet of drilling 57 holes an estimated cost of $32,965.00. A slightly modified three-stage project containing 17,400 feet

of drilling 58 holes an estimated cost of $31,[illegible].00 was recommended and approved.

Stage I consisted of 23 holes to be drilled on 500-to 1,500-foot spacings. Two holes, 11 and 22, were to be cored for their entire length; the other 21 holes were to be cored only in the ore zone. Stage II provided for 25 additional holes each spaced at least 300 feet from any other hole, to delineate ore found in stage I drilling, and stage III provided for 10 holes to be drilled at least 50 feet from any other hole to further delineate ore found in the previous two stages. Stage II and stage III were dependent upon the results obtained by the previous drilling.

The contract was signed on September 6, 1955, and drilling started on October 6, 1955, and stage I drilling was completed on November 14, 1955.

The first drilling contractor proved unsatisfactory, and the Denver Exploration Company, using two Mayhew model 1000 rigs with chain pulldowns completed the stage I drilling.

Because of being located upon a small mesa surrounded by cliffs, hole 2 was eliminated, hole 3 was moved 500 feet to the west, and hole 4 was moved 600 feet to the east. The Field Team terminated the contract after the completion of the stage I drilling. The contract failed to consider the amount of coring required for holes 11 and 22 (982 feet) and the footage cored in stage I was 386 feet more than the contract allowed. The locations of the holes drilled are shown on figure 2. Core recovery through the zone of uranium mineralization was 88 percent (table 1 in the Annex).

Factual Data

The following work and cost data for stage I drilling follow:

1,616 feet of core drilling at $3.00/ft.	$4,848.00
1,742 feet of non-core drilling at $1.298/ft.	2,262.15
4,477 feet of non-core drilling at $1.235/ft.	5,529.15
7,835 feet incidental allowance at $0.15/ft.	1,175.25
8 hours bulldozing at $12.00/hr.	96.00
Adjustment for core drilling	398.00
Total cost of stage I drilling	$14,308.55
Government participation 75 percent, or	$10,731.41

No ore has been produced from the property and no ore was discovered by the drilling.

All equipment was furnished by individual contractors.

CONCLUSIONS AND RECOMMENDATIONS

The ore-bearing sandstone underlying the Vaughey and Vaughey property is considered unfavorable for the occurrence of significant uranium ore deposits. It is recommended that no additional DMEA funds be expended for exploration on the property, and that no certification of discovery be issued.

/ph

ANNEX

Table No. 1

Stage I Holes

Hole	Footage plug-hit	Footage cored	Total footage	Description of cored section	Mineralization
1	350	20	370	19 ft. white sandstone, 1-ft. red mudstone	Barren
2	Not drilled				
3	160	26	186	11 ft. white sandstone, 4 ft. red-green sandstone, 3 ft. red mudstone	Barren
4	240	20	260	3 ft. white sandstone, 1 ft. red mudstone, 4-1/2 ft. white sandstone	Barren
5	305	20	325	3 ft. mixed sandstone, 7 ft. green-red mudstone	Barren
6	270	10	280	Mixed sandstone and mudstone	Barren
7	265	30	295	White sandstone, 4 ft. red-green mudstone	Barren
8	317	52	369	10 ft. white sandstone, 25 ft. green-red mudstone, 22 ft. white sandstone	Barren
9	272	28	300	19 ft. green sandstone, 5 ft. white sandstone, 4 ft. red mudstone	Barren
10	350	30	380	15 ft. white sandstone, 2 ft. red mudstone, 8 ft. white sandstone, 5 ft. red mudstone	Barren
11	0	432	432	10 ft. white sandstone, 9 ft. red-green mudstone, 11 ft. white sandstone, 40 ft. sandstone and mudstone	Barren
12	335	74	409	55 ft. white sandstone, 3 ft. red mudstone, 7 ft. sandstone	Barren
13	295	35	330	7 ft. white sandstone, 3 ft. green mudstone, 19 ft. white sandstone, 7 ft. carbonaceous mud	Barren

Table No. 1 (Cont.)

	Hole	Footage plug-bit	Footage cored	Total footage	Description of cored section	Mineralization
	14	285	20	305	6 ft. white sandstone, 14 ft. green-red mudstone	Barren
	15	363	20	383	19 ft. white sandstone, 1 ft. red mudstone	Barren
	16	345	41	386	5 ft. white sandstone, 13 ft. red mudstone, 19 ft. white sandstone, 4 ft. red mudstone	Barren
	17	355	38	393	19 ft. white sandstone, 19 ft. red-green mudstone	Barren
	18	347	20	367	15 ft. white sandstone, 5 ft. red mud	Barren
	19	378	27	405	22 ft. white sandstone, 5 ft. red mud	Barren
	20	252	63	315	7 ft. white sandstone, 25 ft. red mudstone, 5 ft. white sandstone, 26 ft. red mudstone	Barren
	21	280	30	310	8 ft. grey mudstone, 2 ft. white sandstone, 20 ft. red mudstone	Barren
	22	0	550	550	45 ft. white sandstone, 2 ft. red mudstone, 29 ft. white sandstone, 28 ft. red mudstone	Barren
	23	455	30	485	28 ft. white sandstone some carbon, 2 ft. green mudstone	Barren
Total	22	6,219	1,616	7,835		

(Ore recovery through the Salt Wash portion cored was 88 percent)

4-6-56

FINAL DISTRIBUTION MADE APR 2 1956

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

224 New Customhouse
Denver 2, Colorado

March 15, 1956

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3730 (Uranium), Contract Idm-E868 (Ouray Ventures Property), Emery County, Utah - FINAL PAYMENT

Vaughey & Vaughey

Reference is made to our memorandum dated December 29, 1955, whereby we transmitted final Form MF-104, Operator's Monthly Report and Voucher for the month of November, 1955 and requested that the amount of $250.00 be withheld pending resolution of matters relative to closing the account.

The Operator's final report has been received, therefore we recommend that final payment be made on the following basis which is in conformance with the Report of Review of contract expenditures by the Contract Administration and Audit Division dated February 8, 1956, which was released to this office February 17, 1956.

Basis for Final Payment

Total accepted cost	$13,910.55
Government participation at 75 percent	10,432.92
Total prior payments	10,182.92
Balance due the operator	$ 250.00

W. M. TRAVER

W. M. Traver

JDC:jy
cc: MF-104 File E868
Sec. Op. Comm. (2)
Shaw (2)
Townsend
Chron.

$ 250.00
3/30 56 DMA 56-87

3/19/56 gla

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

RECEIVED
MAR 19 1956

224 New Customhouse
Denver 2, Colorado

March 15, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3730 (Uranium), Contract Idm-E868, Vaughey and Vaughey, a Partnership Consisting of E. A. Vaughey, W. M. Vaughey, and W. T. Blackburn, Emery County, Utah.

In compliance with Special Notice Instructions in the "Minutes Operating Committee" No. 622, dated January 27, 1956, we are enclosing the original and one copy of the Operator's final report.

The report is somewhat deficient. However, the report, in conjunction with data submitted with the 104 reports for the months of October and November, 1955, provides all the information that appears to be necessary. Therefore we recommend that the report be accepted as the final report required by the Contract.

W. M. Traver

W. M. Traver

Enclosures

VAUGHEY AND VAUGHEY
OIL PRODUCERS

1650 DENVER CLUB BUILDING
DENVER 2, COLORADO

March 9, 1956

RECEIVED
MAR 13 1956
Div. of Mineral Technology
BUREAU OF MINES
Denver Research Station

RECEIVED
MAR 19 1956
DMEA
Date Rec'd.

MAR 15 1956
BUREAU OF MINES
Denver, Colorado

Mr. John F. Shaw
Defense Minerals Exploration Administration
United States Department of the Interior
Room 137, Building 20
Denver Federal Center
Denver 2, Colorado

Re: Final Engineering and Geologic Report
Project Contract No. Idm E-868
Docket DMEA 3730
Ouray Ventures, Emery County, Utah

Dear Sir:

During October and November, 1955, Vaughey and Vaughey completed Phase One drilling under the subject contract. 1616' of core drilling was completed, 6219' of plug drilling was completed, and 8 hours of bulldozing time was used constructing roads to drill sites.

No chemical assays were obtained, as Phase one drilling did not encounter sufficient mineralization to warrant chemical assaying. All cores were boxed and labeled and stored for future reference. Also, all holes were probed by used of a Babel counter and probe attachment.

The drilling showed that the supposed ore-bearing sands of the Saltwash member of the Morrison formation were variable in thickness and position. The average thickness of these beds was disappointedly thin. No anomalies of ore grade were found in any of the holes drilled; however, we felt that the sand thickness and the slight mineralization encountered in holes number 1, 7, 9, and 10 merited further attention, and a second phase drilling project was requested to offset these holes. This request was denied, and therefore we consider the project at an end.

Very truly yours,

VAUGHEY AND VAUGHEY

By: Douglas V. Watrous
Douglas V. Watrous

DVW:n
cc: Mr. W. M. Traver
Mr. M. H. Salsbury
United States Uranium Company
Mr. James P. Sloss
Jackson Office, Vaughey and Vaughey

Operator's final report

3/8/56 Lgm

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

224 New Customhouse
Denver 2, Colorado

March 5, 1956

Messrs. Vaughey and Vaughey
1650 Denver Club Building
Denver 2, Colorado

RECEIVED
MAR - 8 1956

Attention: Mr. W. T. Blackburn

Re: Docket DMEA 3730 (Uranium),
Contract Idm-E868,
Vaughey and Vaughey, a Partnership Consisting of E. A. Vaughey, W. M. Vaughey, and W. T. Blackburn,
Emery County, Utah

Gentlemen:

We will appreciate advice by return mail as to the date on or before which we can expect to receive your final engineering and geologic report under the provisions of Article 7(c) of the Contract, as requested in our letter to you of December 23, 1955.

Very truly yours,

W. M. TRAVER

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

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

2-16-56 [illegible]

DOMESTIC MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

RECEIVED
FEB 13 1956

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Yeagley and Yeagley, A Partnership Consisting of
E. A. Yeagley, W. M. Yeagley and W. I. Blackburn
1650 Denver Club Building
Denver, Colorado

pertaining to Exploration Project Contract No. Idm-5868, Docket No. DMEA-3730, including Amendment No. 1, for the months of October and November, 1955, covering a project for the exploration of Uranium on property known as Gertrude and Mike Claims located in Emery County, Utah.

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

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

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

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

(c) a major portion of the costs incurred ($12,735.30) covered work performed at unit rates under independent contract; and

(d) the balance $1,175.25) of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs for work actually performed.

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

Total cost as billed by Contractor:		$14,306.55
Exceptions: (schedule attached)		
By DMEA Finance Officer	$396.00	
Herewith	0.00	396.00
Total Accepted Cost		$13,910.55

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Ten thousand, four hundred thirty-two and 92/100ths Dollars
** $10,432.92 **
is considered valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

February 8, 1956

T. H. Breding, Auditor

Audit Report
recd. 2/16/56

SUMMARY OF INSPECTION

YANKEE AND YANKEE **DOCKET NO. IBRA-1738** **CONTRACT IDA-[illegible]**

Operator claimed 1,616 feet of core drilling @ $3.25 per foot	$5,246.00
Maximum allowed by contract: - 1,616 feet of core drilling at $3.00 per foot	4,848.00
Disallowed - Excess Cost	$ 398.00

Disallowance was made by the Finance Officer and approved by the Auditor.

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

February 8, 1956

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare and Miscellaneous Metals Division

Subject: Amendment to contract

Mr. Murphy has reviewed and approved Amendment No. 1, dated November 7, 1955, executed by the Executive Officer, Region III, and the Operator, to Contract Idm-3368, Docket DMEA-3730, Vaughey & Vaughey.

/s/ Grace L. Ault

Grace L. Ault

Date 2-8-56

To: Mr. Murphy

Docket No. DMEA-3730 Vaughey & Vaughey Commodity) Uranium

Contract No. Idm-E 868

Attached is Amendment No. 1, dated 11/7/55
(filed in the docket - clearance overlooked)

to be reviewed.

Approved Murphy

Other action None

Please return this slip to me for my records.

Grace Ault

February 8, 1956

Memorandum

To: Grace Ault, Rare & Misc. Metals, Inc.

From: Hazel Berry, Operating Committee

By 257

Subject: Amendments to Contracts

Will you please advise me what action your division has taken with respect to the following amendments to contracts ~~under Region IV contracts~~:

Vaughey and Vaughey, DMEA-3730, Idm-E868, Amendment No. 1.

FINAL DISTRIBUTION

MADE JAN 3 6 1956

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

RECEIVED
JAN 3 0 1956

Administrative Audit Difference Statement

Date: Jan. 24, 1956
Payee's
Reference: Nov. 1955

DMEA - 3730

Vaughey & Vaughey
1650 Denver Club Bldg.
Denver 2, Colorado

Gentlemen:

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

Amount Claimed	$ 2,582.65
Difference	$ 159.75
Amount Approved	$ 2,422.90

The reason for the difference was due to:

* Suspended:	Claimed - 388 ft. core drilling	$1,323.75
	Allowable cost per contract:	
	388 ft. core drilling @ $3.00 per ft.	1,164.00
	Amount suspended	$ 159.75

Withheld: $250.00 pending final settlement of the account.

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

Very sincerely yours,

N. E. Stokes
Audit Section

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

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

RECEIVED
JAN 30 1956

224 New Customhouse
Denver 2, Colorado

December 29, 1955

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA Docket 3730 (Uranium) Contract Idm-E068, Vaughey and Vaughey, Ouray Venture Property, Emery County, Utah - Operator's Monthly Progress Report for the period November, 1955

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

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

Suspend an amount of $159.75 for core drilling

Claimed by Operator: 388 feet core drilling at total cost of- - - - - - - - - - - - - - - - -	$1,323.75
Allowable cost per contract: 388 feet core drilling @ 3.00/ft, or - - - - - - - - - - - - -	1,164.00
Amount to be suspended- - - - - - - - - - - - -	$ 159.75

Withhold an amount of $250.00 pending final settlement of the account

Reconciliation with amount claimed on Form MF-104

Amount claimed by Operator- - - - - - - -	$7,582.65
Amount suspended this report- - - - - - -	159.75
Adjusted claim- - - - - - - - - - - - - - - -	$7,422.90

RECEIVED
DEC 29 1955
AUDITS
BUREAU OF MINES
REGION III
DENVER, COLO.

Government Participation at 75 percent- - - - $5,567.18
Amount to be withheld- - - - - - - - - - - - - 250.00

Recommended payment to Operator- - - - - - $5,317.18

Summary of Suspensions (No reinstatements)

Core Drilling

Amount previously suspended- - - - - - - - -$238.25
Amount suspended this report- - - - - - - - - 159.75
Total suspended to date- - - - - - - - - - - - $398.00

Plug Drilling

No suspensions

Remarks

Date of Report- - - - - - - - - - - - - - - December 8, 1955
Date Received in Field Office- - - - - - December 13, 1955
Date Received in Region Office- - - - - December 19, 1955

W. M. Traver

W. M. Traver

Enclosures
JDC:jy
cc: MF-104 File E868
Sec. Op. Comm. (2)
Shaw (2)
Townsend w/copy engr's report
Chron.

DMEA
Data Rec'd
DEC 1 1955
BUREAU OF MINES
Denver, Colorado

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
December 15, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

RECEIVED
JAN 30 1956

From: Carl Belser

Subject: DMEA 3730, Contract Idm-E868 (Uranium) Ouray Venture property, Vaughey and Vaughey, Emery County, Utah - Progress report for November, 1955

Drilling progress on the property was inspected on December 5, 1955. Stage I drilling had been completed and the crew and drilling equipment were gone. The following holes were completed in November:

Hole No.	Footage Plug-bit	Footage Cored	Footage Total	Remarks
#1	350	20	370	anomaly gray s.s.
#3	160	26	186	pinkish sandstone
#4	240	20	260	poor s.s.
#5	305	20	325	gray s.s.
#6	270	10	280	poor
#7	265	30	295	25 feet gray s.s. last 5 feet shale
#8	317	52	369	20 feet s.s.
#9	272	28	300	anomalie at 284' s.s. and mudstone
#10	350	30	380	some s.s.
#13	295	35	330	some s.s.
#14	285	20	305	6 feet s.s.
#15	363	20	383	coarse s.s.
#18	347	20	367	good s.s. last 4' shale
#19	378	27	405	18' gray s.s.
#21	280	30	310	mixed m.s. and s.s.
(November 15 Total)	4,477	388	4,865	
(Total drilled previously) 7	1,742	1,228	2,970	
(Total Stage I Drilling) 21	6,219	1,616	7,835	

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
JAN 30 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of NOVEMBER, 1955 Docket No. DMEA 3730 Contract No. IDM E868
Operator's Name VAUGHEY AND VAUGHEY Minerals URANIUM AND VANADIUM
Address 1650 DENVER CLUB BLDG., DENVER 2, COLO.
Contract Amount, $ 31,824 Government Participation: 75 % Amount, $ 23,868

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	$6852.90	$6184.40	$13,037.30			
Bulldozing		96.00	96.00			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
INCIDENTAL ALLOWANCE	729.75	445.50	1,175.25			
TOTALS	$7582.65	$6725.90	$14,308.55	7,422.90	6,725.90	14,148.80
				1	238.95	238.25
					6487.65	13910.55

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

Date DEC. 8, 1955 *Payee VAUGHEY AND VAUGHEY

Per Douglas V. Vaughey Title

DOUGLAS V. VAUGHEY MINING ENGINEER

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of $5317.18

Signature
(Authorized Certifying Officer)

Date 1/24/56 Vou. No. DMA 56-63

(See other side)

Note: 250.00 withheld 1st Previous disallowance

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Fdm-5568 in accordance with the terms of the contract.

Signature Carl Belan ($5,567.18) Title Mining Engineer Date 12/15/55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. M. Haney Title Executive Officer Date DEC 29 1955

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of NOVEMBER 1955 Docket No. DMEA 3730 Contract No. IDM E868

Operator's Name VAUGHEY AND VAUGHEY Minerals URANIUM AND VANADIUM

Address 1650 DENVER CLUB BLDG., DENVER 2, COLORADO

OPERATION	STAGE	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
CORE DRILLING ~~Drifting~~	I	F.T.	$1323.75	388	$5246.00	1616	$ 3.246	1230	$ 3.00
~~Crosscutting~~	II	F.T.						750	
~~Raising~~	III	F.T.						300	
BLDG DRILLING ~~Shafts~~	I	F.T.	5529.15	4477	7791.30	6219	1.253	5670	1.45
~~Winzes~~	II	F.T.						6750	
~~Drilling: Core~~ ~~Churn~~	III	F.T.						2700	
BULL DOZING	I	HR.			96.00	8	12.00	8	12.00
~~Auger~~	II	HR.						9	
~~Stripping~~	III	HR.						3	
CHEMICAL ASSAY ~~Prospecting~~	I	EACH						18	5.00
~~Test Pits~~	II	EACH						17	
~~Roads and Trails~~	III	EACH						7	
INCIDENTAL ALLOWANCE		F.T.	729.75	4865	1175.25	7835	0.15	17400	0.15
TOTAL DISTRIBUTED COSTS			$7582.65	9730	$14308.55				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased			NONE						
Initial Rehabilitation and Repairs			NONE						
New Buildings, Improvements, etc.			NONE						
			~~$XXXXXX~~		~~$XXXXXXXX~~				
TOTAL COSTS			$7582.65		$14,308.55				

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

REMARKS:

Date DEC. 8, 1955 Operator VAUGHEY AND VAUGHEY

Per Douglas V. Watrous Title

DOUGLAS V. WATROUS MINING ENGINEER

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

(Instructions on reverse)

(For Government use only) Carl Beber

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
JAN 30 1956

DECEMBER 8, 1955

MR. JOHN F. SHAW
DEFENSE MINERALS EXPLORATION ADMINISTRATION
UNITED STATES BUREAU OF MINES
ROOM 137, BUILDING 20
DENVER FEDERAL CENTER
DENVER 2, COLORADO

RE: PROJECT CONTRACT NO. IDM E-868
DOCKET DMEA 3730
OURAY VENTURES, EMERY COUNTY, UTAH

DEAR SIR:

FOLLOWING IS A NARRATIVE REPORT ON THE SUBJECT DRILLING CONTRACT FOR THE MONTH OF NOVEMBER, 1955, AND TO THE COMPLETION OF THE FIRST PHASE OF DRILLING.

DURING NOVEMBER, HOLES 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 14, 15, 18, 19, 21 WERE COMPLETED WITH 388 FEET CORED AND 4477 FEET PLUGGED. DRILLING WAS COMPLETED ON NOVEMBER 15, 1955.

HOLES 2, 3, AND 4 WERE FOUND TO BE INACCESSIBLE. DURING A VISIT BY AN EXAMINING TEAM REPRESENTING THE BUREAU OF MINES AND THE U.S.G.S., HOLES 3 AND 4 WERE RELOCATED AS INDICATED ON THE ACCOMPANYING MAP, AND HOLE 2 WAS ELIMINATED.

DRILL RESULTS ARE EVALUATED ON THE BASIS OF RADIOACTIVE ANOMALIES PRESENT, THICKNESS OF THE FAVORABLE SAND LENSE IN THE SALT WASH MEMBER, AND PRESENCE OF BLEACHING. ALL HOLES WERE PROBED BY THE USE OF A BABEL COUNTER PROBE AND ALSO BY A U.S.G.S. SCINTILLATOR PROBING UNIT. NO ANOMALIES OF ORE GRADE WERE FOUND. HOLES 1, 7, 9, 10, AND 14 ENCOUNTERED VERY WEAK MINERALIZATION IN THE FIRST OR SECOND SAND LENSE. HOLE 1 OF THE PREVIOUS DRILLING PROGRAM SHOWED 8 INCHES OF 9.22% U_3O_8 AT A DEPTH OF 245 FEET. THICKNESS OF THE FAVORABLE SAND LENSE VARIES CONSIDERABLY, FROM 20 TO 50 FEET. BLEACHING WAS GENERALLY PRESENT OVER THE ENTIRE PROPERTY.

FOR THE ABOVE CONSIDERATIONS, THE AREA INCLUDED BY HOLES 1, 7, 9, AND 10, AND HOLE 1 OF THE PREVIOUS DRILLING IS THE MOST FAVORABLE FOUND. I RECOMMEND THAT FUTURE DRILLING BE CONDUCTED ON THIS SECTION OF THE PROPERTY AND THAT DRILLING CENTERS BE REDUCED TO 300 FEET.

SINCERELY YOURS,

VAUGHEY AND VAUGHEY

BY: _____
PHILIP N. PAYNE, GEOLOGIST

APPROVED:

Douglas V. Watrous

DOUGLAS V. WATROUS
MINING ENGINEER

PNP:N
CC: MR. W. M. TRAVER
MR. M. H. SALSBURY
UNITED STATES URANIUM COMPANY
MR. JAMES P. SLOSS

RECEIVED
JAN 30 1956

Nov. 22, 1955

Vaughey & Vaughey Oil Company
1650 Denver Club Bldg.
Denver, Colorado

Gentlemen:

The following invoice covers both plug and core drilling on the Ouray Venture property, located in Emery County, Utah, from Nov. 1, 1955 to Nov. 15, 1955:

Hole No. 1 (Plug)

100 ft. @ $1.00	$100.00	
100 ft. @ 1.20	120.00	
100 ft. @ 1.45	145.00	
50 ft. @ 1.70	85.00	
350 ft.	$450.00	

(Core)

350 ft. to 370 ft.	
20 ft. @ $3.75	$ 75.00
	450.00
TOTAL	$525.00

Hole No. 3 (Plug)

100 ft. @ $1.00	$100.00	
60 ft. @ 1.20	72.00	
160 ft.	$172.00	

(Core)

160 ft. to 186 ft.	
26 ft. @ $2.25	$ 58.50
	172.00
TOTAL	$230.50

Hole No. 4 (Plug)

100 ft. @ $1.00	$100.00	
100 ft. @ 1.20	120.00	
40 ft. @ 1.45	58.00	
240 ft.	$278.00	

(Core)

240 ft. to 260 ft.	
20 ft. @ $3.00	$ 60.00
	278.00
TOTAL	$338.00

Hole No. 5 (Plug)

100 ft. @ $1.00	$100.00	
100 ft. @ 1.20	120.00	
100 ft. @ 1.45	145.00	
5 ft. @ 1.70	8.50	
305 ft.	$373.50	

(Core)

305 ft. to 325 ft.	
20 ft. @ $3.75	$ 75.00
	373.50
TOTAL	$448.50

Hole No. 14 (Plug)

100 ft. @ $1.00	$100.00	
100 ft. @ 1.20	120.00	
85 ft. @ 1.45	123.25	
285 ft.	$343.25	

(Core)

285 ft. to 300 ft. @ $3.00	$ 45.00
300 ft. to 305 ft. @ $3.75	18.75
20 ft.	$ 63.75
	343.25
TOTAL	$407.00

Hole No. 15 (Plug)

100 ft. @ $1.00	$100.00
100 ft. @ 1.20	120.00
100 ft. @ 1.45	145.00
63 ft. @ 1.70	107.10
363 ft.	$472.10

(Core)

363 ft. to 383 ft.	
20 ft. @ $3.75	$ 75.00
	472.10
TOTAL	$547.10

Hole No. 18 (Plug)

100 ft. @ $1.00	$100.00
100 ft. @ 1.20	120.00
100 ft. @ 1.45	145.00
47 ft. @ 1.70	79.90
347 ft.	$444.90

(Core)

347 ft. to 367 ft.	
20 ft. @ $3.75	$ 75.00
	444.90
TOTAL	$519.90

Hole No. 19 (Plug)

100 ft. @ $1.00	$100.00
100 ft. @ 1.20	120.00
100 ft. @ 1.45	145.00
78 ft. @ 1.70	132.60
378 ft.	$497.60

(Core)

378 ft. to 400 ft. @ $3.75	$ 82.50
400 ft. to 405 ft. @ $4.40	22.50
27 ft.	$105.00
	497.60
TOTAL	$602.60

Hole No. 21 (Plug)

100 ft. @ $1.00	$100.00
100 ft. @ 1.20	120.00
80 ft. @ 1.45	116.00
280 ft.	$336.00

(Core)

280 ft. to 300 ft. @ $3.00	$ 60.00
300 ft. to 310 ft. @ $3.75	37.50
30 ft.	$ 97.50
	336.00
TOTAL	$433.50

TOTAL 15 Holes, 4,477 ft. plug, 388 ft. core. BALANCE DUE $6,852.90

DENVER EXPLORATION COMPANY

By Jack Haulton
Asst. Mgr.

Approved
D. V. Watkins

Nov. 15, 1955

RECEIVED
JAN 30 1956

Vaughey & Vaughey Oil Company
1650 Denver Club Bldg.
Denver, Colorado

Gentlemen:

This is to certify that from Nov. 1, 1955 to Nov. 15, 1955, we completed the following drilling on you Ouray Venture property, located in Emery County, Utah, which is under D.M.E.A. Contract Number IDM - E 868:

Hole No.	Plug Footage	Core Footage	Total Depth
1	350 ft.	20 ft.	370 ft.
3	160	26	186
4	240	20	260
5	305	20	325
6	270	10	280
7	265	30	295
8	317	52	369
9	272	28	300
10	350	30	380
13	295	35	330
14	285	20	305
15	363	20	383
18	347	20	367
19	378	27	405
21	280	30	310
TOTAL 15 Holes	4,477 ft.	388 ft.	5,065 ft.

Yours sincerely,

DENVER EXPLORATION COMPANY

By Jack Houlton
Jack Houlton, Dist. Mgr.

12-27-55 ign

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

224 New Customhouse
Denver 2, Colorado

December 23, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket DMEA 3730 (Uranium), Contract Idm-E868, Vaughey and Vaughey, Emery County, Utah

Enclosed are four copies of denial by this office for the Operator to perform work under Stage II of the Contract and notice that the Government's obligation to contribute to the cost of the work under the terms of the Contract ceased upon completion of Stage I.

Also enclosed are two copies of the Operator's letter of November 29, 1955, requesting the Government's approval for the work, and four copies of a memorandum from J. W. Hasler, dated December 12, 1955, recommending that the Operator's request be denied.

E. N. Harshman

E. N. Harshman

Enclosures

NOVEMBER 29, 1955

RECEIVED
DEC 2 7 1955

MR. W. A. TRAVER
DEFENSE MINERALS EXPLORATION ADMINISTRATION
UNITED STATES BUREAU OF MINES
NEW CUSTOMHOUSE
DENVER, COLORADO

RE: DOCKET DEX 3730 (URANIUM)
PROJECT CONTRACT NO. IDM L 868
CURAY VENTURES PROPERTY
EMERY COUNTY, UTAH

DEAR SIR:

REQUEST IS HEREBY MADE TO ENTER INTO SECOND PHASE DRILLING UNDER SUBJECT CONTRACT.

IT IS REQUESTED THAT DRILL HOLES NUMBER 1, NUMBER 7, NUMBER 9, AND NUMBER 10 (AS NUMBERED UNDER CONTRACT IDM L 868) BE OFFSET WITH THREE HOLES EACH FOR A TOTAL OF 12 HOLES HAVING AN AVERAGE DEPTH OF 360 FEET. IT IS ALSO REQUESTED THAT DRILL HOLE NUMBER 1, WHICH WAS DRILLED BY VAUGHEY AND VAUGHEY BEFORE THE SIGNING OF THE CONTRACT, BE OFFSET WITH THREE HOLES HAVING AN AVERAGE DEPTH OF 260 FEET.

TOTAL FOOTAGE REQUESTED IS 4260 FEET, OF WHICH 600 FEET SHOULD BE CORE HOLE DRILLING.

THIS REQUEST IS MADE FOR THE FOLLOWING REASONS:

1. EACH OF THE ABOVE HOLES SHOWED A FAIR THICKNESS OF SAND AT A HORIZON WHERE MINERALIZATION COULD BE EXPECTED.

2. EACH OF THE HOLES EVIDENCED SOME RADIOACTIVITY IN THE SAND.

3. BLEACHING OF THE SANDS WAS NOTED IN ALL OF THE ABOVE HOLES.

4. OVERALL, WE BELIEVE THAT PHASE ONE DRILLING ACCOMPLISHED ITS PURPOSE BY ELIMINATING SOME OF THE LAND AND LOCALIZING A PORTION THAT WE BELIEVE WARRANTS FURTHER DRILLING.

5. WISHFULLY THINKING AN ORE BODY OF CONSIDERABLE SIZE COULD BE ENCOUNTERED BETWEEN HOLES COMPLETED UNDER PHASE ONE DRILLING.

Hole No. 6 (Plug)

100 ft. @ $1.00		$100.00
100 ft. @ 1.20		120.00
70 ft. @ 1.45		101.50
270 ft.		$321.50

(Core)

270 ft. to 280 ft.	
10 ft. @ $3.00	$ 30.00
	321.50
TOTAL	$351.50

Hole No. 7 (Plug)

100 ft. @ $1.00		$100.00
100 ft. @ 1.20		120.00
65 ft. @ 1.45		94.25
265 ft.		$314.25

(Core)

265 ft. to 295 ft.	
30 ft. @ $3.00	$ 90.00
	314.25
TOTAL	$404.25

Hole No. 8 (Plug)

100 ft. @ $1.00		$100.00
100 ft. @ 1.20		120.00
100 ft. @ 1.45		145.00
17 ft. @ 1.70		28.90
317 ft.		$393.90

(Core)

317 ft. to 369 ft.	
52 ft. @ $3.75	$195.00
	393.90
TOTAL	$588.90

Hole No. 9 (Plug)

100 ft. @ $1.00		$100.00
100 ft. @ 1.20		120.00
72 ft. @ 1.45		104.40
272 ft.		$324.40

(Core)

272 ft. to 300 ft.	
28 ft. @ $3.00	$ 84.00
	324.40
TOTAL	$408.40

Hole No. 10 (Plug)

100 ft. @ $1.00		$100.00
100 ft. @ 1.20		120.00
100 ft. @ 1.45		145.00
50 ft. @ 1.70		85.00
350 ft.		$450.00

(Core)

350 ft. to 380 ft.	
30 ft. @ $3.75	$112.50
	450.00
TOTAL	$562.50

Hole No. 13 (Plug)

100 ft. @ $1.00		$100.00
100 ft. @ 1.20		120.00
95 ft. @ 1.45		137.75
295 ft.		$357.75

(Core)

295 ft. to 300 ft. @ $3.00	$ 15.00
300 ft. to 330 ft. @ $3.75	112.50
35 ft.	$127.50
	357.75
TOTAL	$485.25

ENCLOSED PLEASE FIND LOGS OF HOLES WE ARE REQUESTING OFFSETS FOR, ALONG WITH MAP SHOWING APPROXIMATE POSITION OF PROPOSED OFFSET HOLES.

VERY TRULY YOURS,

VAUGHEY AND VAUGHEY

BY: _____
DOUGLAS V. BATROUS

JW:SN
ENCL.
CC: MR. J. W. HABLER
A.E.C. COMPOUND
GRAND JUNCTION, COLORADO
U. S. URANIUM COMPANY
MR. JAMES SLOSS
JACKSON OFFICE, VAUGHEY AND VAUGHEY

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

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

December 23, 1955

Vaughey and Vaughey,
A Partnership which consists
of E. A. Vaughey, W. M. Vaughey,
and W. T. Blackburn,
1650 Denver Club Building,
Denver 2, Colorado

Re: Docket DMEA 5730 (Uranium)
Contract Idm-2868,
Vaughey and Vaughey,
Emery County, Utah

Gentlemen:

Reference is made to your letter of November 29, 1955, wherein you request the Government's approval of drilling to be performed under Stage II of Contract Idm-2868.

Work approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense program.

Study of the results of the work performed under Stage I indicates that the probability of disclosing a significant quantity of uranium ore of acceptable grade is not sufficiently promising to justify Government participation in the costs of work you propose for Stage II. Therefore your request is denied.

Inasmuch as all approved work has been completed and as the Government's approval of additional work will not be forthcoming, this constitutes notice that the contract is terminated and all obligations of the Government to participate in the costs of the work under the terms of the Contract ceased upon completion of the work authorized under Stage I.

In conjunction with the foregoing, your attention is directed to the provisions of Article 7(c) of the Contract relative to your rendering a final engineering and geologic report relative to the work performed under Stage I.

Very truly yours,

DMEA Field Team, Region III

By E. M. Harshman
E. M. Harshman
Acting Executive Officer

JWR:prl
cc: Chairman, Oper. Comm. (4)
Finance Office, Region III
Amendment file
Harshman
Wilson
Bailer
Townsend Correst. file Chron.

MINERAL DEPOSITS
DMEA
RECEIVED
DEC 16 1955
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. BOX 360
GRAND JUNCTION, COLORADO

December 12, 1955

DMEA
Date Rec'd.
DEC 19 1955
BUREAU OF MINES
Denver, Colorado

Memorandum

To: E. N. Harshman, DMEA Field Team, Region III

From: J. William Hasler

Subject: DMEA 3730, Vaughey and Vaughey,
Recommendation for termination of contract Idm-E 6868

On September 6, 1955, a contract was granted between the Government (DMEA) and the partnership of Vaughey and Vaughey. This contract provides for three stages of exploratory drilling. The contract provides for a total maximum footage of 17,400 feet.

Stage I drilling was completed recently, and a request was made on November 29, 1955, to start second stage drilling. The applicant requested a total of 4,860 feet of drilling around holes Nos. 1, 7, 9, and 10, which were drilled on stage I.

We have evaluated the results of stage I drilling and have come to the conclusion that further exploration on the subject property cannot be justified geologically. The following observations were pertinent in reaching this decision:

1. Of the 23 holes drilled, none encountered mineralized material by USGS cutoffs (i.e. ~~>0.20%~~ >0.020% eU_3O_8).

2. The data obtained from logging the drill core and cuttings are not complete in all cases, but an evaluation of all data obtained reveals that of the 23 holes drilled, 22 are considered unfavorable because of the thinness of the sandstone units and the abundance of red mudstone associated

with the sandstone. The other, hole No. 1, may have penetrated a favorable type sand, but this is unknown because the coring started in the sand unit.

3. Outcrop data and data obtained from adjacent properties indicate that the area is not considered to be favorable for the occurrence of significant ore deposits.

In summary, it is concluded that sufficient drilling has already been done to indicate that areas of favorable ground which may contain significant ore deposits do not occur on the subject property. It is recommended that the contract be terminated immediately.

J. William Hasler

J. William Hasler,
Geologist

JWH/mlr

1-23-56 [illegible]

FINAL DISTRIBUTION
JAN 19 1956
MADE

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

RECEIVED
JAN 23 1956

Administrative Audit Difference Statement

Date: [illegible]
Payee's
Reference: [illegible]

[illegible]
1650 Denver Club Bldg.
Denver 2, Colorado

Gentlemen:

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

Amount Claimed $[illegible]

Difference $ 839.25

Amount Approved $[illegible]

The reason for the difference was due to:

Deducted 839.25, the amount by which the allowable certain cost is exceeded for 1,[illegible] ft. of core drilling. All or part of this amount is subject to reimbursement if subsequent stage 1 core drilling costs are under certain allowed by the contract on a unit basis.

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

Very sincerely yours,

N. E. Stokes
Audit Section

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

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

RECEIVED
JAN 23 1956

224 New Customhouse
Denver 2, Colorado

December 12, 1955

Memorandum

To: T. A. Christensen

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

Subject: DMEA Docket 3730, (Uranium) Contract Idm-E868, Vaughey and Vaughey, Ouray Ventures Property, Emery County, Utah. Operator's Monthly Progress Report, for the period October, 1955

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

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

Suspend $238.25, the amount by which the allowable maximum cost is exceeded for 1,228 feet of core drilling. All or part of this amount is subject to reinstatement if subsequent Stage I core drilling costs are under the maximum allowed by the contract on a unit basis.

Remarks

Date of Report- - - - - - - - - - - - - - - - November 7, 1955
Date Received in Field Office- - - - - - November 15, 1955
Date Received in Region Office- - - - - December 9, 1955

E. N. Harshman

E. N. Harshman

Enclosures
JDC:jy
cc: MF-104 File E868
Sec. Op. Comm. (2)
Shaw (2)
Townsend w/copy engr's. report
Chron

Building 20
Federal Center
Denver 2, Colorado
December 1, 1955

REGION III

Memorandum

RECEIVED
JAN 23 1956

To: Executive Officer, DMRA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: Carl Belser

Subject: DMRA 3730, Contract Idm-E868 (Uranium) Ouray Ventures Property, Vaughey and Vaughey, Emery County, Utah
Progress report for October 1955

Drilling progress was inspected on November 3, 1955. The applicant's independent contractor, Denver Exploration Company, was using a Mayhew 1,000 rig with a chain pulldown. The following holes were completed in October:

Hole No.	Footage Plug bit	Footage Cored	Total Footage	Remarks
11	0	432	432	
12	335	74	409	391.5'-394' coarse, pebbly s.s.
16	345	41	386	
17	355	38	393	
20	252	63	315	293'-315' dropped core
22	0	538	550	cored 50' into Summerville,
23	455	30	485	
7	1742	1228	2970	

The following holes were also drilled or being drilled on November 3:

8	317	50	367	slight uranium mineralization
21	310			no core-will finish drilling
9	70			

Phillip N. Paine, geologist for the applicant, and Howard F. Albee and Henry B. Dyer, USGS geologists, accompanied the writer on the inspection. Holes 2, 3 and 4 were also inspected with a view to relocationing.

The narrative report and the 104's are at variance. In 104A 1228 feet of coring is shown, while in the narrative it is 1236. The figure, 1236 checks with my inspection records, but not with the driller's accounts.

Your attention is called to the contract. In Stage I, under General Provisions, 2, holes 11 and 22 are to be cored for their entire depth, a total of 982 feet. The entire coring footage alotted for the 22 holes (23 formerly) is 1230 feet or 248 feet for the remaining 20 holes (12 feet per hole) - not enough to explore the 30-foot sandstone mentioned in the first paragraph of Exhibit "A". Also the claimed coring footage for October is only 2 feet less than the 1230 feet in the contract and the actual footage is 6 feet more. It will also be noticed on the 104's that the core drilling has been claimed at $3.194 a foot instead of $3.00 and the plug bit drilling at $1.298 + instead of $1.45 a foot.

The cost of 1228 feet of core drilling at $3.00 a foot is $3,684.00, of 1742 feet of plug bit drilling at $1.298+ foot is $2,262.15, of 8 hours of bulldozing at $12.00 per hour is $96.00, and of 2970 feet of incidental drilling allowance at $.15 a foot is $445.50 or a total of $6,487.65.

Payment of 75 percent of the above amount or $4,865.74 is recommended.

The drill logs have been retained in this office.

Carl Belser

Carl Belser
Mining Engineer

CB/mw
ee 6
Idm-E868
Chron.

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

Budget Bureau No. 42-R1036.5

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

RECEIVED
JAN 23 1956

Month of OCTOBER, 1955 Docket No. DMEA 3730 Contract No. IDA E 060
Operator's Name VAUGHEY AND VAUGHEY Minerals URANIUM AND
Address 1650 DENVER CLUB BLDG., DENVER 2, COLORADO VANADIUM
Contract Amount, $ 31,024 Government Participation: 75 % Amount, $23,268

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	$184.40	-0-	$184.40			
Bulldozing	95.00	-0-	95.00			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify): INCIDENTAL ALLOWANCE	445.50	-0-	445.50			
TOTALS	$729.90		$729.90	6,487.65		6,487.65

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

Date 11-7-55 *Payee VAUGHEY AND VAUGHEY

Per Philip N. Payne Title Geologist
PHILIP N. PAYNE GEOLOGIST

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

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

(Instructions on reverse)

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

$ 4865.74

Signature [illegible]
(Authorized Certifying Officer)

Date 1/16/56 Vou. DMA 56-59

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Ida-868 in accordance with the terms of the contract.

Signature Carl Belon (9,865.74) Title Mining Engineer Date 11/15/55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature E. M. Hansbrough Title Acting Executive Officer Date DEC 1 2 1955

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
JAN 23 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of OCTOBER 1955 Docket No. DMEA 3730 Contract No. IDM E 868
Operator's Name VAUGHEY AND VAUGHEY Minerals URANIUM AND VANADIUM
Address 1650 DENVER CLUB BLDG., DENVER 2, COLORADO

OPERATION	STAGE	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
CORE DRILLING	I	FT.	$3922.25	1228	$3922.25	1228	$ 3.194	1230	$ 3.00
~~Drifting~~	II	FT.						750	
~~Crosscutting~~	III	FT.						300	
PLUG DRILLING	I	FT.	2262.15	1742	2262.15	1742	1.298	5670	1.45
~~Raising~~	II	FT.						6750	
~~Shafts~~	III	FT.						2700	
BULL DOZING	I	HR.	96.00	8	96.00	8	12.00	8	12.00
~~Winzes~~	II	HR.						9	
~~Drilling Core~~	III							3	
CHEMICAL ASSAY	I	EACH						18	5.00
~~Auger~~	II	EACH						17	
~~Stripping~~	III	EACH						7	
INCIDENTAL ALLOWANCE		FT.	445.50	2970	445.50	2970	0.15	17400	0.15
TOTAL DISTRIBUTED COSTS			$6725.90		$6725.90				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased			NONE						
Initial Rehabilitation and Repairs			NONE						
New Buildings, Improvements, etc.			NONE						
TOTAL COSTS			$6725.90		$6725.90				

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

Date Nov. 7, 1955 Operator VAUGHEY AND VAUGHEY

Per Philip N. Payne Title Geologist
PHILIP N. PAYNE GEOLOGIST

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

REMARKS:

(Instructions on reverse)

(For Government use only) Carl Belan

INSTRUCTIONS

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

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

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

GPO 872894

November 2, 1955

Mr. John F. Shaw
Defense Minerals Exploration Administration
United States Bureau of Mines
Room 137, Building 20
Denver Federal Center
Denver 2, Colorado

RECEIVED
JAN 23 1956

Re: Project Contract No. IDM E-868
Docket DMEA 3730
Our Ouray Ventures Property
Emery County, Utah

Dear Sir:

Following is a narrative report on the subject drilling contract for the month of October, 1955:

Drilling commenced on October 6, 1955, when one Failing 1000 Rotary Drilling rig entered the property. A second rig of the same make was added on October 9, 1955. Through the end of the month seven holes have been completed with 1,236 feet cored (size NX) and 1742 feet plugged.

On October 7, 1955, a D6 Bulldozer was contracted and performed eight hours of work building access roads to drill sites.

Drill sites were placed by a transit traverse and elevations carried from NE corner Section 3.

Cuttings samples are taken every 2 feet. Core is boxed, labeled, logged, and stored for future reference. On completion of a hole, each is probed by a Babbel Counter and probe attachment. Some difficulty was experienced in coring at the beginning. Several runs lost or fractured core (holes #23 and #20). This trouble has been overcome and overall recovery presently exceeds 90%.

As shown in the accompanying individual drill logs, holes #22 and #11 were cored from the surface and bottomed in the Summerville formation. A maximum thickness of 270 feet of Brushy Basin was cored and an average of 215 feet of the Salt Wash member encountered.

Sand lenses in the Salt Wash are found to be very variable in thickness and position. These are easily located while drilling

BY THE CUTTINGS AND A DISTINCT DIFFERENCE IN DRILLING CHARACTERISTICS.

IN THE NORTHEAST PORTION OF THE PROPERTY, SAND LENSES WERE OFTEN ABSENT OR THIN AND UNCARBONACEOUS IN THE UPPER PART OF THE SALT WASH. THIS CONDITION LED TO DEEPER DRILLING IN ORDER TO CORE A MORE FAVORABLE ZONE. IT IS ANTICIPATED THAT FUTURE HOLES WILL BE SOMEWHAT SHALLOWER.

NONE OF THE HOLES COMPLETED TO DATE HAVE SHOWN SIGNIFICANT MINERALIZATION.

SINCERELY YOURS,

VAUGHEY AND VAUGHEY

BY: _____
PHILIP N. PAYNE
GEOLOGIST

PNP:N

APPROVED:

Douglas V. Watrous
DOUGLAS V. WATROUS
MINING ENGINEER

CC: MR. W. M. TRAVER, U.S.B.M., DENVER, COLORADO
MR. M. H. SALSBURY, U.S.B.M., GRAND JUNCTION, COLORADO
U. S. URANIUM COMPANY
MR. JAMES P. SLOSS
VAUGHEY AND VAUGHEY, JACKSON, MISSISSIPPI

RECEIVED
JAN 23 1956

Oct. 31, 1955

Vaughey & Vaughey Oil Company
1650 Denver Club Bldg.
Denver, Colo.

Gentlemen:

The following invoice covers both plug and core drilling on the Ourey Venture property in Emery County, Utah as of Oct. 31, 1955.

Hole No. 1, (cored)

0 feet to 100 feet,	@1.75 per foot	100 feet	$175.00
100 " to 200 feet,	@2.25 per foot	100 feet	225.00
200 " to 300 feet,	@3.00 per foot	100 feet	300.00
300 " to 400 feet,	@3.75 per foot	100 feet	375.00
400 " to 500 feet,	@4.50 per foot	100 feet	450.00
500 " to 550 feet,	@5.25 per foot	50 feet	262.50
Total		550 feet	$1,787.50

Hole No. 2, (cored)

0 feet to 100 feet,	@ 1.75 per foot	100 feet	$ 175.00
100 " to 200 feet,	@ 2.25 per foot	100 feet	225.00
200 " to 300 feet,	@ 3.00 per foot	100 feet	300.00
300 " to 400 feet,	@ 3.75 per foot	100 feet	375.00
400 " to 500 feet,	@ 4.50 per foot	32 feet	144.00
Total		432 feet	$1,219.00

Balance $3,006.50

(PAGE TWO)

Hole No. 23 (Plug)

			Core.	
0 feet to 100 Ft.	100 Ft. @$1.00	$100.00	455 ft. to 485 ft.	
100 feet to 200 Ft.	100 Ft. @ 1.20	120.00		
200 feet to 300 Ft.	100 Ft. @ 1.45	145.00	30 ft. @$4.50	$135.00
300 feet to 400 Ft.	100 Ft. @ 1.70			
400 feet to 455 Ft.	55 Ft. @ 1.95	107.25		642.25
TOTAL	455 Ft.	$642.25		$777.25

Hole No. 20

0 feet to 100 Ft.	100 Ft @$1.00	$100.00	252 to 300 Ft.	
100 feet to 200 Ft.	100 Ft. @ 1.20	120.00	48 Ft. @ $3.00	$ 144.00
200 feet to 252 Ft.	52 Ft. @1.45	75.40		
	252 Ft.	$295.40	300 to 315 Ft.	
			15 Ft. @ $3.75	56.25
				$200.25
				295.40
			TOTAL	$495.65

Hole No. 16 (Plug)

			(Core)	
0 feet to 100 Ft.	100 Ft. @ $1.00	$100.00	345 Ft. to 386 Ft.	
100 feet to 200 Ft.	100 Ft. @ 1.20	120.00	41. Ft. @ $3.75	$ 153.75
200 feet to 300 Ft.	100 Ft. @ 1.45	145.00		
300 feet to 345 Ft.	45 Ft. @ 1.70	76.50		441.50
	345 Ft.	$441.50	TOTAL	$595.25

Hole No. 17 (Plug)

			(Core)	
0 feet to 100 Ft.	100 Ft. @ $1.00	$100.00	355 Ft. to 393 Ft	
100 feet to 200 Ft.	100 Ft. @$1.20	120.00	38 Ft. @ $3.75	$142.50
200 feet to 300 Ft.	100 Ft. @ $1.45	145.00		
300 feet to 355 Ft.	55 Ft. @ $1.70	93.50		458.50
	355 Ft.	$458.50	TOTAL	$601.00

$ 777.25
495.65
595.25
601.00
$2,469.15

(PAGE THREE)

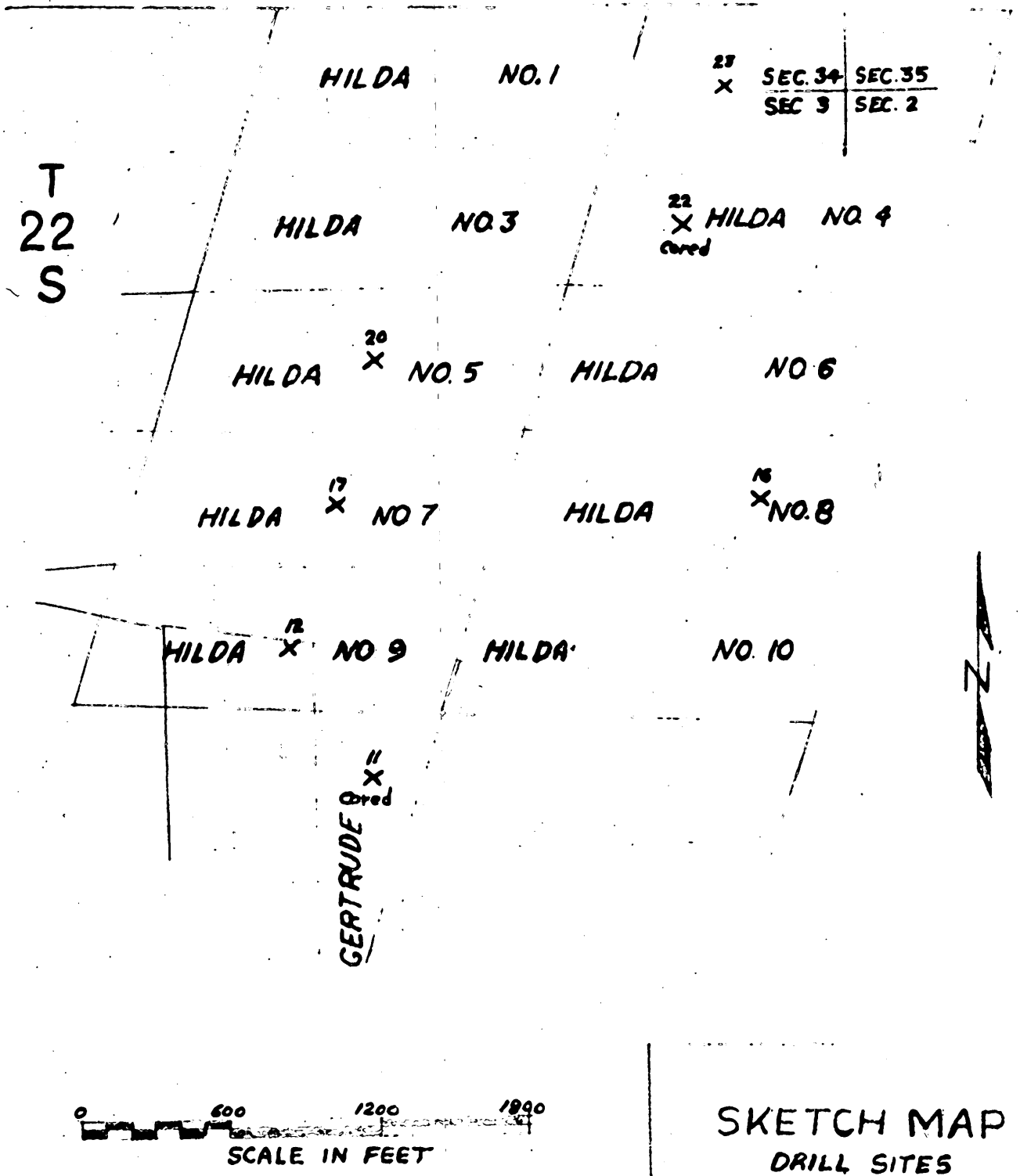
Hole No. 12 (Plug)			(Core)	
0 feet to 100 Ft.	100 Ft. @ $1.00	$100.00	335 Ft. to 400 Ft.	
100 feet to 200 Ft.	100 Ft. @ 1.20	120.00	65 Ft. @ $3.75	243.75
200 feet to 300 Ft.	100 Ft. @ 1.45	145.00		
300 feet to 335 Ft.	35 Ft. @ 1.70	59.50	400 Ft. to 409 Ft.	
	335 Ft.	$424.50	9 Ft. @ $4.50	40.50
				$284.25
				424.50
			TOTAL	$708.75

Total Page (One)	$3,006.50
Total Page (Two)	2,469.15
Total Page (Three)	708.75
	$6,184.40

Approved - Vaughey & Vaughey
By: D. V. Watrous
4 Nov. 1955

D. V. Watrous

RECEIVED
JAN 23 1956



0 600 1200 1800
SCALE IN FEET

SKETCH MAP
DRILL SITES
11, 12, 16, 17, 20, 22, 23

1-4-55 dym

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

224 New Customhouse
Denver 2, Colorado

December 28, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3730 (Uranium), Contract Idm-2568
Vaughey and Vaughey, Emery County, Utah

Enclosed are the following instruments pertaining to the subject contract:

1. Four copies of letter from this office dated December 8, 1955, which in the main part confirms verbal approval by the DMEA Field Team, Region III, to transfer drilling footages from Stage II to Stage I, consistent with the provisions in Exhibit A attached to the contract.

2. Original and two copies of Amendment No. 1 to Contract Idm-2568 which has been executed to delete one hole from drilling to be performed under Stage I, and to change the location for the drilling of holes Nos. 3 and 4.

3. One copy of an affidavit executed by the three partners, which permits any one of the partners to obligate the partnership by executing documents pertaining to it.

4. Four copies of data in support of the instruments under Items 1 and 2.

W. M. Trever
W. M. Trever

See clearance 1/8/56

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

[illegible] New Customhouse
Denver 2, Colorado

December 8, 1955

Vaughey and Vaughey
1670 Denver Club Building
Denver 2, Colorado

Attention: Mr. W. T. Blackburn

Re: Docket DMEA 3739 (Uranium)
Contract [illegible]

Gentlemen:

In reference to your letter of October 18, 1955, regarding the relocation of holes Nos. 2, 3, and 4, and approval for the transfer of core drilling footage from Stage II to Stage I, you are advised as follows:

An Amendment will be prepared to authorize that hole No. 2 be deleted from Stage I drilling and establish a new location for the drilling of holes Nos. 3 and 4.

Consistent with the provisions in Exhibit "A" attached to Contract [illegible], regarding the possible deficiency in footage for Stage I drilling, this constitutes confirmation of the Government's verbal approval of November 7, 1955, for you to transfer [illegible] feet of core drilling and [illegible] feet of plug drilling footage from Stage II to Stage I to complete the twenty-two (22) holes to be drilled under Stage I.

Nothing in this letter shall be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute under the terms of the Contract, nor the fixed unit cost of any item of work.

Very truly yours,

E. N. Herzbrun

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

JEEtpsl
cc: Chairman, Oper. Comm. (4)
Finance Office, Region III
Herzbrun
Shaw (2)
Butler
Treasurer
Admin. File
Survey. File
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey
Colorado Plateau District
P. O. Box 360
Grand Junction, Colorado

Memorandum

December 1, 1955

To: Executive Officer DMEA Field Team Region III

From: M. H. Salsbury
J. William Hasler

Through: E. N. Harshman
John F. Shaw

Subject: DMEA 3730 (Uranium) Contract Idm E868 Vaughey and Vaughey, Emery County, Utah - Recommendations on operators request for amendment to contract.

The operator has requested an amendment to the subject contract to move the location of proposed drill holes Nos. 2, 3 and 4, and to convert certain Stage II drilling footage to Stage I. The request was dated October 18, 1955.

Field inspections were made by DMEA inspecting teams on November 3 and November 15-16, 1955.

The proposed relocation of drill holes was considered during the November 3 inspection. The operator's representative in the field, Philip Payne, requested relocation of holes Nos. 3 and 4, and that the footage assigned to hole No. 2 be used for other Stage I holes. New locations were made in the field by Payne and the DMEA inspectors. They are shown on the accompanying figure.

Contract terms provide that an average of thirty feet per hole be cored. It has been found in drilling done to date that the ore bearing sandstone is up to 80 feet in thickness. It is the opinion of the operator, concurred in by the DMEA representatives, that the full thickness of the ore bearing sandstone should be cored. As of November 1, 1955 a total of 230 feet had been used in coring 5 holes, not counting holes 11 and 22 which were cored throughout. A total of 1180 feet of the 1230 feet of coring permitted in Stage I had been used at the time of the November 3 inspection.

These facts were verified by the inspecting team, and it is recommended that footage from Stage II be transferred to Stage I, as provided in the contract, so as to permit coring the full thickness of the ore bearing sandstone. The amount of coring footage required to finish Stage I is not known. It appears that non-core footage in Stage I will be sufficient. If the transfer of footage from Stage II to Stage I can be made without designating a definite amount, it is believed that no amendment is required.

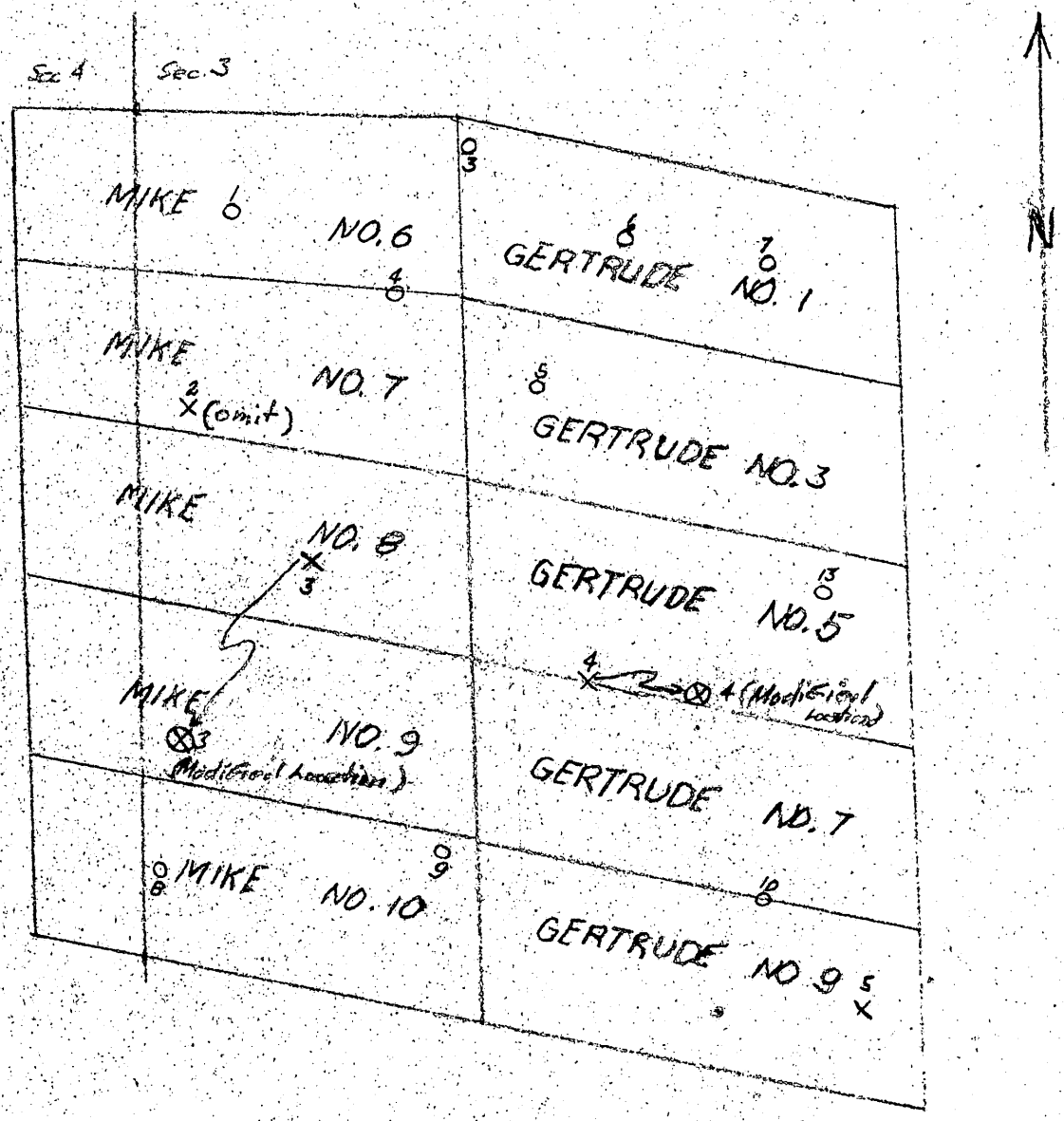
It has been recommended that approval be given for relocation of proposed holes Nos. 3 and 4, as requested by the operator on October 18, 1955, but that hole No. 2 be deleted. It is believed that an amendment to the contract may be required.

Verbal approval for the relocations of holes was given by the Field Team Region III on November 4, 1955 by phone, and the Denver office was requested by teletpye on November 7, 1955 to so notify the operator in Denver.

M. H. Salsbury by JWH
M. H. Salsbury
Mining Engineer

J. William Hasler
J. William Hasler
Geologist

DMEA Docket No. 3730
Contract No. IDM-E868



Map of Part of the Gertrude & Mike Claims
Vauley & Vauley Property Emery Co., Utah
Showing Proposed Changes in Drill Hole Locations.

0 600 Ft. 1200 Ft.
Scale

6 Hole Already Drilled
4 Proposed drill hole

⊗ Modified position of Proposed drill hole (arrow shows change in location)

DMEA
Date Rec'd
OCT 31 1955
BUREAU OF MINES
Denver, Colorado

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

October 28, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: J. William Hasler and M. H. Salsbury

Subject: DMEA 3730 (Uranium), Vaughey and Vaughey, Emery County, Utah
contract Idm-E 863

In answer to your request of October 20 for recommendations concerning the Operator's request to move the location of certain stage I drill holes, this matter has been discussed between Mr. Salsbury and myself, and it is our opinion that the request for the relocation of the drill holes in the above-mentioned contract should be denied, and that the problem be studied further after an examination in the field by either a representative of the Bureau of Mines or the Geological Survey. This examination will be done at the time of the regular monthly inspection of the contract Idm-E 863.

For J. William Hasler, Jr.
Geologist, USGS

For M. H. Salsbury,
Engineer, USBM

JWH/mlr

cc: E. N. Harshman

VAUGHEY AND VAUGHEY
OIL PRODUCERS
1650 DENVER CLUB BUILDING
DENVER 2, COLORADO

DMEA
Date Rec'd.
OCT 19 1955
BUREAU OF MINES
Denver, Colorado

OCTOBER 18, 1955

MR. W. M. TRAVER
UNITED STATES BUREAU OF MINES
NEW CUSTOMSHOUSE
DENVER, COLORADO

DEAR MR. TRAVER:

REGARDING THE DMEA CONTRACT NUMBER IDM E-868 (URANIUM), APPLICATION NUMBER 3730, AS OF MONDAY MORNING, OCTOBER 17, 1955, WE HAVE, IN ACCORDANCE WITH THE CONTRACT, COMPLETED PLUG HOLE NUMBER 23 TO A TOTAL DEPTH OF 485'. THIS HOLE WAS CORED BETWEEN THE DEPTHS OF 455' AND 485'. SLIGHT MINERALIZATION NOTED FROM LOGGING BETWEEN THE DEPTHS OF 455' AND 475'.

CORE HOLE NUMBER 22 IS CORING AT 400' AND HAS AN INDICATED TOTAL DEPTH OF 500'.

CORE HOLE NUMBER 11 WILL BE THE NEXT HOLE CORED, AND HAS AN INDICATED DEPTH OF 460'.

PLUG HOLE NUMBER 21 WILL BE THE NEXT PLUG HOLE DRILLED, AND HAS AN INDICATED DEPTH OF AROUND 320'.

IN VIEW OF THE FACT THAT OUR CONTRACT CALLS FOR AN AVERAGE DEPTH OF 300' FOR ALL DRILLING, AND THAT WE MAY REQUEST THAT SOME SECOND PHASE DRILLING BE INCORPORATED AND ADDED TO FIRST PHASE DRILLING, WE DEEM IT ADVISABLE TO ASK FOR THIS CONVERSION AT THIS TIME. WE EXPECT TO HAVE 3 DRILLS IN OPERATION ON THE PROPERTY BY WEDNESDAY, OCTOBER 19, 1955, SO THAT THE PROJECT MAY BE BROUGHT TO COMPLETION AS SOON AS POSSIBLE.

PROPOSED DRILL HOLES NUMBER 2, 3, AND 4 FALL ON THE TOP OF A BLUFF, WHICH IS FOR ALL PRACTICAL PURPOSES INACCESSIBLE. WE WOULD ALSO LIKE TO HAVE PERMISSION TO MOVE THESE HOLES TO ACCESSIBLE AREAS ON THE LAND COVERED BY OUR CONTRACT SO LONG AS THESE HOLES ARE NOT LOCATED WITHIN 500' OF ANY OTHER HOLE, OR WITHIN 100' OF THE OUTER BOUNDARIES OF THE PROPERTY.

THANK YOU FOR YOUR CONSIDERATION IN THIS MATTER.

VERY TRULY YOURS,

VAUGHEY AND VAUGHEY

BY: W. T. BLACKBURN

DWW:N
CC: MR. J. F. SHAW
MR. M. H. SALSBURY
MR. S. R. WILSON

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

Recd. 12-1-55

Denver Federal Center
Denver, Colorado

November 23, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Gamma-ray log interpretations

Enclosed are four copies of gamma-ray log interpretations on the following DMEA exploration projects:

DMEA Projects

2771 - Walter Gramlich
3297 - Continental Uranium Company
3475 - Amuranium Corporation
3524 - Climax Uranium Company
3555 - Four Corners Exploration - Bachelor group
3579 - Bula Belle Uranium, Inc.
3582 - Walter Duncan Mining Co.
3632 - Colmar Corporation
3649 - Simpson Uranium Co.
3660 - Mid Continent Uranium Corp.
3675 - Great Frontier Uranium Company
3730 - Vaughey & Vaughey, Carey Ventures
3939 - Westvaco Mineral Products

W. M. Traver

by Townsend

Enclosures

Vaughey & Vaughey - Ouray Ventures
San Rafael Reef Area - Hilda Claims

GAMMA-RAY LOG INTERPRETATION DMEA Docket No. 3730

Hole No.	Depth Drilled	Depth Cased	Depth Logged From*	Depth Logged To	Anomaly Detected From*	Anomaly Detected To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_eU_3O_8$	Remarks
#8	370.0	None	1.7	365.3	Barren							
#12	409.0	None	340.0	365.5	Barren							
#16	386.0	None	5.0	371.9	Barren							
#17	393.0	None	5.0	382.1	Barren							
#20	315.0	None	4.9	299.2	Barren							

* From top to bottom depths

Vaughey & Vaughey Ouray Ventures
Hilda Claims - San Rafael Reef
DMEA Docket # 3730

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
#22	558.0	None	4.2-555.7	Barren						
#23	485.0	None	2.1-450.1	Barren						

* From top to bottom depths

Vaughey & Vaughey - Ouray Ventures
San Rafael Reef Area - Hilda Claims

GAMMA-RAY LOG INTERPRETATIONDMEA Docket No. 3730

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
#8	370.0	None	1.7 - 365.3	Barren						
#12	409.0	None	340.0 - 365.5	Barren						
#16	386.0	None	5.0 - 371.9	Barren						
#17	393.0	None	5.0 - 382.1	Barren						
#20	315.0	None	4.9 - 299.2	Barren						

* From top to bottom depths

Vaughey & Vaughey Ouray Ventures
Hilda Claims - San Rafael Reef
DMEA Docket # 3730

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From*	Depth Logged To	Anomaly Detected From*	Anomaly Detected To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade % U_3O_8	Remarks
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#23	485.0	None	2.1	450.1	Barren							

* From top to bottom depths

Vaughey & Vaughey - Ouray Ventures
San Rafael Reef Area - Hilda Claims

GAMMA-RAY LOG INTERPRETATIONDMEA Docket No. 3730

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
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#16	386.0	None	5.0 - 371.9	Barren						
#17	393.0	None	5.0 - 382.1	Barren						
#20	315.0	None	4.9 - 299.2	Barren						

* From top to bottom depths

Vaughey & Vaughey Ouray Ventures
Hilda Claims - San Rafael Reef
DMEA Docket # 3730

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
#22	558.0	None	4.2-555.7	Barren						
#23	485.0	None	2.1-450.1	Barren						

* From top to bottom depths

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

NOV 17 1955

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

Re: Docket No. DMEA-3730 (Uranium)
Contract No. Idm-8868
Vaughey and Vaughey
Ouray Ventures Property
Emery County, Utah

Dear Mr. Traver:

This is to acknowledge your memorandum, dated November 9, and the attached letter, dated November 3, 1955, from the Operator, concerning the payment of drilling costs under the subject contract.

We have had a number of actual cost contracts where the unit cost varied from month to month. For example, in Docket No. DMEA-2028, Contract No. Idm-8360, U. S. Smelting, Refining, and Mining Company, the same problem existed.

In a letter dated May 24, 1954, to Mr. King, Executive Officer, Region IV, concerning Contract No. Idm-8360, this office stated in part —

> "We should point out that the costs submitted by the Operator which are in excess of the contract's allowable maxima are not being disallowed since this may only be done at completion of each class of work. Rather, such excess sums will be considered as potential credits in suspense, so that in the event of future underruns on unit costs, such units may be paid at the allowed maximum rate, utilizing the potential suspense credits, of course, only to the extent that they are available."

The above procedure should be followed in respect to all actual cost contracts wherein maximum unit costs are provided. However, it must be kept in mind that in contracts having more than one

stage of work, the total estimated cost of each class of work in each stage may be an allowable maximum.

Sincerely yours,

-noted

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

FMMmurphy/izm
11-16-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Code 700
Mr. Murphy
Messrs. JECrawford, Rm. 3641
THKiilsagaard, Rm. 5224
JOHosted, Rm. 3210, GSA

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

224 New Customhouse
Denver 2, Colorado

November 9, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3730 (Uranium), Contract Idm-E868, Vaughey and Vaughey, Emery County, Utah

Enclosed are the original and three copies of a letter from Douglas V. Watrous, the Operator's representative, dated November 3, 1955.

Mr. Watrous requests that final reimbursement be on the basis of an over-all average unit cost rather than the incurred unit cost on a month by month basis. It is believed that in all probability some months the costs will be lower and other months higher than the allowable maximum unit cost established in the contract.

We will appreciate prompt advice from you in the matter, as the question has been raised by other operators holding similar DMEA contracts.

W. M. Traver

By J. W. Townsend
J. W. Townsend

Enclosures

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

224 New Customhouse
Denver 2, Colorado

November 9, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3730 (Uranium), Contract Idm-E868, Vaughey and Vaughey, Emery County, Utah

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We will appreciate prompt advice from you in the matter, as the question has been raised by other operators holding similar DMEA contracts.

W. M. Traver

By J. W. Townsend
J. W. Townsend

Enclosures

VANDERK AND VANDERK
Oil Producers

1650 Denver Club Building
Denver 2, Colorado

November 3, 1955

(C O P Y)

Mr. W. H. Trover
United States Bureau of Mines
Bar Contract Bonus
Denver, Colorado

Re: Project Contract
No. IDM - 2068
Contract DMMA 3730
Our Gurey Ventures Property
Emery County, Utah

Dear Mr. Trover:

As you know, the footage price under subject contract is $5.00 per foot for core hole drilling, and $1.45 per foot for plug hole drilling, regardless of the depth of hole.

The contract we have with our driller calls for a gradual increase in the per foot price according to the depth of hole. This is the same contract on which our contract price with you was derived, and should average out at the end of the contract very close to the per foot prices granted under IDM 068.

Because of the above, we have a problem when the per foot costs are figured on a monthly basis. During the first months, our average per foot price will be higher because of deeper drilling. Later months will show a lower average price per foot because of shallow drilling.

Therefore, permission is hereby requested to carry forward these variances in average figures either as a debit or a credit to our account so that upon completion of the work we may participate in this contract according to the overall average price of core and plug hole drilling.

Thanking you for your consideration, we remain

Very truly yours,

VANDERK AND VANDERK

By /s/ Douglas V. Watrous

Douglas V. Watrous

DVW:mg

VADNEY AND VADNEY
Oil Producers

1650 Denver Club Building
Denver 2, Colorado

November 3, 1955

(C O P Y)

Mr. W. M. Trever
United States Bureau of Mines
New Customs House
Denver, Colorado

Re: Project Contract
No. IDM - 2868
Docket DMMA 3730
Our Curvy Ventures Property
Emery County, Utah

Dear Mr. Trever:

As you know, the footage price under subject contract is $3.00 per foot for core hole drilling, and $1.45 per foot for plug hole drilling, regardless of the depth of hole.

The contract we have with our driller calls for a gradual increase in the per foot price according to the depth of hole. This is the same contract on which our contract price with you was derived, and should average out at the end of the contract very close to the per foot prices granted under IDM 868.

Because of the above, we have a problem when the per foot costs are figured on a monthly basis. During the first months, our average per foot price will be higher because of deeper drilling. Later months will show a lower average price per foot because of shallow drilling.

Therefore, permission is hereby requested to carry forward these variances in average figures either as a debit or a credit to our account so that upon completion of the work we may participate in this contract according to the overall average price of core and plug hole drilling.

Thanking you for your consideration, we remain

Very truly yours,

VADNEY AND VADNEY

By /s/ Douglas V. Watrous

Douglas V. Watrous

DVW:mg

11/15/55 gla

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

224 New Customhouse
Denver 2, Colorado

November 9, 1955

RECEIVED NOV 14 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3730 (Uranium), Contract Idm-2868, Vaughey and Vaughey, Emery County, Utah

Enclosed are the original and three copies of a letter from Douglas V. Watrous, the Operator's representative, dated November 3, 1955.

Mr. Watrous requests that final reimbursement be on the basis of an over-all average unit cost rather than the incurred unit cost on a month by month basis. It is believed that in all probability some months the costs will be lower and other months higher than the allowable maximum unit cost established in the contract.

We will appreciate prompt advice from you in the matter, as the question has been raised by other operators holding similar DMEA contracts.

W. M. Traver

By J. W. Townsend
J. W. Townsend

Enclosures

VAUGHEY AND VAUGHEY
Oil Producers

1650 Denver Club Building
Denver 2, Colorado

November 3, 1955

(C O P Y)

RECEIVED
NOV 14 1955

Mr. W. M. Trover
United States Bureau of Mines
New Customs House
Denver, Colorado

Re: Project Contract
No. IBM - 8068
Docket BMBA 5730
Our Gurey Vanderes Property
Emery County, Utah

Dear Mr. Trover:

As you know, the footage price under subject contract is $3.80 per foot for core hole drilling, and $1.45 per foot for plug hole drilling, regardless of the depth of hole.

The contract we have with our driller calls for a gradual increase in the per foot price according to the depth of hole. This is the same contract on which our contract price with you was derived, and should average out at the end of the contract very close to the per foot prices granted under IBM 868.

Because of the above, we have a problem when the per foot costs are figured on a monthly basis. During the first months, our average per foot price will be higher because of deeper drilling. Later months will show a lower average price per foot because of shallow drilling.

Therefore, permission is hereby requested to carry forward these variances in average figures either as a debit or a credit to our account so that upon completion of the work we may participate in this contract according to the overall average price of core and plug hole drilling.

Thanking you for your consideration, we remain

Very truly yours,

VAUGHEY AND VAUGHEY

By /s/ Douglas V. Watrous

Douglas V. Watrous

DVWing

RECEIVED
OCT 7 - 1955

224 New Customhouse
Denver 2, Colorado

October 5, 1955

Mr. W. T. Blackburn, Partner
Vaughey and Vaughey
1650 Denver Club Building
Denver 2, Colorado

Re: Docket DMEA 3730 (Uranium),
Contract Bdm-8868

Dear Mr. Blackburn:

To expedite handling in the field of the referenced contract, the files concerned with it have been transferred from the Salt Lake City office to the office at the Denver Federal Center.

Refer to our letter of September 13, 1955, transmitting your copy of the contract with instruction regarding work performance and reporting procedures. Wherever, in that letter, mention is made of S. R. Wilson, substitute the name John F. Shaw. Otherwise, procedures remain the same.

Mr. Shaw's address is Room 137, Building 20, Denver Federal Center, Denver 2, Colorado.

Your co-operation in the matter will be appreciated.

Very truly yours,

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

WMT:gri
cc: Secretary, Oper. Comm. (2)
Shaw (2)
Wilson
King
Butler
Corres. B868
Barnhart
Townsend
Corres.

September 23, 1955

Airmail

Memorandum

To: E. R. Wilson

From: Superintendent, Denver Experiment Station, Reg. III

Subject: DMEA Dockets
Docket DMEA 3730, Contract Idm-2865, Vaughey and Vaughey, Emery County, Utah
Docket DMEA 3767, Contract Idm-2877, Uranium Prospectors, Emery County, Utah

In order to facilitate administration of the subject contracts, we are suggesting to Executive Officer W. M. Traver, that he request the entire files on these contracts be sent to John F. Shaw, at the Denver Federal Center for administration.

We understand that Contract Idm-2877, Uranium Prospectors has not been signed. It may be advisable to have you complete the contract before forwarding it to Shaw. We will leave this matter to the discretion of the Executive Officer.

W. H. KING

W. H. King

Copy to: W. M. Traver (3)
John F. Shaw (2)
K. H. Barnhusen
J. W. Mealer

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

RECEIVED
SEP 1 9 1955

224 New Customhouse
Denver 2, Colorado

September 15, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3730 (Uranium), Contract Idm-2868,
Vaughey & Vaughey (Mike, Hilda, and Gertrude Claim group),
Emery County, Utah.

Rec'd to M+T

Attached is a copy of Power of Attorney authorizing any one of the partners to act for the other two in matters concerned with the partnership.

W. M. Traver

Attachment

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

RECEIVED
SEP 15 1955

September 13, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman of the Operating Committee, Washington

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3730, Contract Idm-2868 (Uranium), Vaughey and Vaughey, Emery County, Utah

Enclosed are the Government, Division and Docket copies of Contract Idm-2868 which have been properly executed by the Operator. The contract was received in this office September 8, 1955 from you.

Copies have been transmitted to the Operator, the Finance Officer Region III, the field offices concerned and a copy retained for our files

W. M. Traver

Enclosures

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

RECEIVED
SEP 16 1955

September 13, 1955

CERTIFIED MAIL

224 New Customhouse
Denver 2, Colorado

Mr. W. T. Blackburn, Partner
Vaughey and Vaughey
1650 Denver Club Building
Denver 2, Colorado

Re: Docket DMEA 3730, Contract Idm-2868, (Uranium), Vaughey and Vaughey, Emery County, Utah

Dear Mr. Blackburn:

Enclosed herewith is the "Operator's Copy" of a Long-Form Exploration Project Contract No. Idm-2868, Docket DMEA 3730.

Also enclosed are six copies of Form MF-104, "Operator's Unit Cost and Progress Report." At the completion of the first calendar month of operation and monthly thereafter you are required to submit five copies of the forms to Mr. S. R. Wilson, U. S. Bureau of Mines, 1600 East First South Street, Salt Lake City, Utah. The sixth form is for your records.

Please note that the monthly report requires a narrative report which should be accompanied by maps or sketches. The narrative report must be signed by the operator. The monthly report will not be processed for payment unless accompanied by a narrative report. Additional copies of Forms MF-104 and MF-104A will be forwarded to you as required.

For your information and in reply to many questions that have been asked, after Forms MF-104 and MF-104A are received, an engineer will check progress and approve your accounts, after which it will be sent to the Regional Office, Region III, U. S. Bureau of Mines, 224 New Customhouse, Denver 2, Colorado, for auditing and vouchering. If the report is in order, a check will be issued by the Treasury Department for the Government's portion of the costs. If you have any difficulty in completing these forms and the reports, please call on Mr. Wilson or this office for assistance.

In the matter of your claim for reimbursement of drilling costs, reimbursement to you under the terms of the contract will be on the basis of a hole or holes completed to the objective, therefore your monthly report should include only such holes that are completed.

Under the provisions of the contract the unit cost established for each item of work under Category (1) for all stages are allowable maximum unit costs which cannot be exceeded. The actual cost of each item of work under Category (1) must be documented in conformance with the instructions in the next to the last paragraph on the reverse side of Form NF-104. The actual cost up to the allowable maximum unit cost established, and as supported by the documentation, will be the basis for reimbursement to you under the terms of the contract.

When Stage I has been completed you should request approval from this office of the work you propose to perform under the next stage. Your request for the work approval must be in sextuplicate, complete with a map showing the location of the holes drilled under Stage I, the proposed location of holes to be drilled under Stage II and the results of the work performed under Stage I, including assay returns and any other pertinent data which will be of value to the Government in evaluating the work performed under Stage I. The same applies to Stage III after completion of Stage II should the work continue to these successive stages. You should anticipate a suspension of operations between stages of work to enable the Government geologist and engineer to evaluate the results of the work performed and make their recommendations to this office relative to the additional work you propose.

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

Field representatives of the Government are not authorized to approve any changes in the work program or contract provisions. Such approval can only be given by the Washington Office, DMEA, or the DMEA Field Team, Region III, which is comprised of E. N. Harshman, U. S. Geological Survey member, and W. M. Trever, U. S. Bureau of Mines member.

No oral statement of any person shall modify or otherwise affect the terms or conditions of this contract.

It is a regulation that reimbursement for the cost of the work accomplished prior to the date of the contract will not be allowed. It is also a requirement and <u>imperative</u> that you notify this office in writing the date work actually commences under the contract, with a copy of your letter to Mr. Wilson. In this instance, October 15, 1955 has been entered as the date on or before which operations shall commence in accordance with your request.

Very truly yours,

W. M. Trever

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

WMT:ab
cc: Chair. Oper. Comm. (2)
Harshman
Wilson
Hasler
Townsend
Corresp. E868
Enclosures
Amend. E868
Chron.

700

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

SEP - 6 1955

Mr. R. E. Travers
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-3730 (Uranium)
Vaughey and Vaughey
Ouray Ventures Property
Emery County, Utah

Dear Mr. Travers:

Enclosed are the original and five copies of a proposed long-form contract between the Government and Vaughey and Vaughey, a partnership.

The Administrator has signed this contract subject to the execution and attachment of the Owners' Consent to Lien forms which are enclosed. The original executed forms submitted by the Applicant did not cover all the claims to be explored, as noted in Mr. Ellis' letter, dated August 6, copies of which were forwarded to you.

After this has been completed, if you and the Operator find the proposed contract in order, please insert in Article 3 of the contract form the date work shall commence. Then have the Operator sign the original and all copies; thereafter kindly make the usual distribution.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

P. F. Yopes

Member, Bureau of Mines

/s/ N. E. Nelson

Member, Geological Survey

Murphy:am
8-30-55
cc to: Admr. Reading File
Operating Committee
Docket
Messrs. J.E.Crawford, Rm.3661
T.H.Killeagard, Rm.5222
J.O. Hosted, Rm.3210, GSA
Code 700
Mr. Murphy

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

AUG 2[illegible] 1955

Memorandum

To: The Administrator, DMEA
Attention: Mr. E. W. Ellis

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-3730, Vaughey and Vaughey (uranium)

Pursuant to Mr. Murphy's memorandum dated August 17, we have prepared the attached contract in satisfactory legal form for execution subject to attachment of Consent to Lien covering all claims in Annex I, on attached form.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments

HCRubin/emd
Copy to: DMEA Docket
Solicitor's Docket
E. W. Ellis (2)
J. L. Hofflund
H. C. Rubin
chron.

August 17, 1955

Memorandum

To: Acting Assistant Solicitor, DMEA

From: Fred M. Murphy, Mining Enginner
Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-3730 (Uranium)
Vaughey and Vaughey
Ouray Ventures Property
Emery County, Utah

Please refer to your memorandum, dated August 5, addressed to the Administrator, DMEA, regarding the subject applicant's interest in certain claims.

Attached you will find copies of an amendment and supplement to the Mining Lease mentioned in your memorandum, and also, a letter from the applicant in regard to an additional Consent to Lien. If this additional Consent to Lien is required, will you kindly prepare a contract subject to attachment of this Consent to Lien before execution.

F. M. Murphy

FMMurphy:ai
8/17/55
cc to: Docket
Code 700
Mr. Murphy

July 21, 1955

Memorandum

To: Acting Assistant Solicitor, DMEA

From: Fred M. Murphy, Mining Engineer
Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-3730 (Uranium)
Vaughey and Vaughey
Quincy Ventures Property
Emery County, Utah

Will you kindly prepare a long-form contract with the subject Applicant in accordance with the attached draft.

You will note the Applicant has submitted the Owner's Consent to Lien requested in our letter, dated May 11, 1955, drafted by your office, a copy of which is marked in the docket.

F. M. Murphy

Attachment

FMMurphy:am
cc to: Docket
Code 700
Mr. Murphy

MF-200
(Revised June 1954)

Docket No. DMEA 3730

Commodity Uranium

Contract No. Idm-E

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this ..... day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Vaughey and Vaughey - A partnership consisting of E. A. Vaughey, W. M. Vaughey, and W. T. Blackburn, whose mailing address is 1650 Denver Club Building Denver 2, Colorado, hereinafter called the "Operator," as follows:

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

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

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

(b) The Operator represents and undertakes that:

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

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

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: Owner's Consent to Lien

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

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Uranium. The work to be performed is described in Exhibit "A." The Operator on or before ..... shall commence the work, and on or before February 1, 1956 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A."

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $ 31,824.00 The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $ 23,868.00 : *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

Draft
FMurphy:am
7-21-55

EXPLORATION PROJECT CONTRACT

VAUGHEY AND VAUGHEY

Docket No. DMEA-3730

ANNEX I

The land referred to in Article 2 of the contract consists of 37 unpatented mining claims recorded in the office of the County Recorder, Emery County, Utah, as follows:

Name of claim						Book	Page
Mike	No.	1		Location	Notice	J 74	443
"	"	2		"	"	"	444
"	"	3		"	"	"	445
"	"	4		"	"	"	446
"	"	5		"	"	"	447
"	"	11		"	"	"	448
"	"	12		"	"	"	449
"	"	13		"	"	"	450
Gertrude	"	11		"	"	"	451
"	"	12		"	"	"	452
"	"	13		"	"	"	453
"	"	14		"	"	"	454
Mike	"	6	Amended	"	"	"	455
"	"	7	"	"	"	"	456
"	"	8	"	"	"	"	457
"	"	9	"	"	"	"	458
"	"	10	"	"	"	"	459
Hilda	"	1	"	"	"	"	460
"	"	2	"	"	"	"	461
"	"	3	"	"	"	"	462
"	"	4	"	"	"	"	463
"	"	5	"	"	"	"	464
"	"	6	"	"	"	"	465
"	"	7	"	"	"	"	466
"	"	8	"	"	"	"	467
"	"	9	"	"	"	"	468
"	"	10	"	"	"	"	469
Gertrude	"	1	"	"	"	"	470
"	"	2	"	"	"	"	471
"	"	3	"	"	"	"	472
"	"	4	"	"	"	"	473
"	"	5	"	"	"	"	474
"	"	6	"	"	"	"	475
"	"	7	"	"	"	"	476
"	"	8	"	"	"	"	477
"	"	9	"	"	"	"	478
"	"	10	"	"	"	"	479

ANNEX I Cont'd

The above claims are situated in secs. 34 and 35, T. 21S., R. 14E., and secs. 3, 4, and 10, T. 22S., R. 14E., S.L.B. & M. and are shown on attached map entitled "Figure 2. - DMEA Docket No. 3730, Claim Map ... ."

DRAFT
FMurphy:am
7-21-55

EXPLORATION PROJECT CONTRACT

VAUGHEY AND VAUGHEY

Docket No. DMEA-3730

EXHIBIT "A"

Description of the Work

The object of this project is to discover uranium ore deposits that might occur in the Salt Wash member of the Morrison formation on the land mentioned in Annex I of this contract. In this region the uranium mineralization is generally confined to an irregular lenzatic sand bed about 175 feet above the base of the Morrison formation. Within this 30 foot sand bed the ore may occur in 3 or more zones. It is estimated that drill holes averaging 300 feet in depth will be required to penetrate the ore-bearing horizon.

The work shall be performed in three successive stages. The Operator shall perform all the work under Stage I and shall perform so much of each succeeding stage as is approved in advance in writing by the Government, based upon the results of the completed stage or stages of work.

STAGE I

Stage I shall consist of bulldozing access roads and preparing twenty-three (23) drill sites. The approximate locations of the drill sites are shown on the attached map entitled "Figure 2 ... Claim Map Showing Proposed Drill Holes, Vaughey and Vaughey Property ... ." From each of these sites one (1) vertical hole shall be drilled. Spacing of holes may range from 500 to 1,500 feet.

It is estimated that 5,670 feet of non-core and 1,230 feet of core drilling will be required to complete the twenty-three drill holes authorized for Stage I. However, if the drill footage estimated for

Stage I drilling is not sufficient to complete the twenty three (23) holes, then with previous written Government approval, a part of the footage authorized for Stage II may be used to complete the Stage I drilling.

Chemical analyses shall be made to determine the U_3O_8 and V_2O_5 content of samples procured during Stage I drilling.

STAGE II

Stage II shall consist of bulldozing access roads and preparing twenty-five sites for drilling to delineate ore-bearing structures discovered in Stage I. Holes drilled from these sites shall not be closer than 300 feet to any other drill hole. From each of these drill sites one (1) vertical hole shall be drilled.

Not in excess of twenty-five (25) holes, totaling 6,750 feet of non-core and 750 of core drilling, shall be performed in this stage. Also, no hole shall be started unless sufficient footage remains in this contract stage to complete the hole through the ore-bearing horizon, unless the Operators agree in writing that the remainder of the hole shall be completed at their expense.

Not in excess of 9 hours of bulldozing shall be performed, and not in excess of 17 samples shall be chemically analyzed to determine the U_3O_8 and V_2O_5 content under this Stage II of the contract.

Stage III

Stage III shall consist of bulldozing access roads and preparing ten (10) sites for drilling to further deliniate ore-bearing structures discovered in the preceeding stages. Holes drilled from these sites shall not be closer than 50 feet to any other hole. From each of these sites one (1) vertical hole shall be drilled.

Not in excess of ten (10) holes, totaling 2,700 feet of non-core and 300 feet of core drilling, shall be performed in this Stage III. Also, no hole shall be started unless sufficient footage remains in this contract stage to complete the hole through the ore-bearing horizon, unless the Operators agree in writing that the remainder of the hole shall be complete at their expense.

Not in excess of 3 hours of bulldozing shall be performed, and not in excess of 7 samples shall be analyzed to determine the U_3O_8 and V_2O_5 content, under this Stage III of the contract.

General Provisions

1) A supervisor and one helper shall be employed full time under this contract. The Operator shall also provide any additional aid necessary to the satisfactory technical progress of this contract.

2) Hole No. 11 and Hole No. 22 in Stage I shall be cored from the surface to the bottom, all other holes in Stages I, II, and III shall be non-core drilled, except through the inferred 30 foot thick ore-bearing sandstone bed in the Salt Wash member, which shall be core-drilled.

3) All holes shall be logged and probed for radioactivity. Records of such logging and probing, together with assay certificates shall be submitted with the Operators' monthly progress report.

4) The Government shall not contribute to the cost of any uncompleted hole or any hole that bottoms less than Ax core size, nor to the cost of any hole which cannot be probed with radiometric logging equipment.

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

6) Mineralized portions of the core shall be split, the Operator using one-half for assay purposes. The other half shall be stored for Government use with the rest of the core in boxes properly labeled as to drill hole number. Markers shall be placed in the sections of the core to indicate the depth represented. All drill cuttings shall be properly identified and retained for Government inspection and disposal, unless otherwise notified verbally or in writing by the Government's representatives.

7) The supervision, the extent and method of sampling, the manner of storing drill hole cuttings, the manner of splitting and storing drill hole cores, the laboratory making the chemical analyses, the location of drill sites and drill holes, and the drilling method used are all subject to Government approval.

Estimated Costs of the Project

ACTUAL COSTS

Category (1) Independent Contracts

Stage I

1)	Access roads and drill sites, D-6 bulldozer or equivalent 8 hours @ $12.00/hr.	$96.00	
2)	Non-core drilling 5,670 feet @ $1.45/ft.	8,221.50	
3)	Core-drilling, AX size or larger 1,230 feet @ $3.00/ft.	3,690.00	$12,007.50

Stage II

1)	Access roads and drill sites D-6 bulldozer or equivalent 9 hours @ $12.00/hr.	$108.00	
2)	Non-core drilling 6,750 feet @ $1.45/ft.	9,787.50	
3)	Core drilling 750 ft. @$3.00/ft.	2,250.00	$12,145.50

Stage III

1)	Access roads and drill sites D-6 bulldozer or equivalent 3 hours @ $12.00/hr.	$36.00	
2)	Non-core drilling 2,700 feet @ $1.45/ft.	3,915.00	
3)	Core drilling 300 feet @ $3.00/ft.	900.00	$4,851.00

FIXED UNIT COSTS 1/

Stage I

1)	Incidental allowance 2/ for each foot of drilling completed, 6,900 feet @ $0.15/ft.	$1,035.00	
2)	Chemical analyses for U_3O_8 and V_2O_5, 18 samples @ $5.00 each	90.00	$1,125.00

Stage II

1)	Incidental allowance 2/ for each foot of drilling completed, 7,500 feet @ $0.15/ft.	$1,125.00	
2)	Chemical analyses for U_3O_8 and V_2O_5 17 samples @ $5.00 each	85.00	$1,210.00

Stage III

1)	Incidental allowance for each foot of drilling completed 3000 feet @ $0.15/ft.	$450.00	
2)	Chemical analyses for U_3O_8 and V_2O_5, 7 samples @ $5.00 each	35.00	$485.00

Total Estimated Cost of the Project	$31,824.00
Government participation at 75 percent	$23,868.00

1/ Categories (2) through (7) of the contract form do not apply to this contract.

2/ Includes all costs whatsoever that are not included in the estimates for "Independent Contracts" and Analyses of samples, and includes such items as supervision, technical services, labor, materials and supplies, etc.

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

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

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By .....

.....
(Operator)

By .....

.....

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

.....

[CORPORATE SEAL]

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

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

224 New Custom house
Denver 2, Colorado

July 12, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Report of Examination, DMEA Docket 3730 (Uranium), Vaughey & Vaughey, Ouray Ventures property, Emery County, Utah

Enclosed are the original and three copies of the report pertaining to the above application.

We concur in the recommendation of the field examiners for a three-stage drilling project as outlined in the report.

Nine extra copies of Figure 2 are attached for possible use in the contract.

Six signed copies of Owner's Consent to Lien are also attached and have been executed in accordance with instructions in your letter of May 11, 1955.

DMEA Field Team, Region III

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

DMEA
Date Rec'd
JUL 8 1955
BUREAU OF MINES
Denver, Colorado

July 8, 1955

TRANSMITTED
JUL 12 1955

Memorandum

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

From: Stephen R. Wilson

Subject: Docket No. DMEA-3730 (Uranium), Vaughey and Vaughey, Ouray Ventures property, Emery County, Utah

Enclosed are the original and 10 copies of an engineering report covering examination of the subject property for DMEA loan appraisal. Also included are copies of a separate section, Summary, Conclusions and Recommendations. The brochure was transmitted to W. P. Williams as requested by you June 13, 1955. The engineering report was prepared by H. H. Howes.

The applicant has requested DMEA funds to explore for uranium ores in the Salt Wash member of the Morrison formation. The applicant's estimate of the cost of the proposed work is $32,965. The applicant's proposals for exploration were made after completion of seven drill holes on the property. At the time of the field examination, a total of 18 holes had been drilled by the applicant. Information gained from the drilling indicated that the original proposal should be altered slightly. The examining engineer has therefore recommended a three-stage project costing approximately $31,804. I concur in the recommendations of the examining engineer.

The examining personnel discussed the proposed project work with a representative of the AEC during the period of the examination.

Stephen R. Wilson
Stephen R. Wilson

Enclosures

cc: J. H. Clemmer

TRANSMITTED
JUL 12 1955

DMEA
Date Rec'd.
JUL 8 1955
BUREAU OF MINES
Denver, Colorado

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By R. W. Outerbrook and M. E. Moran

An application, dated March 8, 1955, for Government aid in exploration under Docket No. DMEA 3730 has been submitted by Vaughey and Vaughey. The applicant's proposed project consists of 97 diamond drill holes to be located on the Curry Ventures property, to explore for uranium ores in the Salt Wash member of the Morrison formation. The estimated cost of the project is $32,965. A field examination was made April 26, 1955, by R. W. Outerbrook, Geological Survey, and M. E. Moran, Bureau of Mines.

The applicant is a copartnership, consisting of E. A. Vaughey, W. M. Vaughey, and W. T. Blackburn. The Curry Ventures property, containing 37 unpatented lode mining claims, is owned by Paul Alex, Devel Waldeman, Angelo Zanetti, and Fred Zanetti, and is leased to Vaughey and Vaughey. The claims are situated in Emery County, Utah, about 12 airline miles southwesterly from Green River, Utah, on the east edge of the San Rafael Swell.

Only sedimentary rocks are exposed on the property. These consist principally of the shale, conglomerate and sandstone of the Burro Canyon formation of Lower Cretaceous age and the Brushy Basin shale member of the Morrison formation of Upper Jurassic age. In the immediate project area, the beds strike generally north and dip

gently to the east. Several minor, steep-dipping, normal faults with northwesterly strikes have been observed in the area.

Erratic mineralization has been encountered in the Salt Wash sandstone member of the Morrison formation in 9 of the 19 holes drilled on the property by the applicant. A chemical analysis of core, from a 1-foot interval of Hole No. 1, resulted in 0.27 percent V_2O_5 and 0.34 percent V_2O_3. The mineralization in the Salt Wash member is generally confined to an irregular lenticular sand bed, from 0 to 40 feet in thickness, and about 175 feet above the base of the Morrison formation. The relative abundance of carbonaceous material in the more porous sediments is believed to be the principal ore control.

The applicant proposes to explore the property by drilling 57 holes in 3 stages. In Stage 1, 22 holes are planned at random locations over the 37 claims, to establish the lithology of the Salt Wash member, and to indicate favorable areas for drilling holes in succeeding stages. Stages 2 and 3 are planned to drill 25 holes at 400-foot intervals and 10 holes at 50-foot intervals respectively, to delineate and delimit ore found in preceding stages.

Alternate proposals which differ from the original principally in the order of drilling, have been submitted by the field examiners, (fig. 2). A cost estimate for the alternate proposals is $31,804, of which the Government's share at 75 percent participation is $23,853.

It is concluded that the proposed program is feasible and desirable, and recommendation is made that it be approved by the Government.

VANHEET AND VANHEET
EMERY COUNTY, UTAH
DMRA-3750
Uranium

Engineering Report

By M. E. Rowan
Mining Engineer
Bureau of Mines

YAUGHEY AND YAUGHEY
KEWEE COUNTY, UTAH

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ILLUSTRATIONS

Fig. 1 Location map, Yaughey and Yaughey (Ozzy Yentzen property) Kewee County, Utah

Fig. 2 Claim map with proposed drill holes

INTRODUCTION

Vaughey and Vaughey submitted an application, dated March 8, 1955, for Government aid in an exploratory project under docket No. DMEA-3730. The proposed program consists of 37 drill holes planned, at locations as indicated on application map, to explore for uranium ores in the Salt Wash member of the Morrison formation. The total estimated cost of the program is $32,965.

A field examination of the property was made April 26, 1955, by R. W. Schanzlech, Geological Survey, and M. M. Moore, Bureau of Mines, for the purpose of determining the feasibility of the proposed exploration and the appraisal of the estimated costs and engineering aspects of the job. The field examiners were accompanied to the property by D. V. Weirman and R. M. Conrad, representatives of Vaughey and Vaughey. Leider Million, Atomic Energy Commission geologist, was visited and interviewed at his camp near the property regarding the possibilities for uranium deposits in this area.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The property is located on the east edge of the San Rafael Swell, in Emery County, Utah, about 12 airline miles southwesterly from Green River, Utah, in Secs. 34 and 35, T. 21 S., R. 14 E., and Secs. 3, 4, and 10, T. 22 S., R. 14 E., S.L.B. and M. (Fig. 1). The San Rafael River is less than one airline mile to the west. Erosion of the original flat terrain has formed wide, shallow, winding arroyos and

low mesas. Vegetation is scarce and is comprised for the most part of desert plants. The climate is arid. In summer the days are hot and nights chilly; winters are cold.

HISTORY AND PROSPECTING

The mining claims that comprise the property have been recently located. An exploratory drilling program was started early in 1955 by the applicant. At the time of the field examination, April 26, 1955, 19 holes had been drilled, several of which were reported to show uranium mineralization. No production has been made from the property.

OWNERSHIP AND EXTENT

Vaughey and Vaughey is a copartnership consisting of R. A. Vaughey, W. M. Vaughey, and W. T. Blackburn, with mailing address:

1650 Denver Club Building
Denver 2, Colorado

The Darcy Ventures property, consisting of 37 unpatented lode mining claims (fig. 2), is owned by Paul Alex, Revel Waldrman, Angelo Zanetti, and Fred Zanetti, and is held under lease, dated October 16, 1954, by Vaughey and Vaughey. Location notices for the following claims have been recorded in the office of the County Recorder, Emery County, Utah:

Name of Claim		Book	Page
Mike No. 1	Location Notice	374	443
" " 2	" "	"	444
" " 3	" "	"	445
" " 4	" "	"	446
" " 5	" "	"	447
" " 11	" "	"	448
" " 12	" "	"	449
" " 13	" "	"	450
Gertrude No. 11	" "	"	451
" " 12	" "	"	452
" " 13	" "	"	453
" " 14	" "	"	454
Mike No. 6	Amended Location Notice	"	455
" " 7	" " "	"	456
" " 8	" " "	"	457
" " 9	" " "	"	458
" " 10	" " "	"	459
Mike No. 1	" " "	"	460
" " 2	" " "	"	461
" " 3	" " "	"	462
" " 4	" " "	"	463
" " 5	" " "	"	464
" " 6	" " "	"	465
" " 7	" " "	"	466
" " 8	" " "	"	467
" " 9	" " "	"	468
" " 10	" " "	"	469
Gertrude No. 1	" " "	"	470
" " 2	" " "	"	471
" " 3	" " "	"	472
" " 4	" " "	"	473
" " 5	" " "	"	474
" " 6	" " "	"	475
" " 7	" " "	"	476
" " 8	" " "	"	477
" " 9	" " "	"	478
" " 10	" " "	"	479

DESCRIPTION OF THE DEPOSITS

Rock outcrops on the Gurny Ventures property consist chiefly of variegated shale and light-colored sandstone and conglomerate of the

Brushy Basin member of the Morrison formation. Much of the surface, and especially the lower ground, is covered by alluvium. Just west of the property, the contact between the Brushy Basin member and the Salt Wash member of the Morrison formation is exposed. The strike of the contact and of the beds throughout the area of the claims is generally north-south and the dip about 3 degrees easterly.

A gritty-sandstone bed of variable thickness from 0 to 40 feet, occurs about 175 feet above the base of the Morrison formation in the Salt Wash member, and appears to be the most favorable horizon for uranium mineralization. This bed is exposed about a mile west of the property at the Hinsa mines and at the Hinsa Goose workings, where uranium ores are being produced at present. Ores occur in irregular, lens-shaped pods in a fairly coarse-grained sandstone, and usually in the presence of carbonaceous material. Uranium mineralization has been encountered in the favorable horizon in several holes drilled by the applicant on the Curry Ventures property (fig. 2). Radiometric logs of the holes were made by the Atomic Energy Commission. Hole No. 1 was cored. Chemical analysis of core from a 1-foot interval, from 245 to 246 feet in Hole No. 1, was reported to have resulted in 0.217 percent U_3O_8 and 0.24 V_2O_5.

MINABLE ORE RESERVES

No known ore reserves occur on the property.

PRESENT STATUS

About 3 miles of access road has been constructed westerly from the Utah State Highway No. 24 (Green River-Hanksville road) to serve the property. No buildings exist on the claims at present. Some 18 holes, averaging about 300 feet in depth, have been drilled on the property.

Mine labor is available at Green River and Price, Utah.

Most of the materials, supplies and equipment necessary for mine operations may be obtained at Moab or Price, Utah.

Ample water may be had from the San Rafael River, about 3 miles by road from the property.

Power can be supplied by gasoline or Diesel engines.

PROJECT PROPOSALS

The applicant proposes to explore the 37 claims by drilling 37 holes to an average depth of 300 feet, for a total of 17,100 feet, as follows:

Stage 1

three

Twenty-two holes are to be distributed over the project area to establish the lithology of the Salt Wash member and to indicate favorable areas for drilling holes in Stage 2.

Stage 2

Twenty-five holes are to be drilled at intervals of about 400 feet to delineate uranium mineralization encountered in Stage 1.

Stage 3

Ten holes are to be drilled at intervals of about 50 feet to delimit ore found in Stage 2.

It is planned that 4 holes, at widely spaced intervals, will be cored from the surface to determine the stratigraphy of the beds. All other holes will be non-cored, except that in the ore-bearing horizon core drilling will be employed.

The above proposals were planned after the applicant had completed only 7 drill holes. At the time of field examination, some 18 holes had been completed. Additional information resulting from the new holes has made a slight alteration desirable in the original proposals (fig. 2). Alternate proposals are described as follows:

The purpose of this project is to explore for uranium ore in a favorable ore-bearing horizon in the Salt Wash member of the Morrison formation, estimated to average 30 feet in thickness at an average depth of 300 feet.

The work shall be performed in 3 successive stages. Stage 1 is designated to explore outward from known uranium mineralization in an attempt to develop and expand ore deposition trends. Stage 2 is planned to delineate ore deposition discovered in Stage 1; and Stage 3 is aimed at a closer delineation of ore found in Stages 1 and 2. The operator shall complete all of the work under Stage 1 and shall perform so much of the work of each succeeding stage as is approved in advance,

in writing, by the Government, based upon the results of the completed work under preceding stages.

Stage 1

Twenty-three vertical holes shall be drilled from the surface, in numerical order, at approximate locations indicated on figure 2. Hole No. 11 and Hole No. 22 shall be core drilled from the surface to the bottom. All other holes shall be noncore drilled except through the ore-bearing horizon, which shall be core drilled.

Approximately 5,670 feet of noncore and 1,230 feet of core drilling shall be completed under Stage 1.

Stage 2

Twenty-five vertical holes shall be drilled at 300-foot intervals, to delineate ore discovered in Stage 1. These holes shall be noncore drilled except through the ore-bearing horizon, which shall be core drilled.

Approximately 6,750 feet of noncore and 750 feet of core drilling shall be completed under Stage 2.

Stage 3

Ten vertical holes shall be drilled at 30-foot intervals, to further delineate ore discovered in Stages 1 and 2. These holes shall be noncore drilled except through the ore-bearing horizon, which shall be core drilled.

Approximately 2,700 feet of noncore and 300 feet of core drilling shall be completed under Stage 3.

General Provisions

The operator shall provide for the examination and logging, splitting, and storage in a suitable place for Government inspection and disposal of drill hole cuttings and cores, hole probing, determination of drilling depths, necessary surveying and mapping of drill hole locations, sampling, and all other duties necessary to the satisfactory technical progress of the proposed program.

The Government shall not contribute to the cost of any hole drilled smaller than AX size, nor to the cost of any hole which cannot be probed with radiometric logging equipment.

The operator's monthly report shall contain certified drill and geologic logs, and certified copies of chemical analyses.

The supervision, the extent and method of sampling and logging holes, the manner of storing and splitting drill hole cuttings and cores, the laboratory making the chemical analyses, the location of drill sites, and the drilling method used are to be subject to Government approval.

ESTIMATED COSTS OF PROJECT PROPOSALS

Independent Contracts

Stage 1 2.3

Drilling
Removes, 5,670 feet at $1.45 per foot ——— $ 8,221.50
Core, 1,230 feet at $3.00 per foot ——— 3,690.00
Bulldozing, 8 hrs. at $12 per hr. ——— 96.00

Total independent contracts, Stage 1 ——— $12,007.50

Stage 2 25

Drilling
Reverse, 6,750 feet at $1.45 per foot —— $9,787.50
Core, 750 feet at $3.00 per foot —— 2,250.00
Bulldozing, 9 hrs. at $12 per hr. —— 108.00

Total independent contracts, Stage 2 —— $12,145.50

Stage 3 10

Drilling
Reverse, 2,700 feet at $1.45 per foot —— $3,915.00
Core, 300 feet at $3.00 per foot —— 900.00
Bulldozing, 3 hrs. at $12 per hr. —— 36.00

Total independent contracts, Stage 3 —— $ 4,851.00

Total estimated costs of independent contracts for project —— $37,004.00

Other Items of Costs

Stage 1

Supervision —— $ 800.00
Technical services —— 168.00
Chemical analyses, 16 at $5.00 each —— 80.00
Accounting —— 40.00
Core boxes, handling, etc. —— 40.00

Total —— $ 1,120.00
80
1040

Stage 2

Supervision —— $ 850.00
Technical services —— 170.00
Chemical analyses, 17 at $5.00 each —— 85.00
Accounting —— 42.50
Core boxes, handling, etc. —— 42.50

Total —— $ 1,190.00
85
1105

Stage 3

Supervision —— $ 350.00
Technical services —— 70.00
Chemical analyses, 7 at $5.00 each —— 35.00
Accounting —— 17.50
Core boxes, handling, etc. —— 17.50

Total —— $ 490.00
35

221

Vaughey - Vaughey

3730

Total estimated cost of other items for project ——— $ 2,200.00

Estimated Cost Summary

Stage 1 ———	$13,127.50
Stage 2 ———	13,535.50
Stage 3 ———	5,341.00
Total estimated cost of project ———	$31,804.00
Government participation at 75 percent ———	$23,853.00

PROPOSED FINANCING

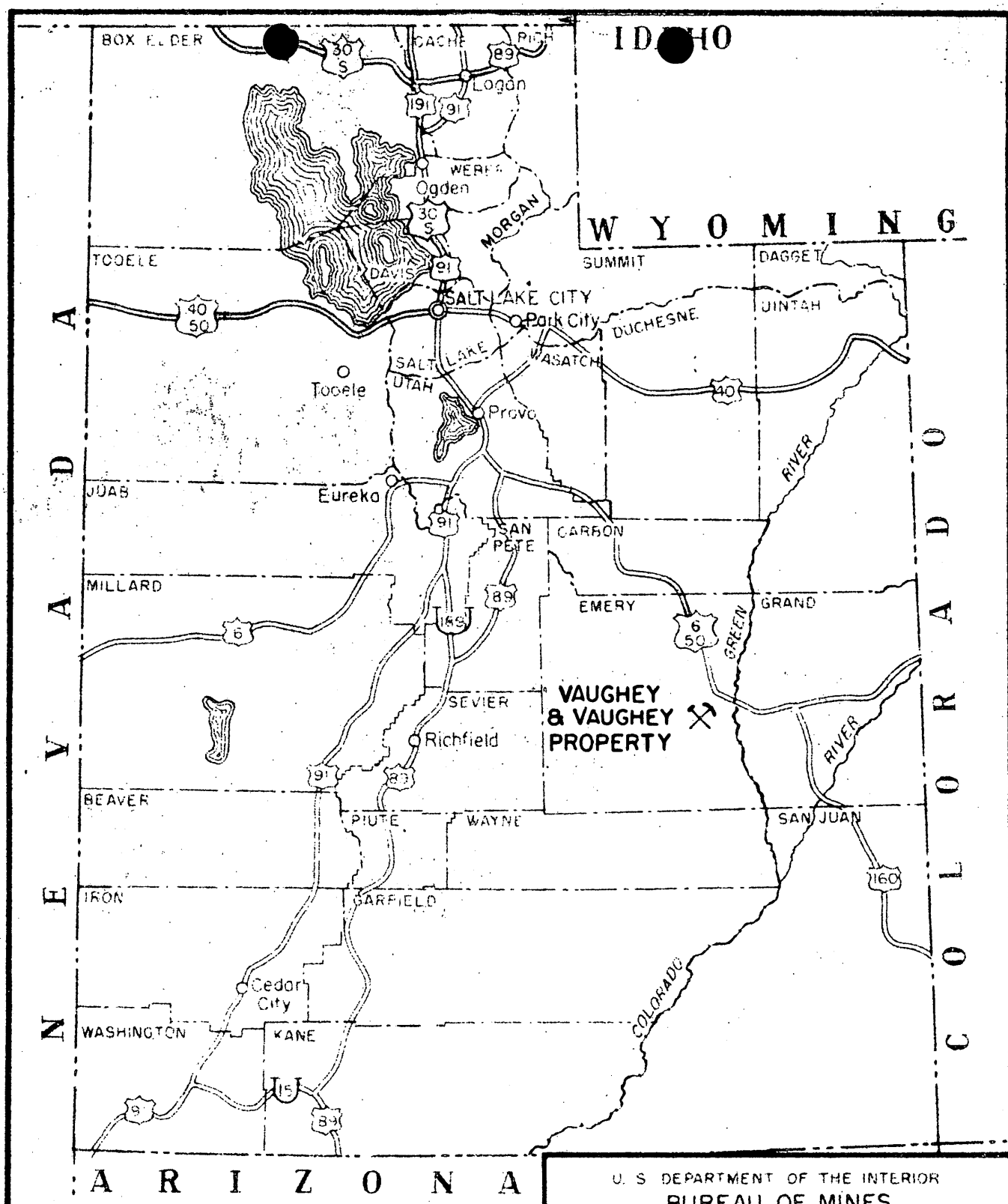
The applicant reports that he is prepared to invest $7,951 in the proposed exploratory project, which is 25 percent of the estimated cost of $31,804, in accordance with the regulations on Government participation, as stated in Section 7, DMEA Order No. 1 Amended.

CONCLUSIONS AND RECOMMENDATIONS

A total of 19 holes were drilled on the property by the applicant, prior to the field examination in April 1955. Seven holes showed uranium mineralization. Chemical analyses of core from a 1-foot interval in Hole No. 1 resulted in 0.217 percent U_3O_8 and 0.24 V_2O_5. Uranium ore is being produced at present from several properties in the vicinity of the Ouray Ventures claims. Ore occurs in a gritty-sandstone bed in the Salt Wash member of the Morrison formation. Under favorable conditions, usually in the presence of carbonaceous material, ore deposits of commercial size have been found. Inasmuch as many favorable conditions for ore deposition exist on the Ouray Ventures property, it is concluded that an exploratory program is

feasible and desirable. The property is considered to be of ample size to contain ore bodies sufficient to more than repay the Government for the requested loan.

It is recommended that the Government approve the alternate exploratory program described in this report.



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 1 DMEA Docket No. 3730

Location Map
VAUGHEY & VAUGHEY
(OURAY VENTURES PROPERTY)
EMERY COUNTY, UTAH

ENGINEER *M. H. Howes* DATE JUNE 23, 1955
TRACED JUNE, 1955, A.P.T.S.
CHECKED

1900-336-E

IN REPLY REFER TO:

DMEA

Date Rec'd.

JUL 5 1955

BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

July 1, 1955

TRANSMITTED

JUL 12 1955

Memorandum

To: DMEA Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 3750 (Uranium), Vaughey and Vaughey, Ouray Ventures property, Emery County, Utah

Enclosed are the original and nine copies of a geologic report by R. W. Ostenstock, U. S. Geological Survey, covering his examination of the subject property.

The exploration program recommended by Ostenstock has my approval.

Since the property is on the Colorado Plateau, I had Hasler review the proposed exploration program. The original and nine copies of his letter of concurrence, dated June 29, 1955, are enclosed also.

E. N. Harshman

E. N. Harshman
Member, Field Team

Enclosures (20)

EHHarshman:arh

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Colorado Plateau District
P. O. Box 360
Grand Junction, Colorado

TRANSMITTED
JUL 12 1955

DMEA
RECEIVED
JUL 1 1955
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

June 29, 1955

Memorandum

To: E. N. Harshman, DMEA Field Team, Region III

From: J. William Hasler

Subject: DMEA docket 3730 (Uranium) Vaughey and Vaughey, Ouray Ventures Property, Emery County, Utah

Enclosed is one copy of an examination report by R. W. Osterstock on DMEA docket 3730 and one copy of the brochure covering the subject property as submitted to this office by Stephen R. Wilson.

The examination report of the subject property by R. W. Osterstock is a well prepared report and I believe the exploration program submitted in this report will test the subject property adequately insofar as the DMEA application is concerned.

I have no further recommendations or comments to make at this time.

Best regards.

JWH

J. William Hasler
Geologist

JWH/mlr

Enclosure

TRANSMITTED

JUL 12 1955

Room 206, 222 So. West
Salt Lake City 1, Utah
June 8, 1955

Memorandum

To: K. N. Burnham, DMEA Field Team, Region III

From: R. W. Outerstock

Subject: DMEA Docket 3730 (Uranium), Vaughey and Vaughey, Ouray Ventures property, Emery County, Utah.

Enclosed are eleven copies of a geologic report on the Ouray Ventures property, DMEA Docket 3730, by R. W. Outerstock (USGS).

The applicants, Vaughey and Vaughey, applied for government assistance to explore for uranium ores on their Ouray Ventures property in Emery County, Utah.

Uranium mineralization on the subject property has been penetrated in diamond drill holes put down at the applicant's expense. The ore minerals occur in a zone of irregular thickness in the upper portion of the Salt Wash member of the Jurassic Morrison formation. There is indicated a NW-SE trending zone of uraniferous material which measures in excess of 12,000 feet along strike from the Blue Goose Workings on the NW to the Sharples No. 11 hole on the SE. It is doubtful that mineralization within this zone is continuous however.

It is recommended that a revised diamond drilling program as outlined in the body of the report be approved for government assistance.

R. W. Outerstock

RWO:dmm

QURAY VENTURES PROPERTY — VAUGHNY AND VAUGHNY

EMERY COUNTY, UTAH

DMEA Docket 3730
(Uranium)

Initial Geologic Report

By R. W. Outerstock
U. S. Geological Survey

CONTENTS

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Introduction	1
Location and accessibility	1
History and production	1
Geology	2
Ore deposits	4
Ore reserves	7
Proposed exploration	7
Conclusions and recommendations	9
Bibliography	10

ILLUSTRATIONS

Figure 1. Index map of Utah.

Figure 2. Claim Map and proposed drill hole locations on Gurey Ventures property.

Figure 3. Geologic map of Gurey Ventures property, Emery County, Utah.

Introduction

On March 8, 1955, R. A. Vaughey, W. M. Vaughey and W. T. Blackburn, a copartnership, applied for a DMEA loan, Docket No. 3730, to aid in exploration for uranium on the leased Gurey Ventures property in Emery County, Utah. At the request of the DMEA Field Team, Region III the property was examined on April 26, 1955 by R. W. Gaterstock (USGS) and M. H. Hansen (USBM). The examiners were accompanied in the field by Douglas Watrous and R. M. Conrad, representatives of Vaughey and Vaughey.

Location and Accessibility

The thirty seven claims comprising the Gurey Ventures property are situate in Sections 3, 4, 10, T. 22 S., R. 14 E., and Section 34, T. 21 S., R. 14 E., Salt Lake Base and Meridian. The area, although termed by the applicants the Green River Mining District, is properly assigned to the San Rafael Mining District. The property may be reached by traveling west from the town of Green River about 5 miles on paved U. S. Highway 50, thence left (south) for 9.6 miles on Utah Highway 24, a graded dirt road, thence right (west) 2.9 miles on an unmarked twisting primitive road to the Mike No. 10 claim.

History and Production

The applicants held the Gurey Ventures property by lease and have expanded the claim area by the addition of several claims on the periphery of the original block which has itself been substantially relocated in order to cover unclaimed fractions (see fig. 2). Portions of the eastern parts of Mike Nos. 2, 4, 6, 8, and 10 are not valid as they fall within a school section.

The property has no production history. The applicants have to date drilled 17 holes. Results of this drilling program are discussed in detail in the section on Ore Deposits.

Geology

Only sedimentary rocks are exposed on the Ouray Ventures property; they consist mainly of shale, siltstone, mudstone, sandstone, conglomerate and limestone ranging in age from upper Jurassic through upper Cretaceous. The property lies on the east flank of the San Rafael Swell east of the steep hogbacks forming the main boundary of this major structural feature.

The formations comprising the exposed section are from top to bottom as follows:

Mancos shale — upper Cretaceous — slate gray marine shale with a few lenses of yellow gray sandstone and light gray marl, covers broad area mostly to north and east of property.

Dakota (?) sandstone — upper Cretaceous — yellow and gray conglomeratic sandstone and gray shale resting in depressions in the Morrison. This unit is mapped by Baker (1946, plate 1) as thin, lenticular, intermittent outcrops between the Morrison and the Mancos only at the extreme eastern edge of the property.

Burro Canyon formation — lower Cretaceous — variegated terrestrial sediments including shale, chert, limestone, conglomerate and sandstone, often shows lower conglomeratic member, contact with underlying Morrison obscure where basal conglomerate is absent. G. H. Marshall (1954) has interpreted on a photogeologic map all material lying between the Morrison and the Mancos as Burro Canyon with no Dakota sandstone present (see fig. 3).

Morrison formation — upper Jurassic — Brushy Basin shale member — varicolored mudstone and siltstone with ledges of sandstone and conglomerate and some limestone and quartzite. This unit, where not obscured by alluvium, covers most of the project area.

Salt Wash sandstone member — interbedded gray, medium grained sandstone and red to gray sandy mudstone. A fluvial deposit, locally has basal gypsiferous unit at base. Lenticularity of beds is characteristic within this member. Silicified wood is common in the sandstone lenses. The top of the Salt Wash member is placed at the top of the upper most ledge that marks a conspicuous change in lithology from abundant sandstone to dominantly shale. This member is not exposed in the project area, however, less than 500 feet west of the project area the Brushy Basin-Salt Wash contact is exposed in a small topographic depression. About 1 mile west of the project area the Salt Wash member is well exposed in the cliffs of a minor canyon which drains into the San Rafael River.

Summerville formation — upper Jurassic — consists mainly of interbedded shale, mudstone and subordinate platy sandstone. Usually colourless, locally contains large chert concretions and gypsum beds. This formation is not exposed in the project area, however, it does outcrop about 1 mile to the west in the walls of small canyon draining into the San Rafael River.

Baker (1946, p. 94) describes the region as being structurally composed of broad anticlinal upwarps and synclinal basins cut by numerous normal faults. East of the San Rafael Swell, one of the large upwarps, the rocks have low dips to the north into the Uinta basin. In the immediate project area the rocks strike generally north and dip gently to the east (see figs. 2 and 3).

Baker (1946, p. 103) has noted that the dominant trend of normal faulting in the region is N. 40° - 55° W., this is borne out by faults mapped by company geologists (see fig. 2) which trend about N. 55° - 60° W. All of the faults mapped in the project area have only very small displacement, they can be traced across changes in lithology in cliffs and ledges but are generally obscured on the flat tablelands which are most characteristic of the area. Isadore Million, field representative of the Atomic Energy Commission in the Green River area states that some of the northwest trending faults may be post-mineral but that most of the faulting and parallel fracturing appears to be pre-mineral.

Ore Deposits

Uranium mineralization in the project area is apparently confined to the Salt Wash sandstone member of the Jurassic Morrison formation. Although little is known of the character of the Salt Wash member on the Ouray Ventures property it has been penetrated by 17 diamond drill holes put down at the applicant's expense, as well as by 4 additional nearby holes put down on adjacent properties.

Uranium mineralization has been encountered in Ouray Ventures holes Nos: 1, 2, 4, 11, 13, and 14, and in Climax hole No. 2 and Sharples hole No. 11. The Atomic Energy Commission has made radiometric logs of all of the open holes, these logs have been studied and while no precise radiometric assay data may be gained, the zones of radiometric highs are sufficiently distinct to establish their relative elevation in the Salt Wash member. Wet chemical assays are available for Ouray Ventures hole No. 1 (245-246) in which a one-foot interval assayed 0.217 percent U_3O_8 and 0.24 percent V_2O_5, and from Sharples hole No. 11 in which a three-foot interval of unknown depth assayed 0.42 percent U_3O_8.

Uranium mineralization in the Salt Wash member of the Morrison formation is generally confined to an irregular lenticular sand bed about 175 feet above the base of the Morrison. Within this 40 foot sand bed the ore may exist in 3 or more zones. Isadore Million (AEC) (oral communication) has described the favorable 40 feet as a "grit-like" unit, a generally coarser clastic than the beds above or below. Stokes (1954, p. 46) notes that the general trend of the rivers which deposited the Salt Wash member was about 20-30 degrees east of north but that a second well marked trend occuring chiefly in the vicinity of the best mineralization trends about 45 degrees east of south. Million has suggested that sedimentary structural features on the east flank of the San Rafael Swell indicate most of the channels trend in a NE-SW direction but he emphasizes that this is a regional feature not necessarily applicable on a local scale.

It is believed by AEC geologists that the principle ore control is the relative abundance of carbonaceous material with its attendant precipitating qualities in the more porous sediments. Thus any abrupt change in the course of a channel may have provided an increased amount of carbonaceous debris. The 40 feet of coarse sands about 175 feet above the base of the Morrison is known to have a high degree of porosity. Million has also suggested that while some of the northwest trending faults may be post-mineral they may owe their origin to parallel pre-mineral fractures and that these features may have provided some degree of ore localization.

Several producing uranium properties about 1 mile west and northwest of the Ourny Ventures property have not yet developed their ore bodies to the stage where distinct ore trends can be established. One noteworthy

feature of these properties (Bison workings, Blue Goose workings and the Four Corners workings) is the tendency of the ore bodies to have sufficient areal size to permit efficient prospecting by surface diamond drilling, this has been especially true at the Four Corners holdings.

It may be noted on figure 2 that the company and non-company drill holes which have intersected zones of abnormally high radioactivity do suggest a northwest trending zone which points toward the Blue Goose workings.

The elevations of mineralization encountered in the listed holes is as follows:

			Elevation
Gurney	DDH	14	4,258
"	"	4	4,183
Climax	DDH	2	4,138
Gurney	DDH	11	4,119
"	"	1	4,078
"	"	13	4,025
"	"	2	3,891

It might be expected that the mineralization in the easternmost holes would be somewhat lower in elevation than that in the westernmost holes because of the regional 3 degree eastward dip. No such regularity appears, the mineralization ranges from 3,891 to 4,253 with little regard for positions of the holes. It may be presumed therefore, that one of two possibilities obtain, there is extreme irregularity of the thickness and attitude of the ore zone or the ore zone is not as well defined as is suggested by AEC.

Although there has as yet been no exposure of the mineralized Salt Wash other than diamond drill core which has been shipped for assaying purposes, it is presumed that the mineralogy of the deposit will closely parallel that of nearby producing properties. Carnotite and tyuyamunite will probably be the major uraniferous minerals. "Rossolite", vanoxite, and corvusite will probably be the major vanadiferous minerals.

Ore Reserves

The Ourey Ventures property has no ore reserves of any class. Although ore grade mineralization has been encountered by diamond drilling the extent of the mineralization is as yet unknown.

Proposed Exploration

When the applicants submitted their request for government assistance they had, at their own expense, completed seven diamond drill holes in the project area. On the basis of information then available, the applicants proposed an exploration program consisting of three stages. Stage 1 included 22 holes randomly distributed over the project area, Stage 2 consisted of 25 holes on about 400 feet centers to delineate mineralization encountered during Stage 1, Stage 3 consisted of 10 holes on 50 feet centers for more detailed delineation of mineralization encountered in the previous two stages. Of the total of 57 holes proposed it was planned to drill 4 holes cored from the surface, the remainder of the holes would have cored only in the ore bearing horizon. The applicants had determined that the average depth of hole would be 300 feet.

Prior to examination of the property by DMEA personnel the applicants had drilled 10 more holes, bringing the total to 17 on the Ourey Ventures property. Four additional holes on the perimeter of the project area had been put down as joint ventures with adjacent property owners.

With additional information resulting from the greater number of drill holes completed it has been possible to revise the originally proposed exploration program. The following revised program has been discussed with and approved by the applicants.

Stage I — 21 non-core holes) as spotted on fig. 2.
2 core holes)

Having indicated by diamond drilling an irregular NW-SE trend of uraniferous mineralization on the Corey Ventures property it seems judicious to attempt to prove this trend by surrounding the mineralized area with an additional set of widely spaced drill holes as indicated on fig. 2. Thirteen holes will be utilized for this purpose, one of this set of holes will be cored all the way for stratigraphic information as well as aiding in delimiting the mineralized trend. The remaining 10 holes of stage I will be utilized for exploration of the northern portion of the project area in which other parallel unmineralized trends may exist. The holes will be drilled as numbered on fig. 2. Hole No. 14 #11 on map and Eng report will be a cored hole from the surface to aid in stratigraphic correlation as well as searching for mineralized trends.

Stage II — 25 non-core holes on 300 foot centers.

Consisting of 25 non-core holes on no more than 300 foot centers will be utilized to further delimit and confirm the trend of the mineralized zone now indicated. An unnumbered hole from this stage will be cored from the surface. Spotting of these holes will depend entirely on the drilling results obtained from Stage I. It is therefore mandatory that the results of Stage I be studied in detail prior to the inception of Stage II.

Stage III — 10 non-core holes on 50 foot centers.

Consisting of 10 holes to be drilled on no more than 50 foot centers, this final stage will provide information leading to tonnage and grade estimates. Although this latter phase of drilling may suggest development rather than exploration it should be borne in mind that so little is known of the

character of the ore occurrence on the Ouray Ventures property that the blocking out of at least one ore body is a requisite factor preceding a planned mining program. As in Stage II these holes cannot be spotted until information from the earlier stages is compiled and studied. On the Four Corners property to the north of the project area the owners have found it necessary to conduct final drilling operations on 30 foot centers, however it does not appear that such closely spaced holes will be required in the project area.

Conclusions and Recommendations

It is concluded that the Ouray Ventures property contains uranium mineralization within an ill defined zone in the upper part of the Salt Wash member of the Jurassic Morrison formation. Drilling completed by the applicants and adjacent property holders has indicated an irregular NW-SE trend of the uranium mineralization. The potential of the project area is sufficiently large to provide a significant contribution to the nation's uranium reserves.

It is recommended that DMEA enter into a contract with the applicants to explore the Ouray Ventures property by the revised diamond drilling program as outlined. It is further recommended that authorization for Stages II and III be individually withheld pending review by DMEA representatives at which time the operators must receive written government approval before proceeding with the exploration project.

The proposals and recommendations contained herein have been discussed with Isadore Million, AEC field representative in the Green River area.

Bibliography

Baker, A. A., Geology of the Green River Desert — Cataract Canyon Region, Emery, Wayne and Garfield Counties, Utah, U. S. Geol. Survey Bull. 951, 1946.

Marshall, C. H., Photogeology of the Tidwell No. 3 Quadrangle, Emery County, Utah. U. S. Geol. Survey Trace Elements Memorandum Report No. 759, 1954.

Stokes, W. C., Some Stratigraphic, Sedimentary, and Structural Relations of Uranium Deposits in the Salt Wash Sandstone. U. S. Atomic Energy Commission, Raw Materials Exploration 3102, 1954.

U.S. DEPARTMENT OF THE INERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET

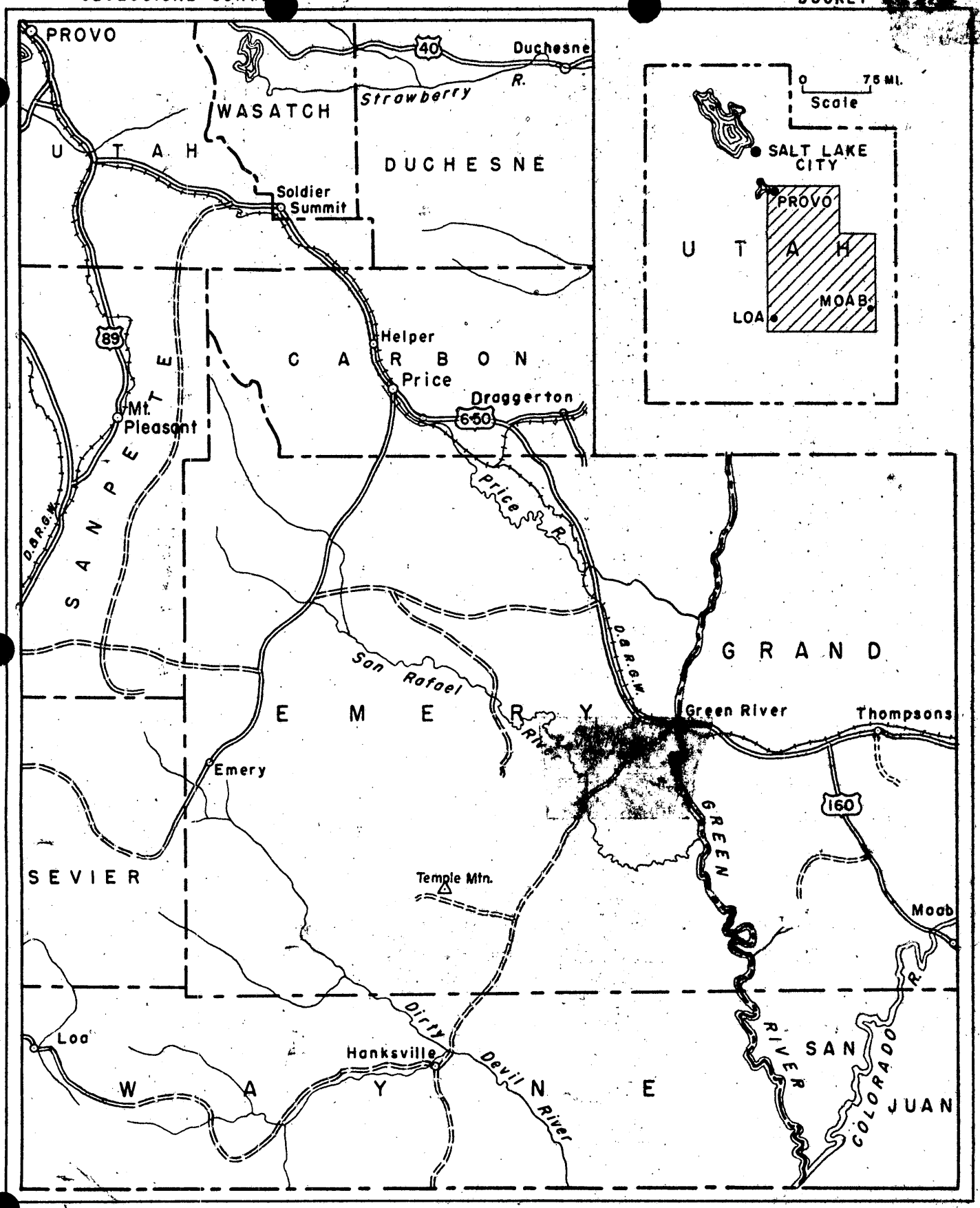
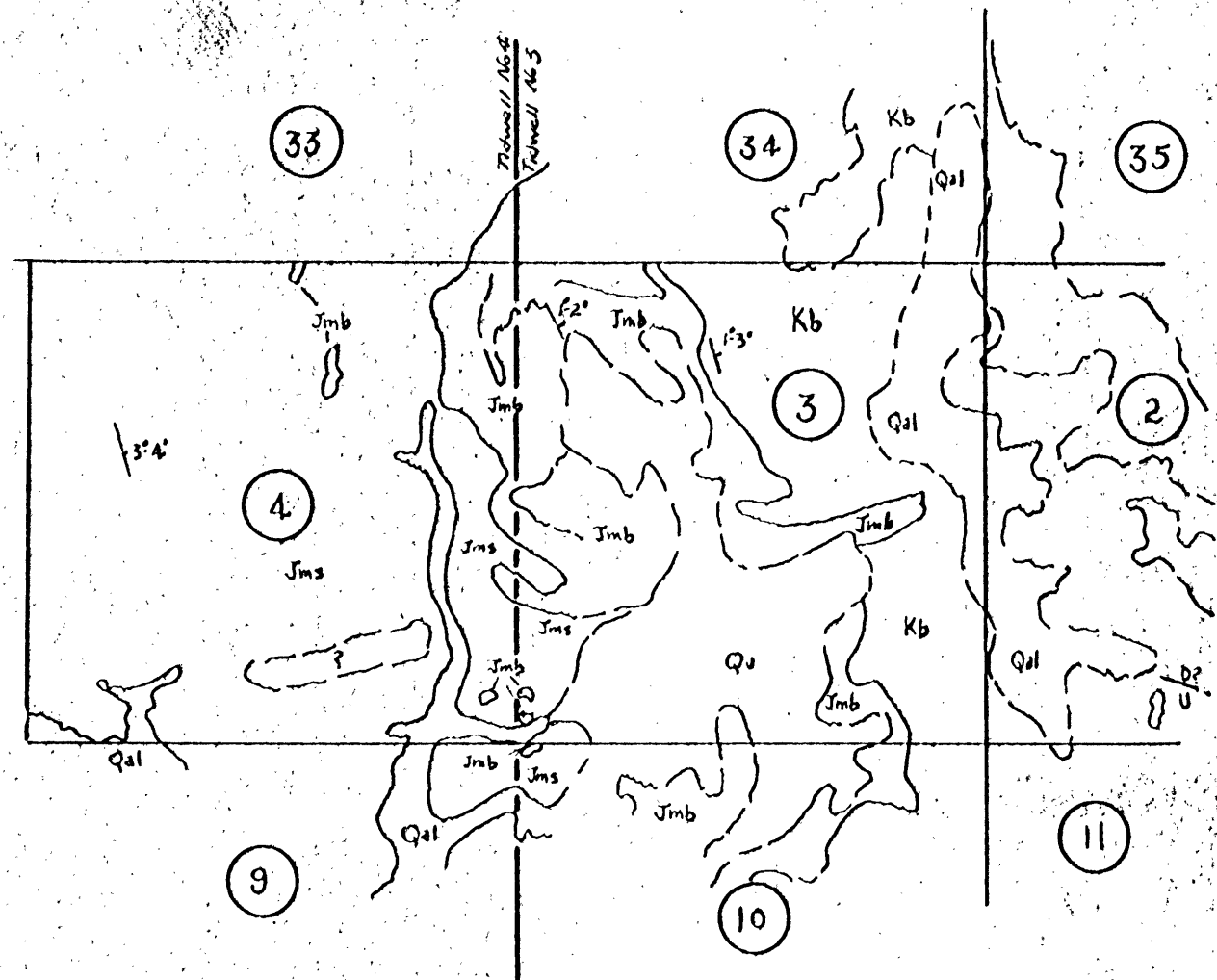


FIG. 1 INDEX MAP OF UTAH

0 5 10 15 20 MILES
Scale

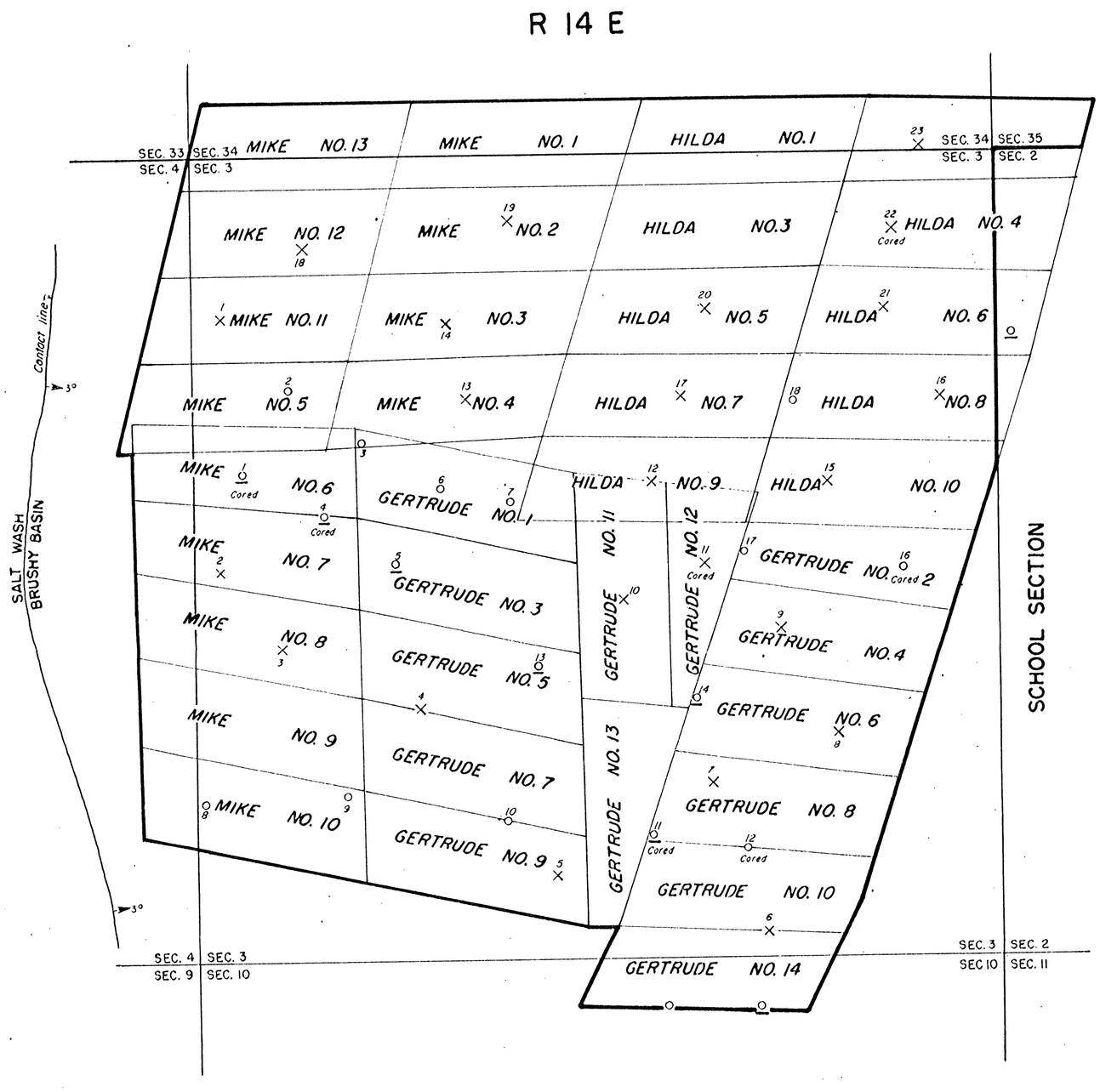


Adapted from Photogeologic maps of the Tidwell Nos 3 & 4 Quads.
Tidwell #3 - TEMR 759 by C.H. Marshall
Tidwell #4 TEMR 655 by P.P. Orkild

Fig. 3

GEOLOGIC MAP OF OURAY VENTURES PROPERTY
EMERY COUNTY, UTAH

500 1000 2000 3000 FT



LEGEND

- HOLE ALREADY DRILLED, (BARREN)
- HOLE ALREADY DRILLED, (URANIUM MINERALIZATION)
- PROPOSED DRILL HOLE. (AVE. DEPTH OF HOLE = 300', NON-CORED DRILLING: EXCEPT 10% OF EACH HOLE TO BE CORE-DRILLED THRU THE FAVORABLE HORIZON OF SALT WASH MEMBER; AND EXCEPT WHERE INDICATED.
- CONTACT OF SALT WASH AND BRUSHY BASIN MEMBERS OF MORRISON FORMATION.

NOTE

DATA TAKEN FROM APPLICANT'S MAP.

0 600 1200 1800 2400
SCALE OF FEET

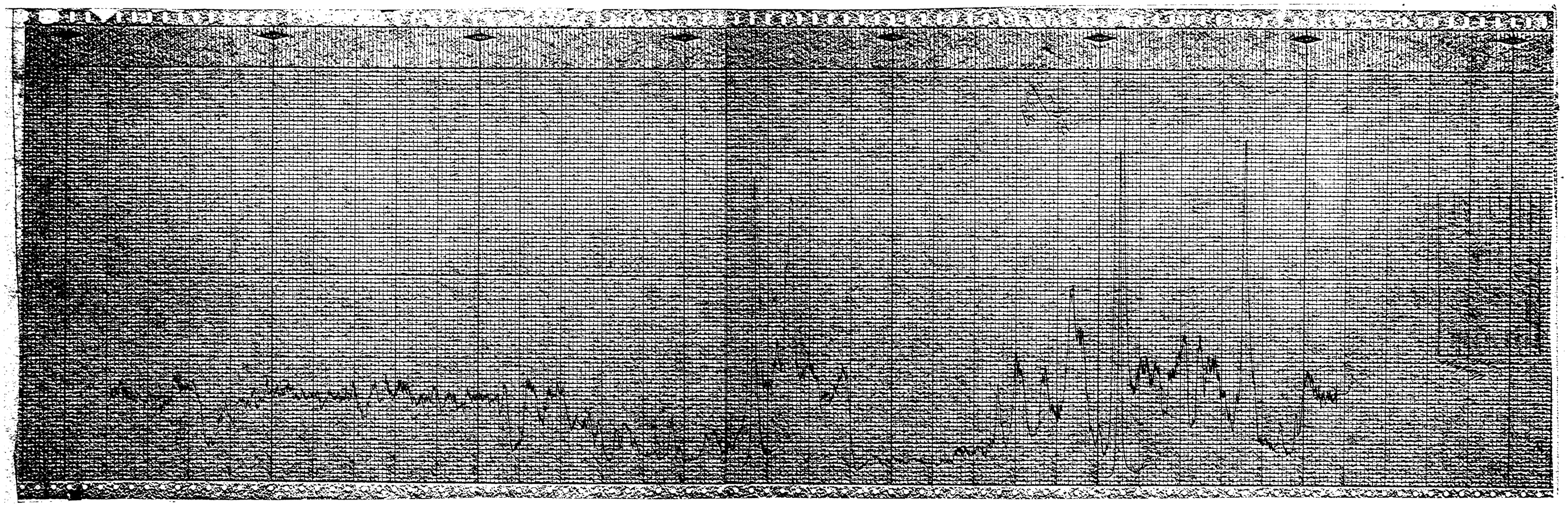
U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 2 DMEA Docket No. 3730

Claim Map showing Proposed Drill Holes

VAUGHEY & VAUGHEY PROPERTY
(OURAY VENTURES PROPERTY)
EMERY COUNTY, UTAH

ENGINEER: *M. H. Howes*	DATE: JUNE 22, 1955
TRACED: JUNE, 1955, BY: A. P. T. S.	1900 - 337 - D
CHECKED:	



PAGE ___ OF ___

ORE ___ HOLE NO. 10 FAV. ___

MIN ___ UNFAV. ✓

BARREN ✓

CONTRACT Idm E868

LOCALITY Four Corners CLAIM Gertrude II

COLLAR ELEV 4373.1 DEPTH 380'

DATE STARTED 11-13-55

DATE COMPLETED 11-19-55

LOGGED BY R.N.P. DATE 11-14-55

DEPTH	GEOLOGIC COL.	COLOR	BEDDING	TEXTURE	CHEM. ASSAY	CARBON	ORE MINERALS	MISCEL.	DEPTH
0									0
50									50
100									100
150									150
200									200
								SS.	
250								weak ANOMALY	250
								SS.	
300									300
								Cored 350'-380'	
350								SS.	350
	SALT WASH					CARBON		White SS.	90
						CARBON			90
								Red+GREEN Mud	90
								White SS	90
								Red+GREEN Mud.	90
								Bottomed 380'	
400									400

CORE RECOV. 7%

PAGE ___ OF ___

ORE ___ HOLE NO. 9 FAV. ✓

MIN ✓ UNFAV. ___

BARREN ___

CONTRACT Idm E868

LOCALITY Four Corners CLAIM Gertrude 4

COLLAR ELEV 4317.8 DEPTH 300'

DATE STARTED 11-1-55

DATE COMPLETED 11-8-55

LOGGED BY R.M.P. DATE 11-8-55

DEPTH	GEOLOGIC COL.	COLOR	BEDDING	TEXTURE	CHEM. ASSAY	CARBON	ORE MINERALS	MISCEL.	DEPTH
0									0
50									50
100									100
								SS.	
150									150
200								SS.	200
250							ANOMALY 281.6'-285.6'		250
								CORED 272'-300'	CORE RECOV. 87%
								FINE IMPURE GREEN SS. - SOME GREEN MUD LENSES	+95 +95 +95 +95
	SALT WASH							RED IMPURE SS - SOME RED MUD.	+95
								white SS.	+95
300								Bottomed 300'	300

PAGE ___ OF ___

ORE ___ HOLE NO. 7 FAV. ___

MIN ___ UNFAV. ✓

BARREN ✓

CONTRACT Idm E868

LOCALITY Four Corners CLAIM Gertrude 8

COLLAR ELEV 4306.6 DEPTH 295'

DATE STARTED 11-8-55

DATE COMPLETED 11-11-55

LOGGED BY P.N.P. DATE 11-11-55

DEPTH	GEOLOGIC COL.	COLOR	BEDDING	TEXTURE	CHEM. ASSAY	CARBON	ORE MINERALS	MISCEL.	DEPTH
0									0
50								SS.	50
100									100
150									150
200								SS.	200
								weak anomaly	
250								weak anomaly	250
								cored 265'-295'	Core recov.
					weak anomaly				
									295
									295
	SALT WASH							coarse white SS.	295
									295
									295
								Red + green mud.	295
300								Bottomed 295'	300
350									350
400									400
450									450

PAGE ___ OF ___

ORE ___ HOLE NO. 1 FAV. ___

MIN ___ UNFAV ✓

BARREN ✓

CONTRACT Idm - E868

LOCALITY Four Corners CLAIM Mike II

COLLAR ELEV 4453.0 DEPTH 370'

DATE STARTED 11-10-55

DATE COMPLETED 11-12-55

LOGGED BY P.N.R. DATE 11-12-55

DEPTH	GEOLOGIC COL.	COLOR	BEDDING	TEXTURE	CHEM. ASSAY	CARBON	ORE MINERALS	MISCEL.	DEPTH
0									0
50									50
100									100
150									150
200									200
250									250
300									300
350	SALT WASH								350
400									400

Work Anomaly

white S S

cored 350'-370'

+95

+95

coarse white SS.

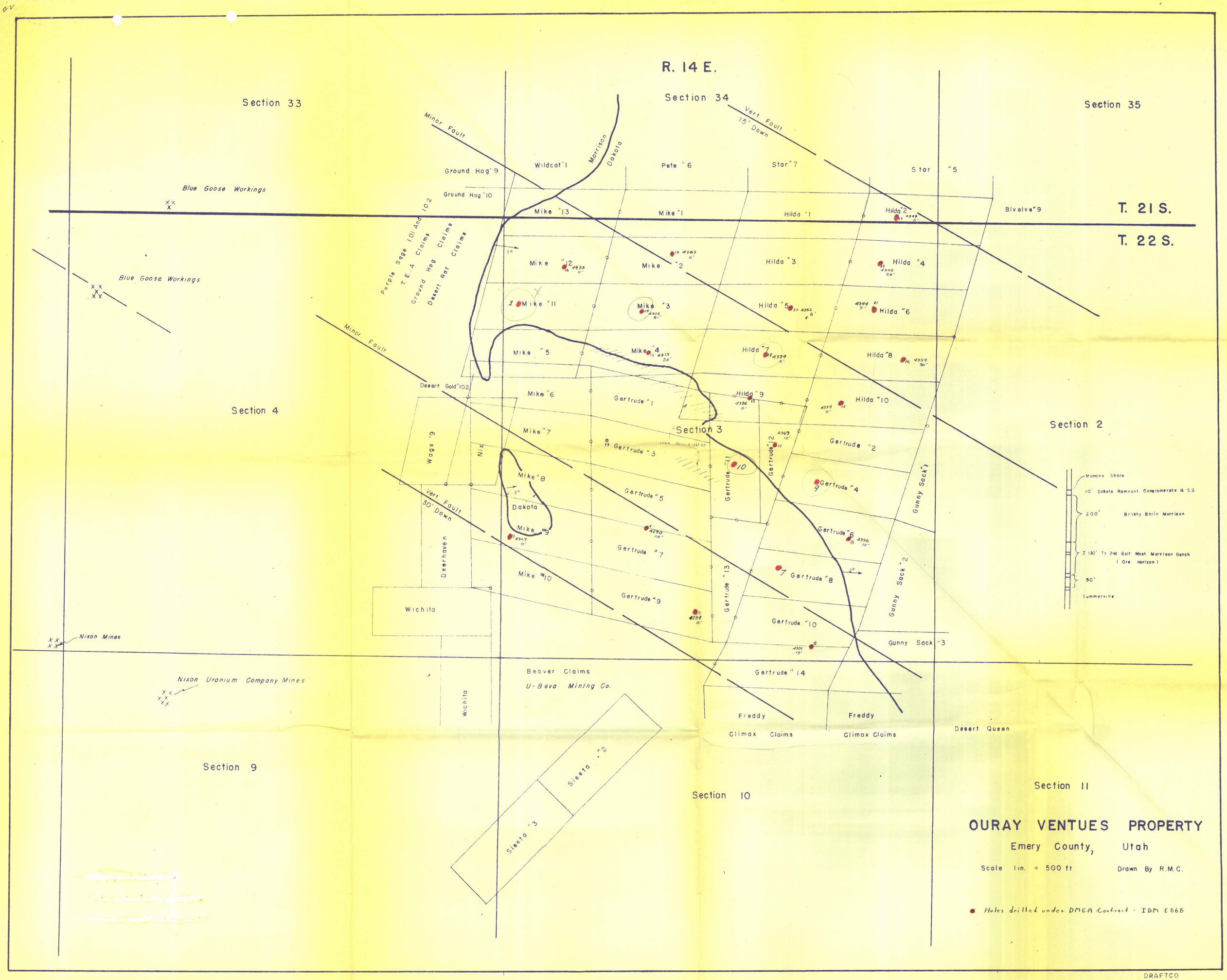
+95

Red mud.

+95

Bottomed 370'

Core Recov. 70


R. 14 E.
T. 21 S.
T. 22 S.
Section 33
Section 34
Section 35
Section 4
Section 3
Section 2
Section 9
Section 10
Section 11
Minor Fault
Vert Fault 15' Down
Vert Fault 30' Down
Morrison
Dakota
Ground Hog "9
Ground Hog "10
Wildcat "1
Pete "6
Star "7
Star "5
Bivalve "9
Blue Goose Workings
Purple Sage 101 And 102
T. E. A Claims
Ground Hog Claims
Desert Rat Claims
Mike "13
Mike "1
Hilda "1
Hilda "2
Mike "12
Mike "2
Hilda "3
Hilda "4
Mike "11
Mike "3
Hilda "5
Hilda "6
Mike "5
Mike "4
Hilda "7
Hilda "8
Desert Gold "102
Mike "6
Gertrude "1
Hilda "9
Hilda "10
Mike "7
Gertrude "3
Gertrude "2
Wags "9
Nix
Mike "8
Gertrude "5
Gertrude "4
Gertrude "11
Gertrude "12
Gunny Sack "1
Dakota
Mike "9
Gertrude "7
Gertrude "6
Deerhaven
Mike "10
Gertrude "9
Gertrude "8
Gertrude "13
Gertrude "10
Gunny Sack "2
Wichita
Gunny Sack "3
Gertrude "14
Nixon Mines
Nixon Uranium Company Mines
Beaver Claims
U-Beva Mining Co.
Freddy
Climax Claims
Freddy
Climax Claims
Desert Queen
Siesta "2
Siesta "3
Mancos Shale
10' Dakota Remnant Conglomerate & S.S.
200' Brushy Basin Morrison
± 130' To 2nd Salt Wash Morrison Bench (Ore Horizon)
50' Summerville
OURAY VENTUES PROPERTY
Emery County, Utah
Scale 1in. = 500 ft
Drawn By R.M.C.
Holes drilled under DMEA Contract - IDM E868
DRAFTCO

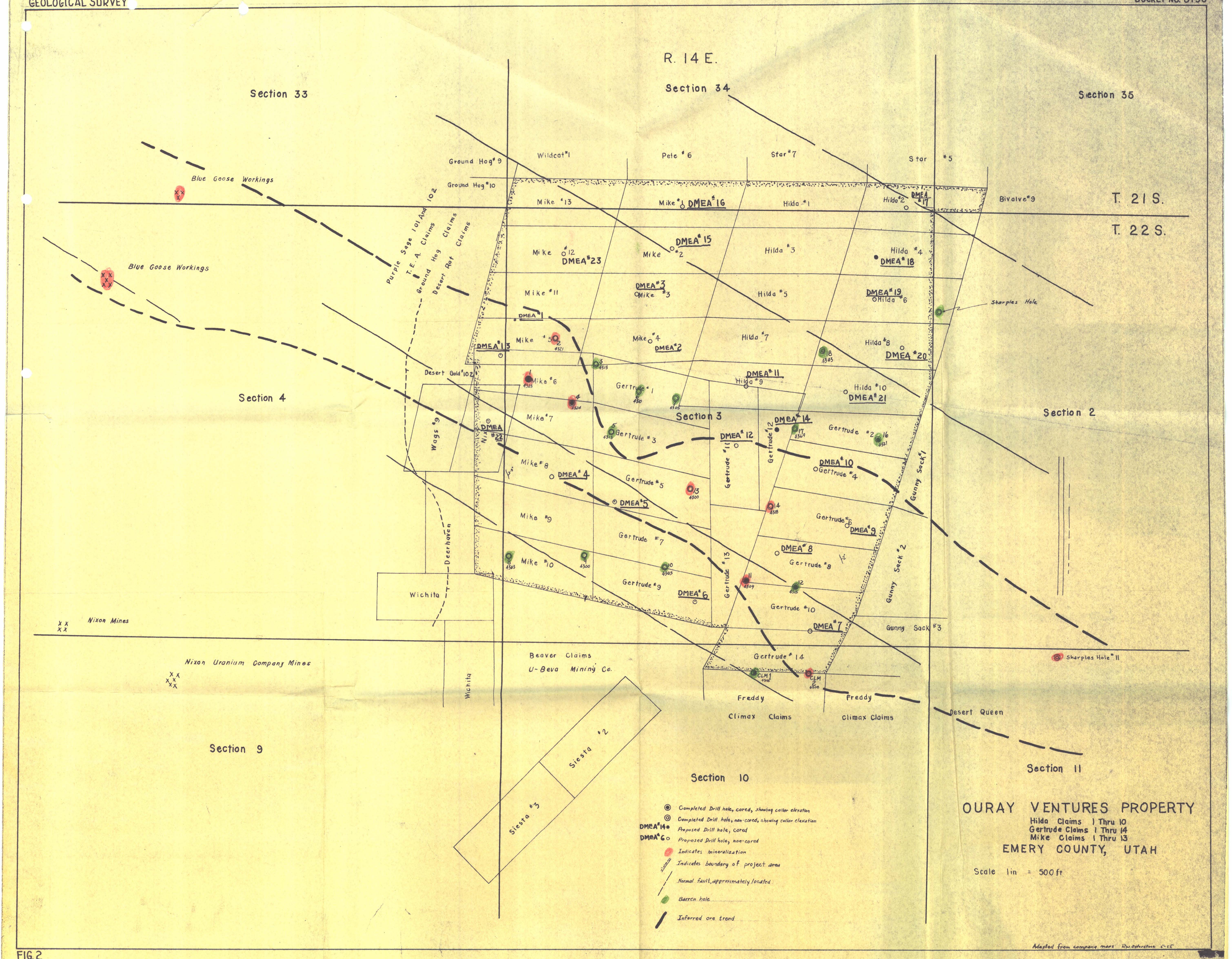
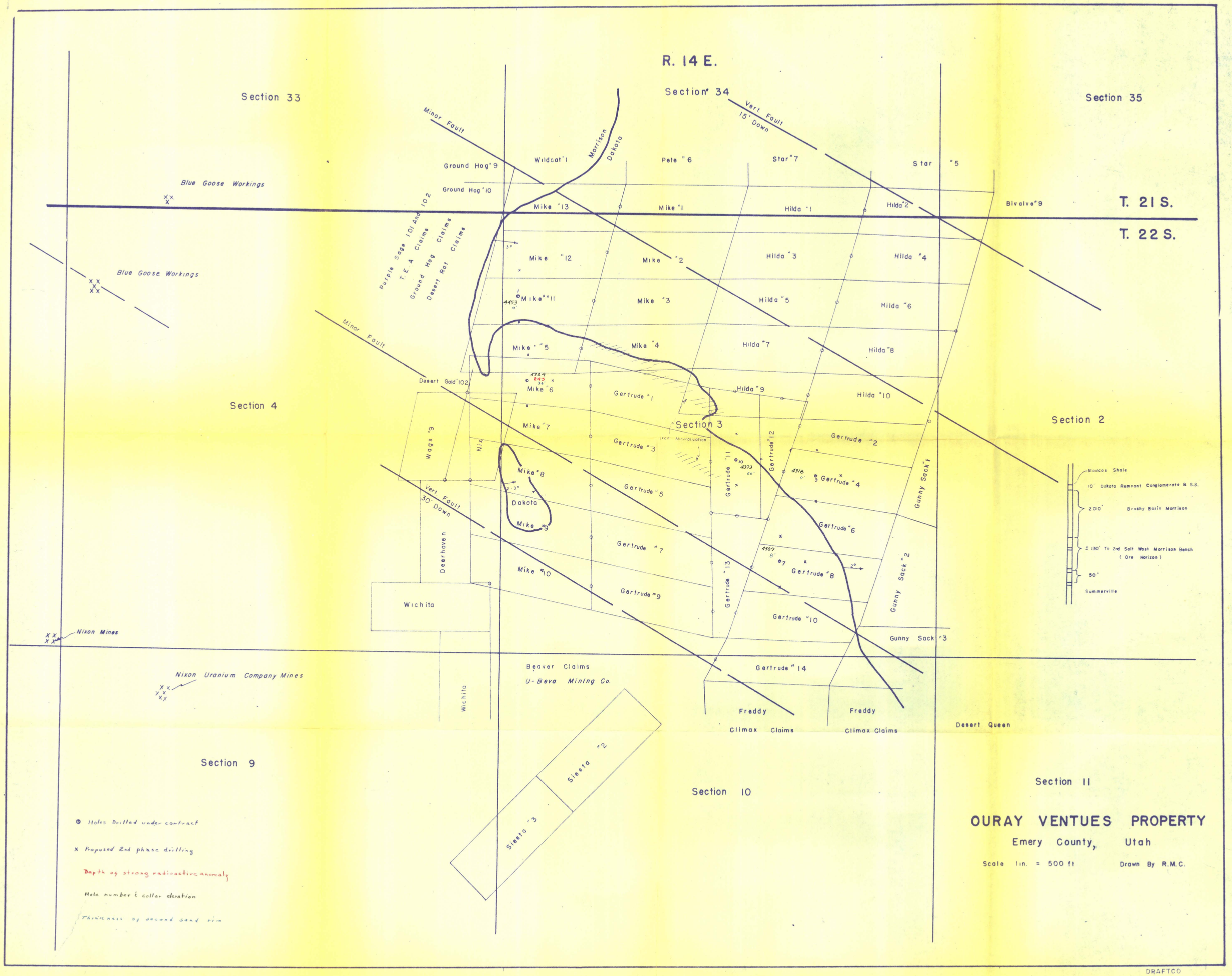

R. 14 E.
Section 33
Section 34
Section 35
T. 21 S.
T. 22 S.
Section 4
Section 3
Section 2
Section 9
Section 10
Section 11
Blue Goose Workings
Blue Goose Workings
Nixon Mines
Nixon Uranium Company Mines
Purple Sage 1 al And 102
T.E.A. Claims
Ground Hog Claims
Desert Rat Claims
Ground Hog #9
Ground Hog #10
Wildcat #1
Pete #6
Star #7
Star #5
Bivalve #9
Mike #13
Mike #1
DMEA #16
Hilda #1
Hilda #2
DMEA #17
Mike #12
DMEA #23
Mike #2
DMEA #15
Hilda #3
Hilda #4
DMEA #18
Mike #11
DMEA #3
Mike #3
Hilda #5
DMEA #19
Hilda #6
Sharples Hole
DMEA #1
Mike #5
DMEA #13
Mike #4
DMEA #2
Hilda #7
Hilda #8
DMEA #20
Desert Gold #102
Mike #6
Gertrude #1
DMEA #11
Hilda #9
Hilda #10
DMEA #21
Wags #9
DMEA #22
Mike #7
Gertrude #3
DMEA #12
DMEA #14
Gertrude #2
Mike #8
DMEA #4
Gertrude #5
DMEA #10
Gertrude #4
Gertrude #11
Gertrude #12
Gunny Sack #1
DMEA #5
Mike #9
Gertrude #6
DMEA #9
Gertrude #7
DMEA #8
Gertrude #8
Gunny Sack #2
Deerhaven
Mike #10
Gertrude #9
Gertrude #13
DMEA #6
Wichita
Gertrude #10
DMEA #7
Gunny Sack #3
Beaver Claims
U-Beva Mining Co.
Gertrude #14
Sharples Hole #11
Wichita
Freddy
Climax Claims
Freddy
Climax Claims
Desert Queen
Siesta #2
Siesta #3
Completed Drill hole, cored, showing collar elevation
Completed Drill hole, non-cored, showing collar elevation
DMEA #14
Proposed Drill hole, cored
DMEA #6
Proposed Drill hole, non-cored
Indicates mineralization
Indicates boundary of project area
Normal fault, approximately located
Barren hole
Inferred ore trend
OURAY VENTURES PROPERTY
Hilda Claims 1 Thru 10
Gertrude Claims 1 Thru 14
Mike Claims 1 Thru 13
EMERY COUNTY, UTAH
Scale 1 in = 500 ft
Adapted from company maps Rev. Osterstock 5-55

FIG. 2


R. 14 E.
Section 33
Section 34
Section 35
Section 4
Section 3
Section 2
Section 9
Section 10
Section 11
T. 21 S.
T. 22 S.
Minor Fault
Vert Fault 15' Down
Vert Fault 30' Down
Morrison
Dakota
Blue Goose Workings
Purple Sage 101 And 102
T. E. A. Claims
Ground Hog Claims
Desert Rat Claims
Ground Hog "9
Ground Hog "10
Wildcat "1
Pete "6
Star "7
Star "5
Bivalve "9
Mike "13
Mike "1
Hilda "1
Hilda "2
Mike "12
Mike "2
Hilda "3
Hilda "4
Mike "11
Mike "3
Hilda "5
Hilda "6
Mike "5
Mike "4
Hilda "7
Hilda "8
Desert Gold "102
Mike "6
Gertrude "1
Hilda "9
Hilda "10
Mike "7
Gertrude "3
Gertrude "2
Wags "9
Nix
Mike "8
Dakota
Mike "3
Gertrude "5
Gertrude "11
Gertrude "12
Gertrude "4
Gertrude "6
Gertrude "7
Gertrude "8
Gertrude "13
Gunny Sack "1
Gunny Sack "2
Gunny Sack "3
Deerhaven
Mike "10
Gertrude "9
Gertrude "10
Wichita
Nixon Mines
Nixon Uranium Company Mines
Beaver Claims
U-Beva Mining Co.
Gertrude "14
Freddy
Climax Claims
Freddy
Climax Claims
Desert Queen
Siesta "2
Siesta "3
Iron Mineralization
Mancos Shale
10' Dakota Remnant Conglomerate & S.S.
210' Brushy Basin Morrison
± 130' To 2nd Salt Wash Morrison Bench (Ore Horizon)
50'
Summerville
Holes Drilled under contract
Proposed 2nd phase drilling
Depth of strong radioactive anomaly
Hole number & collar elevation
Thickness of second sand rim
OURAY VENTUES PROPERTY
Emery County, Utah
Scale 1in. = 500 ft
Drawn By R.M.C.
DRAFTCO