DMEA 3565

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Docket copy

Talbert
Murphy
Ellis
Rubin
Sawyer
Selfridge
Johnson

EXPLORATION PROJECT CONTRACT
GOLDEN CYCLE CORPORATION
DOCKET NO. DMEA-3565

MEMORANDUM OF EXPLANATION

Washington, D. C.

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Golden Cycle Corporation are parties to Exploration Project Contract Idm-2778 (Docket No. DMEA-3565), dated March 29, 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) in Exhibit "A" represent the maximum average cost per foot of drilling performed and accepted rather than the maximum cost per foot of drilling performed.

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

C. O. Mitchell
Administrator, Defense Minerals
Exploration Administration

Date: NOV 23 1956

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AGREEMENT
between
THE UNITED STATES OF AMERICA
and
GOLDEN CYCLE CORPORATION
Terminating
CONTRACT NO. Idm-E778 (DOCKET NO. DMEA-3565)

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 Golden Cycle Corporation (hereinafter called the "Operator") as follows concerning Exploration Project Contract Idm-E778 (Docket No. DMEA-3565) dated March 29, 1955 (hereinafter called the "Contract"):

1. Effective October 15, 1955, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

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

3. Any work or operations prosecuted or costs incurred by the Operator beginning with said effective date, except as otherwise provided in this termination agreement, shall be for the sole account of the Operator without contribution by the Government.

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

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

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

THE UNITED STATES OF AMERICA

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

GOLDEN CYCLE CORPORATION

By Max W. Bowen

Title EXECUTIVE VICE PRESIDENT

Appd. Sol. Off.
Talbot 10/28/55
Murphy 10/28/55
Ellis
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C
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EXPLORATION PROJECT CONTRACT
GOLDEN CYCLE CORPORATION
DOCKET NO. DMEA-3565

AMENDMENT NO. 1

It is agreed this 29th day of August, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Golden Cycle Corporation, parties to Exploration Project Contract Idm-8778 (Docket No. DMEA-3565), dated March 29, 1955, that:

1. In Article 3 of the contract form the date for completion of the work is extended to not later than January 31, 1956.

2. (a) Work under the contract shall be suspended during the period beginning July 15, 1955, and ending not later than October 15, 1955.

(b) No costs incurred by the Operator during the period of suspension shall be allowable for contribution by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of the work.

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O P Mitchell
Administrator, Defense Minerals Exploration Administration

GOLDEN CYCLE CORPORATION

By Max N. Power

EXECUTIVE VICE-PRESIDENT

Rubin
Hoffman
Appd. Sol. Dfn.
Murphy
Ellis
Selfridge
Fidler

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

Docket copy
Defense Minerals Administration
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MF-200
(Revised June 1954)

Docket No. DMEA -3565

Commodity Uranium

Contract No. Idm-E - 778

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 29th day of March, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] The Golden Cycle Corporation, Uranium Division, a West Virginia corporation,

whose mailing address is P. O. Box 86 Colorado Springs, 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

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 Colorado, County of Montrose and San Miguel, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] lessee of [5] See Annex I 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: See Annex I

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

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of uranium. The work to be performed is described in Exhibit "A." The Operator on or before May 1, 1955, shall commence the work, and on or before October 31, 1955 (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 $30,440.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $22,830.00: *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. 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 would otherwise be allowable costs of the project under Article 6.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By [signature]
Administrator, Defense Minerals
Exploration Administration

THE GOLDEN CYCLE CORPORATION
(Operator)

By [signature]
PRESIDENT

Porter
[signature]
"Appd. Sol. Off."
Murphy
Ellis
Chandler
Selfridge
[signature]

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

[signature]

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
THE GOLDEN CYCLE CORPORATION
DOCKET NO. DMEA-3565

ANNEX I

1. The Operator is a lessee under an agreement dated June 29, 1954, with Walter F. Burnett and Duncan E. Harrison of the mineral rights in all those claims listed below under the heading "Harrison and Burnett Group." The docket indicates that the claims were validated under Public Law 585, 83d Congress, approved August 13, 1954.

2. The Operator, under an agreement dated June 18, 1954, with S. C. Lee and U. A. Small, is the lessee of the mineral rights of those claims listed below under the "Lee and Small Group" under the heading "As filed under Colorado Mining Law," and is assignee of uranium lease rights under Atomic Energy Commission lease held by Lee and Small of those claims in the Lee and Small group listed below under the heading "As filed under Circular 7."

The claims are shown on the map entitled "Figure 2. Map of Part of the Bull Canyon Mining District . . . Golden Cycle Property . . ." attached hereto and made a part hereof.

The general location of the claims is shown on the map entitled "Figure 1. Index Map of Part of the Colorado Plateau Showing . . . Golden Cycle Property . . ." attached hereto and made a part hereof.

3. (a) The Owner's Consent to Lien, referred to in Article 2(c) of the contract, from the owners of the Harrison-Burnett Group of claims, is attached to each copy of the contract.

(b) A Performance Bond covering this contract, executed January 21, 1955, by United States Fidelity and Guaranty Company, Baltimore, Maryland, is attached to the Government's copy of the contract.

(c) The Owner's Consent to Lien for the Lee and Small Group of claims is waived.

ANNEX I

LEE AND SMALL GROUP

As filed under Colorado Mining Law:

* Also filed in San Miguel Co.
' Also filed in Montrose Co.
ϕ Also filed under Circular 7

	Recorded in Montrose County			Book	Page
April #4				376	415
April #5*	"	"	"	376	416
April #6	"	"	"	376	417
April #7*	"	"	"	376	418
April #8.	"	"	"	376	419
April #9*	"	"	"	376	420
April #10	"	"	"	376	421
April #11*	"	"	"	376	422
April #12ϕ		"	"	376	423
April #15	"	"	"	375	291
April #19	"	"	"	375	292
	Recorded in San Miguel County				
April #5'	"	"	"	237	257
April #7'	"	"	"	237	258
April #9'	"	"	"	237	259
April #11'	"	"	"	237	260
April #13	"	"	"	237	261
April #17	"	"	"	237	262
Lobo #1	"	"	"	237	265
Lobo #2	"	"	"	237	266
Lobo #3	"	"	"	237	267
Lobo #4	"	"	"	237	268
Lobo #5	"	"	"	237	269
Lobo #6	"	"	"	237	270
Lobo #7	"	"	"	237	271
Lobo #8	"	"	"	237	272
Lobo #9	"	"	"	237	273
West Fork #11	"	"	"	237	263
West Fork #12	"	"	"	237	264
West Fork #13	"	"	"	238	350
West Fork #14	"	"	"	238	351
West Fork #15	"	"	"	238	352

As filed under Circular 7:

* Also filed in San Miguel Co.
' Also filed in Montrose Co.
ϕ Also filed under Colo.Mgn.Law

	Recorded in Montrose County			Book	Page
April #1	"	"	"	369	400
April #2	"	"	"	369	401
April #3	"	"	"	369	402

Lee and Small Group (Con't.)

				Book	Page
	Recorded in Montrose County				
April #12*	"	"	"	369	403
April #14	"	"	"	369	404
April #16	"	"	"	369	405
April #18	"	"	"	369	406
April #20	"	"	"	369	407
Fraction #1*	"	"	"	377	188
Fraction #2*	"	"	"	377	189
Border #1	"	"	"	375	114
Border #2	"	"	"	375	115
Border #3	"	"	"	375	116
Border #4	"	"	"	375	117
Border #5	"	"	"	375	118
Border #6*	"	"	"	375	119
Border #7*	"	"	"	375	190
Lee #4	"	"	"	368	519
Lee #5	"	"	"	369	1
Lee #6	"	"	"	369	2
Lee #7	"	"	"	369	3
Lee #8	"	"	"	369	4
Lee #9	"	"	"	369	5
Lee #10	"	"	"	369	6
Lee #11	"	"	"	369	7
Lee #12	"	"	"	369	8
Lee #13	"	"	"	369	9
Lee #14	"	"	"	369	10
Lee #15	"	"	"	369	11
Lee #16	"	"	"	369	12
Lee #20	"	"	"	369	16
Lee #21	"	"	"	369	17
Lee #22	"	"	"	369	18
Lee #23	"	"	"	369	19
Lee #24	"	"	"	369	20
Lee #25	"	"	"	369	21
Lobo #18	"	"	"	375	79
Lobo #19	"	"	"	375	80
Lobo #20	"	"	"	375	[illegible]
Lobo #21	"	"	"	375	82
Lobo #22	"	"	"	375	83
Lobo #23	"	"	"	375	84
Lobo #24	"	"	"	375	85
Lobo #25	"	"	"	375	86
	Recorded in San Miguel County				
Fraction #1'	"	"	"	236	1
Fraction #2'	"	"	"	236	2
Border #6'	"	"	"	234	196
Border #7'	"	"	"	236	3
West Fork #1	"	"	"	234	197
West Fork #2	"	"	"	234	198

Lee & Small Group (Cont.)

	Recorded in San Miguel County				Book	Page
West Fork #3	"	"	"	"	234	199
West Fork #4	"	"	"	"	234	200
West Fork #5	"	"	"	"	234	201
West Fork #6	"	"	"	"	234	202
West Fork #7	"	"	"	"	234	203
West Fork #8	"	"	"	"	234	204
West Fork #9	"	"	"	"	234	205
West Fork #10	"	"	"	"	234	206
May #1	"	"	"	"	235	448
May #2	"	"	"	"	235	449
May #3	"	"	"	"	235	450
May #4	"	"	"	"	235	451
May #5	"	"	"	"	235	452
May #6	"	"	"	"	235	453
May #7	"	"	"	"	235	454
May #8	"	"	"	"	235	455
May #9	"	"	"	"	235	456
Lobo #10	"	"	"	"	234	186
Lobo #11	"	"	"	"	234	187
Lobo #12	"	"	"	"	234	188
Lobo #13	"	"	"	"	234	189
Lobo #14	"	"	"	"	234	190
Lobo #15	"	"	"	"	234	191
Lobo #16	"	"	"	"	234	192
Lobo #17	"	"	"	"	234	193
Lobo #26	"	"	"	"	234	194
Lobo #27	"	"	"	"	234	195
Lobo #28	"	"	"	"	236	4

HARRISON AND BURNETT GROUP

As filed under A.E.C. Circular 7:

	Recorded in Montrose County			Book	Page
Ashbeck #1	"	"	"	368	60
Burnett #1	"	"	"	368	72
Harrison #1	"	"	"	368	74
Quincy #1	"	"	"	368	77
Betty #1	"	"	"	368	79
Denny #1	"	"	"	368	73
Jane #1	"	"	"	368	75
Ruby #1	"	"	"	368	78
Boggy #1	"	"	"	368	71
Kroeger #1	"	"	"	368	76
Tug #1	"	"	"	368	187
Bob #1	"	"	"	368	188
Emely #1	"	"	"	368	189
Pat #1	"	"	"	368	190
Elmer #1	"	"	"	368	191
Apex #1	"	"	"	368	192
Gary #1	"	"	"	368	193

Harrison & Burnett Group (Con't.)

As filed under A.E.C. Circular 7:

	Recorded in Montrose County			Book	Page
Gene #1	"	"	"	368	194
Mary #1	"	"	"	368	195
Rose #1	"	"	"	368	196
Daniels #1	"	"	"	-	-

Withdrawal of Lease Application #213 covering the above 21 claims and dated September 8, 1954, sent to the A.E.C. at that time. Signed by Walter F. Burnett and D.E. Harrison.

Recorded Montrose County, Book 381, Page 541

As filed under Colorado Mining Law:

	Recorded in Montrose County			Book	Page
Ashbeck #1	"	"	"	385	132
Burnett #1	"	"	"	385	127
Harrison #1	"	"	"	385	129
Quincy #1	"	"	"	385	137
Betty #1	"	"	"	385	120
Denny #1	"	"	"	385	128
Jane #1	"	"	"	385	130
Ruby #1	"	"	"	385	136
Moggy #1	"	"	"	385	126
Kroeger #1	"	"	"	385	131
Tug #1	"	"	"	385	118
Bob #1	"	"	"	385	124
Emely #1	"	"	"	385	133
Pat #1	"	"	"	385	134
Elmer #1	"	"	"	385	135
Apex #1	"	"	"	385	119
Gary #1	"	"	"	385	123
Gene #1	"	"	"	385	122
Mary #1	"	"	"	385	121
Rose #1	"	"	"	385	125
Daniels #1	"	"	"	385	138

EXPLORATION PROJECT CONTRACT
THE GOLDEN CYCLE CORPORATION
DOCKET NO. DMSA-3565

EXHIBIT "A"

Description of the Work

The object of this project is to explore the Salt Wash member of the Jurassic Morrison formation for uranium ore deposits by means of core and noncore diamond drilling. The work shall be done in two successive stages.

Stage I

Construct access roads or trails to all drill-sites.

Not to exceed twenty (20) drill holes shall be drilled at locations approximately indicated on the attached map, Figure 2. The holes shall be drilled from points just above the upper rim of the Salt Wash member of the Morrison formation, shall penetrate the Salt Wash member, and shall be located on perpendiculars spaced at 500-feet centers from a line striking N. 30° 30' E.

Not to exceed 3,400 feet of noncore drilling and 1,900 feet of core drilling shall be performed under this Stage I.

Stage II

Construct access roads or trails to all drill-sites.

If authorized in writing in advance by the Government, the operator shall drill not to exceed ten (10) holes to an average depth of 350 feet to delineate ore bodies penetrated in Stage I drilling. No drill hole shall be closer than 50 feet to any other drill hole.

Not to exceed 3,000 feet of noncore drilling and 500 feet of core drilling shall be performed under this Stage II.

General Provisions

1. All drill holes shall be BX size minimum, and shall be started with a noncore bit; however, on reaching the estimated depth of the mineralized zone the holes shall be BX core drilled.

2. Core barrel equipment and drilling practices shall be such as to provide a maximum core recovery.

3. All core shall be split into two halves, and one-half shall be retained and properly stored for later use by the Government.

4. All drill core shall be checked for the presence of uranium by a radiometric instrument. Each section showing significant mineralization shall be chemically analyzed for U_3O_8, V_2O_5, and $CaCO_3$, using the Operator's one-half of the core for the sample.

5. An engineer-geologist shall be on the property at all times when the drills are in operation and shall supervise and direct all drilling.

6. Copies of all assay results and drill logs shall accompany the final engineering report, unless previously submitted.

7. The Government will not contribute to the costs of any hole which does not penetrate the target, Salt Wash member of the Morrison formation.

8. Upon completion of Stage I, the Operator will submit five (5) copies of the following data to the Government:

(a) Drill logs and assay results of holes drilled and a map showing the location of the holes.

(b) Location of holes proposed to be drilled under Stage II in relation to holes drilled under Stage I and a listing showing the estimated depths of the proposed holes.

9. The location, depth, type, and method of drilling, and the method of sampling are subject to Government approval.

Estimated Costs of the Project

Actual Costs

(Categories (5) through (7) do not apply to this contract)

Stage I

Category (1) Independent contracts

3,400 feet of noncore rotary drilling @ $2.50/ft.	$ 8,500.00	
1,900 feet of BX-core diamond drilling @ $3.25/ft.	6,175.00	$14,675.00

Stage II

Category (1) Independent contracts

3,000 feet of noncore rotary drilling @ $2.60/ft.	7,800.00	
500 feet of BX-core diamond drilling @ $4.75/ft. (includes standby)	2,375.00	10,175.00

Fixed Unit Costs

The Government will contribute to the fixed unit costs of analyses and "incidental allowance" 1/ set forth below, as they accrue, in lieu of actual costs. These costs include all costs of the work whatsoever except the costs of drilling, to which the Government will contribute on the basis of actual costs as set forth above.

Stage I

100 analyses @ $5.00/ea.	500.00	
Incidental allowance 1/ for each foot of drilling completed--5,300 feet @ $0.55/ft.	2,915.00	3,415.00

Stage II

50 analyses @ $5.00/ea.	250.00	
Incidental allowance 1/ for each foot of drilling completed--3,500 feet @ $0.55/ft.	1,925.00	2,175.00

1/ The "incidental allowance" covers all costs of the project whatsoever that are not included in the estimates for drilling and the fixed unit cost for analyses, and includes such items as supervision, geology, engineering, labor, costs of access roads, transportation of men and equipment, etc.

SUMMARY OF COSTS

Estimated total cost Stage I	$18,090.00	
Estimated total cost Stage II	12,350.00	
Estimated total cost of Project		$30,440.00
Government participation @ 75%		$22,830.00

STANDARD FORM 25
REVISED NOVEMBER 1950
PRESCRIBED BY GENERAL
SERVICES ADMINISTRATION
GENERAL REGULATION NO. 5

PERFORMANCE BOND

(*See Instructions on Reverse*)

DATE BOND EXECUTED

21 January 1955

PRINCIPAL THE GOLDEN CYCLE CORPORATION (URANIUM DIVISION), a West Virginia Corporation with offices in Colorado Springs, Colorado

SURETY UNITED STATES FIDELITY AND GUARANTY COMPANY, a Maryland Corporation authorized to do business in Colorado

PENAL SUM OF BOND (*express in words and figures*) Twenty Five Thousand and no/100ths Dollars ($25,000.00)

CONTRACT DMEA Aid Application January 21, 1955

DATE OF CONTRACT

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL and SURETY above named, are held and firmly bound unto the United States of America, hereinafter called the Government, in the penal sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Government, numbered and dated as shown above and hereto attached;

NOW THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Government, with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In Presence of:

WITNESS		INDIVIDUAL PRINCIPAL	
1.	as to		[SEAL]
2.	as to		[SEAL]
3.	as to		[SEAL]
4.	as to		[SEAL]

WITNESS		INDIVIDUAL SURETY	
1.	as to		[SEAL]
2.	as to		[SEAL]

Attest:

H. Bates, Secretary

CORPORATE PRINCIPAL THE GOLDEN CYCLE CORPORATION

BUSINESS ADDRESS Colorado Springs, Colorado

BY Merrill E. Shoup

TITLE Merrill E. Shoup, President

AFFIX CORPORATE SEAL

Attest:

H. Roach

CORPORATE SURETY UNITED STATES FIDELITY AND GUARANTY COMPANY

BUSINESS ADDRESS Baltimore 3, Maryland

BY L. C. Slothower, Jr.

TITLE L. C. Slothower, Jr. Its Attorney-in-Fact

AFFIX CORPORATE SEAL

STANDARD FORM 25
NOVEMBER 1950 EDITION

16—30441-2

The rate of premium on this bond is ..... per thousand.

Total amount of premium charged, $.....

(The above must be filled in by corporate surety)

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, ...H. Bates...., certify that I am the ..... secretary of the corporation named as principal in the within bond; that Merrill E. Sheup, who signed the said bond on behalf of the principal, was then ....president.... of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed, and attested for and in behalf of said corporation by authority of its governing body.

..... [CORPORATE SEAL]

INSTRUCTIONS

1. This form shall be used for construction work or the furnishing of supplies or services, whenever a performance bond is required. There shall be no deviation from this form except as authorized by the General Services Administration.

2. The surety on the bond may be any corporation authorized by the Secretary of the Treasury to act as surety, or two responsible individual sureties. Where individual sureties are used, this bond must be accompanied by a completed Affidavit of Individual Surety for each individual surety (Standard Form 28).

3. The name, including full Christian name, and business or residence address of each individual party to the bond shall be inserted in the space provided therefor, and each such party shall sign the bond with his usual signature on the line opposite the scroll seal, and if signed in Maine or New Hampshire, an adhesive seal shall be affixed opposite the signature.

4. If the principals are partners, their individual names shall appear in the space provided therefor, with the recital that they are partners composing a firm, naming it, and all the members of the firm shall execute the bond as individuals.

5. If the principal or surety is a corporation, the name of the State in which incorporated shall be inserted in the space provided therefor, and said instrument shall be executed and attested under the corporate seal as indicated in the form. If the corporation has no corporate seal the fact shall be stated, in which case a scroll or adhesive seal shall appear following the corporate name.

6. The official character and authority of the person or persons executing the bond for the principal, if a corporation, shall be certified by the secretary or assistant secretary, according to the form herein provided. In lieu of such certificate there may be attached to the bond copies of so much of the records of the corporation as will show the official character and authority of the officer signing, duly certified by the secretary or assistant secretary, under the corporate seal, to be true copies.

7. The date of this bond must not be prior to the date of the instrument in connection with which it is given.

U. S. GOVERNMENT PRINTING OFFICE 16—30441-2

(CERTIFIED COPY)

GENERAL POWER OF ATTORNEY

No. 62703

Know all Men by these Presents:

That the UNITED STATES FIDELITY AND GUARANTY COMPANY, a corporation organized and existing under the laws of the State of Maryland, and having its principal office at the City of Baltimore, in the State of Maryland, does hereby constitute and appoint

L. C. Slothower, Jr.

of the City of **Colorado Springs**, State of **Colorado**
its true and lawful attorney in and for the State of **Colorado**

for the following purposes, to wit:

To sign its name as surety to, and to execute, seal and acknowledge any and all bonds, and to respectively do and perform any and all acts and things set forth in the resolution of the Board of Directors of the said UNITED STATES FIDELITY AND GUARANTY COMPANY, a certified copy of which is hereto annexed and made a part of this Power of Attorney; and the said UNITED STATES FIDELITY AND GUARANTY COMPANY, through us, its Board of Directors, hereby ratifies and confirms all and whatsoever the said

L. C. Slothower, Jr.

may lawfully do in the premises by virtue of these presents.

In Witness Whereof, the said UNITED STATES FIDELITY AND GUARANTY COMPANY has caused this instrument to be sealed with its corporate seal, duly attested by the signatures of its Vice-President and Assistant Secretary, this 23rd day of August, A. D. 19 48.

UNITED STATES FIDELITY AND GUARANTY COMPANY.

(Signed) By Charles C. Conlon
Vice-President.

(SEAL)

(Signed) L. M. Smith
Assistant Secretary.

STATE OF MARYLAND
BALTIMORE CITY, } ss:

On this 23rd day of August, A. D. 19 48 before me personally came Charles C. Conlon, Vice-President of the UNITED STATES FIDELITY AND GUARANTY COMPANY and L. M. Smith, Assistant Secretary of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said that they resided in the City of Baltimore, Maryland; that they, the said Charles C. Conlon and L. M. Smith were respectively the Vice-President and the Assistant Secretary of the said UNITED STATES FIDELITY AND GUARANTY COMPANY, the corporation described in and which executed the foregoing Power of Attorney; that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so affixed by order of the Board of Directors of said corporation, and that they signed their names thereto by like order as Vice-President and Assistant Secretary, respectively, of the Company.

My commission expires the first Monday in May, A. D. 19 49.

(Seal) (Signed) Dorothy S. Drexel
Notary Public.

STATE OF MARYLAND
BALTIMORE CITY, } Sct.

I, M. Luther Pittman, Clerk of the Superior Court of Baltimore City, which Court is a Court of Record, and has a seal, do hereby certify that Dorothy S. Drexel, Esquire, before whom the annexed affidavits were made, and who has thereto subscribed his name, was at the time of so doing a Notary Public of the State of Maryland, in and for the City of Baltimore, duly commissioned and sworn and authorized by law to administer oaths and take acknowledgments, or proof of deeds to be recorded therein. I further certify that I am acquainted with the handwriting of the said Notary, and verily believe the signature to be his genuine signature.

In Testimony Whereof, I hereto set my hand and affix the seal of the Superior Court of Baltimore City, the same being a Court of Record, this 23rd day of August, A. D. 19 48

(SEAL) (Signed) M. Luther Pittman
Clerk of the Superior Court of Baltimore City.

Agency 51-A 8-51 ⊙

COPY OF RESOLUTION

That Whereas, it is necessary for the effectual transaction of business that this Company appoint agents and attorneys with power and authority to act for it and in its name in States other than Maryland, and in the Territories of the United States and in the Provinces of the Dominion of Canada and in the Colony of Newfoundland.

Therefore, be it Resolved, that this Company do, and it hereby does, authorize and empower its President or either of its Vice-Presidents in conjunction with its Secretary or one of its Assistant Secretaries, under its corporate seal, to appoint any person or persons as attorney or attorneys-in-fact, or agent or agents of said Company, in its name and as its act, to execute and deliver any and all contracts guaranteeing the fidelity of persons holding positions of public or private trust, guaranteeing the performances of contracts other than insurance policies and executing or guaranteeing bonds and undertakings, required or permitted in all actions or proceedings, or by law allowed, and

Also in its name and as its attorney or attorneys-in-fact, or agent or agents to execute and guarantee the conditions of any and all bonds, recognizances, obligations, stipulations, undertakings or anything in the nature of either of the same, which are or may by law, municipal or otherwise, or by any Statute of the United States or of any State or Territory of the United States or of the Provinces of the Dominion of Canada or of the Colony of Newfoundland, or by the rules, regulations, orders, customs, practice or discretion of any board, body, organization, office or officer, local, municipal or otherwise, be allowed, required or permitted to be executed, made, taken, given, tendered, accepted, filed or recorded for the security or protection of, by or for any person or persons, corporation, body, office, interest, municipality or other association or organization whatsoever, in any and all capacities whatsoever, conditioned for the doing or not doing of anything or any conditions which may be provided for in any such bond, recognizance, obligation, stipulation, or undertaking, or anything in the nature of either of the same.

I, G. P. Moore, an Assistant Secretary of the UNITED STATES FIDELITY AND GUARANTY COMPANY, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney given by said Company to

L. C. Slothower, Jr.

of Colorado Springs, Colorado, authorizing and empowering him to sign bonds as therein set forth, which power of attorney has never been revoked and is still in full force and effect.

And I do further certify that said Power of Attorney was given in pursuance of a resolution adopted at a regular meeting of the Board of Directors of said Company, duly called and held at the office of the Company in the City of Baltimore, on the 11th day of July, 1910, at which meeting a quorum of the Board of Directors was present, and that the foregoing is a true and correct copy of said resolution, and the whole thereof as recorded in the minutes of said meeting.

In Testimony Whereof, I have hereunto set my hand and the seal of the UNITED STATES FIDELITY AND GUARANTY COMPANY on January 21, 1955
(Date)

G P Moore

Assistant Secretary.

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 14 1955

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of _____, County of _____, ~~described as~~ follows:1/ [illegible]

_____

_____

_____

_____

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

2/ [illegible]

_____

_____

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

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/ Insert the name of the Operator as it will appear in the exploration project contract.

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

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions [illegible]

Dated this 10 day of JANUARY, 1955.

Duncan E. Harrison [Seal]

Walter R. Burnett [Seal]

[Seal]

THE GOLDEN CYCLE CORP.
URANIUM DIV.
P.O.Box 86
Colorado Springs, Colo.

HARRISON & BURNETT GROUP

As filed under A. E. C. Circular 7:

				Book	Page
	Recorded in Montrose County				
Ashback #1	"	"	"	368	60
Burnett #1	"	"	"	368	72
Harrison #1	"	"	"	368	74
Quincy #1	"	"	"	368	77
Betty #1	"	"	"	368	70
Denny #1	"	"	"	368	73
Jane #1	"	"	"	368	75
Ruby #1	"	"	"	368	78
Boggy #1	"	"	"	368	71
Kroeger #1	"	"	"	368	76
Tug #1	"	"	"	368	187
Bob #1	"	"	"	368	188
Emely #1	"	"	"	368	189
Pat #1	"	"	"	368	190
Elmer #1	"	"	"	368	191
Apex #1	"	"	"	368	192
Gary #1	"	"	"	368	193
Gene #1	"	"	"	368	194
Mary #1	"	"	"	368	195
Rose #1	"	"	"	368	196
Daniels #1	"	"	"	-	-

Withdrawal of Lease Application #213 covering the above 21 claims and dated Sept. 8, 1954 sent to the A.E.C. at that time. Signed by Walter F. Burnett and D. E. Harrison.

Recorded Montrose County, Book 381, Page 541

As filed under Colorado Mining Law:

				Book	Page
	Recorded in Montrose County				
Ashback #1	"	"	"	385	132
Burnett #1	"	"	"	385	127
Harrison #1	"	"	"	385	129
Quincy #1	"	"	"	385	137
Betty #1	"	"	"	385	120
Denny #1	"	"	"	385	128
Jane #1	"	"	"	385	130
Ruby #1	"	"	"	385	136
Boggy #1	"	"	"	385	126
Kroeger #1	"	"	"	385	131
Tug #1	"	"	"	385	118
Bob #1	"	"	"	385	124
Emely #1	"	"	"	385	133
Pat #1	"	"	"	385	134
Elmer #1	"	"	"	385	135
Apex #1	"	"	"	385	119
Gary #1	"	"	"	385	123
Gene #1	"	"	"	385	122
Gary #1	"	"	"	385	121
Rose #1	"	"	"	385	125
Daniels #1	"	"	"	385	138

THE [illegible] CO[illegible] CORP., [illegible] DIV.
P.O.Box [illegible]
[illegible] Springs, Colo.
HARRISON & BURNETT GROUP

Claim Name	Claim No.	Section	Township	Range	Mer.
Ashbert	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Burnett	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Harrison	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gainey	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Betty	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Henry	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ruby	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Doggy	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kraeger	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tug	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pole	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Brady	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pat	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Miner	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Apex	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gary	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jose	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mary	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rose	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Daniels	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

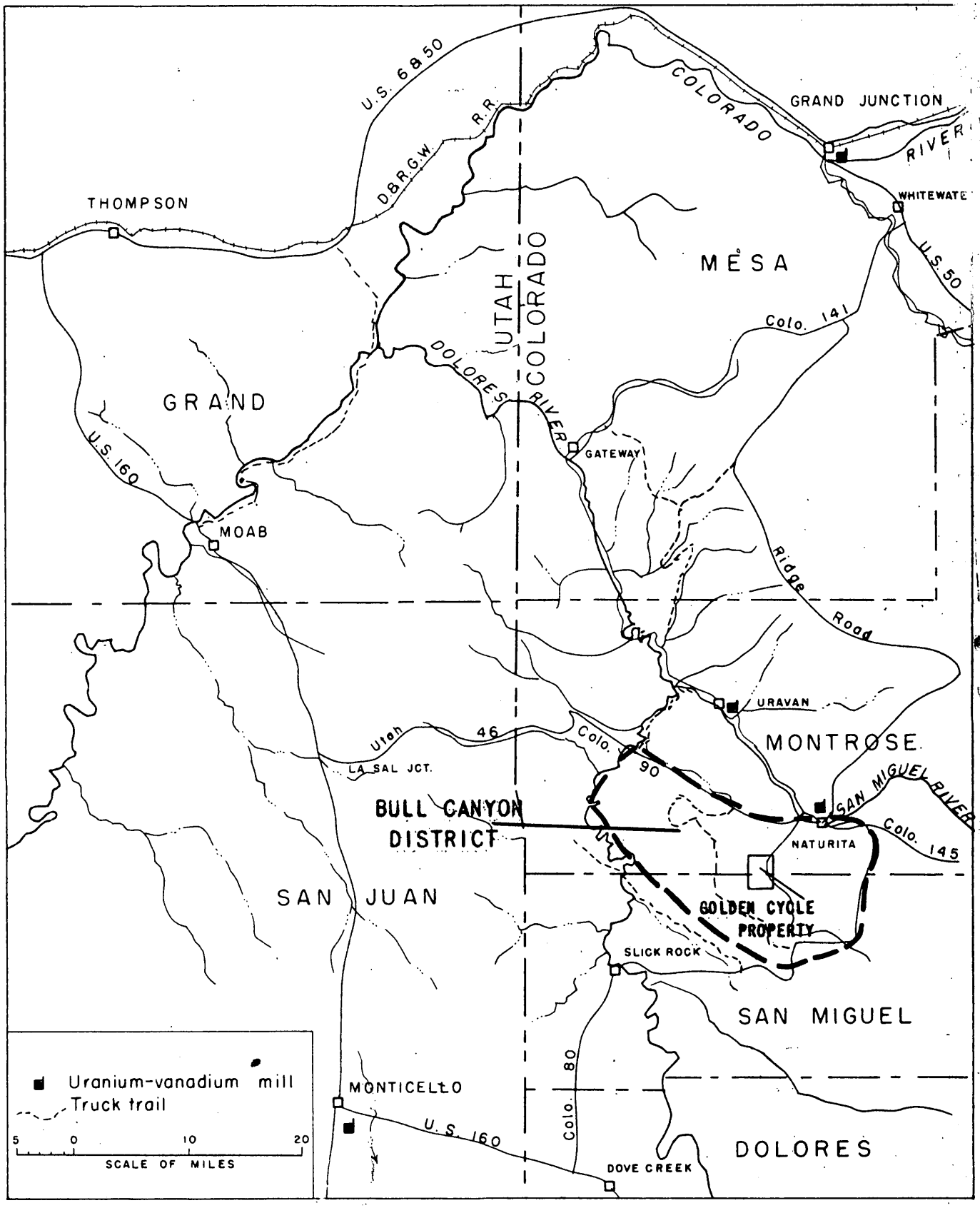
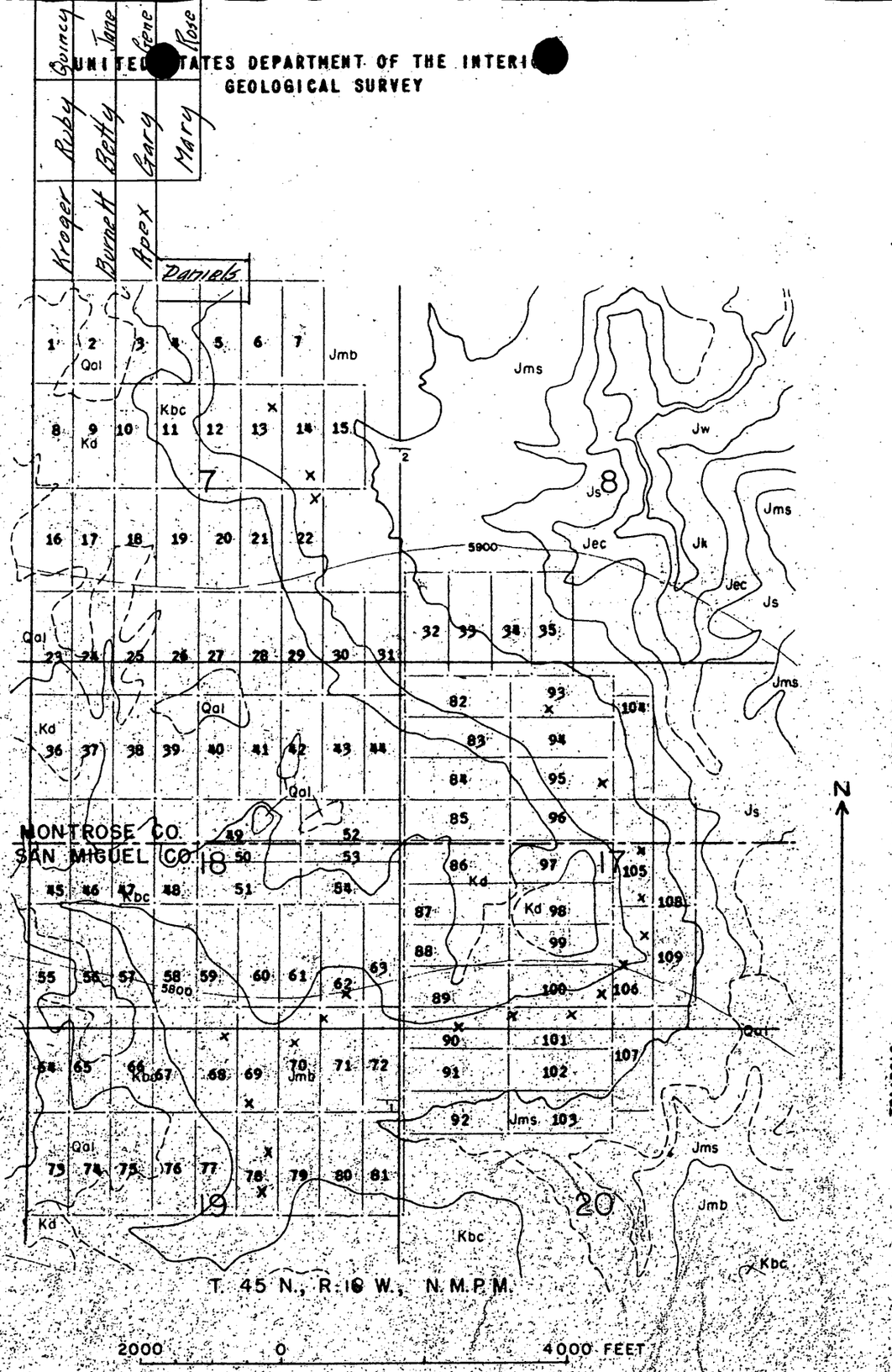


Figure 1. INDEX MAP OF PART OF THE COLORADO PLATEAU SHOWING THE LOCATION OF THE BULL CANYON MINING DISTRICT AND GOLDEN CYCLE PROPERTY, MONTROSE AND SAN MIGUEL COUNTIES, COLORADO



EXPLANATION

QUATERNARY

Qal — ALLUVIUM

CRETACEOUS

Kd — ~~DAKOTA SANDSTONE~~

UNCONFORMITY

Kbc — BURRO CANYON FORMATION

JURASSIC

Jmb, Jms — MORRISON FORMATION

Js — SUMMERVILLE FORMATION

Jec — ENTRADA SANDSTONE AND CARMEL FORMATION UNDIVIDED

UNCONFORMITY

Jk — KAYENTA FORMATION

TRIASSIC

Jw — WINGATE SANDSTONE

FORMATION CONTACT

STRIKE AND DIP OF BEDS

5900 — STRUCTURE CONTOUR

PROPOSED 1ST STAGE DRILL HOLE

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 3565

CLAIM INDEX

1	ASHBACK	56	LOBO NO. 2
2	WARRISON	57	LOBO NO. 3
3	TUG	58	LOBO NO. 4
4	LEE NO. 5	59	LOBO NO. 5
5	LEE NO. 7	60	LOBO NO. 6
6	LEE NO. 9	61	LOBO NO. 7
7	LEE NO. 11	62	LOBO NO. 8
8	DENNY	63	LOBO NO. 9
9	BOGGY	64	WEST FORK NO. 1
10	BOB	65	WEST FORK NO. 2
11	LEE NO. 5	66	WEST FORK NO. 3
12	LEE NO. 6	67	WEST FORK NO. 4
13	LEE NO. 8	68	WEST FORK NO. 5
14	LEE NO. 10	69	WEST FORK NO. 6
15	LEE NO. 12	70	WEST FORK NO. 7
16	EMILY	71	WEST FORK NO. 8
17	PAT	72	WEST FORK NO. 9
18	ELMER	73	MAY NO. 1
19	LEE NO. 13	74	MAY NO. 2
20	LEE NO. 14	75	MAY NO. 3
21	LEE NO 15	76	MAY NO. 4
22	LEE NO. 16	77	MAY NO. 5
23	APRIL NO. 3	78	MAY NO. 6
24	APRIL NO. 2	79	MAY NO. 7
25	APRIL NO. 1	80	MAY NO. 8
26	LEE NO 25	81	MAY NO. 9
27	LEE NO. 24	82	LOBO NO. 24
28	LEE NO 23	83	LOBO NO. 22
29	LEE NO. 22	84	LOBO NO. 20
30	LEE NO. 21	85	LOBO NO. 18
31	LEE NO. 20	86	LOBO NO. 16
32	BORDER NO. 1	87	LOBO NO. 14
33	BORDER NO. 2	88	LOBO NO. 12
34	BORDER NO. 3	89	LOBO NO. 10
35	BORDER NO. 4	90	W.F. NO. 10
36	APRIL NO. 4	91	W.F. NO. 11
37	APRIL NO. 6	92	W.F. NO. 14
38	APRIL NO. 8	93	LOBO NO. 28
39	APRIL NO. 10	94	LOBO NO. 25
40	APRIL NO. 12	95	LOBO NO. 21
41	APRIL NO. 14	96	LOBO NO. 19
42	APRIL NO. 16	97	LOBO NO. 17
43	APRIL NO. 18	98	LOBO NO. 15
44	APRIL NO. 20	99	LOBO NO. 13
45	APRIL NO. 5	100	LOBO NO. 11
46	APRIL NO. 7	101	~~W.F.~~ NO. 17 Lobo
47	APRIL NO. 9	102	W.F. NO. 12
48	APRIL NO. 11	103	W.F. NO. 13
49	APRIL NO. 15	104	BORDER NO. 5
50	FRACTION NO. 1	105	BORDER NO. 6
51	APRIL NO. 13	106	LOBO NO. 26
52	APRIL NO. 19	107	W.F. NO. 15
53	FRACTION NO. 2	108	BORDER NO. 7
54	APRIL NO. 17	109	LOBO NO. 28
55	LOBO NO. 1		

BASE FROM USGS GEOLOGIC QUADRANGLE MAP NATURITA NW

NOTE: STRUCTURE CONTOURS DRAWN ON TOP OF ENTRADA SANDSTONE

Figure 2.-MAP OF PART OF THE BULL CANYON MINING DISTRICT SHOWING THE LOCATION OF PROPOSED DRILL HOLES, GOLDEN CYCLE PROPERTY, MONTROSE AND SAN MIGUEL COUNTIES, COLORADO

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

224 New Customhouse
Denver 2, Colorado

November 27, 1956

RECEIVED 29 1956 D.M.E.A.

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium) Contract Idm-E778, The Golden Cycle Corporation (Lee and Small Group of Claims) Montrose and San Miguel Counties, Colorado - MEMORANDUM OF EXPLANATION

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

Also enclosed is one copy of a relative letter, dated November 23, 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)
Shaw (2) w/two copies of memo. & Chm's. letter
Harshman }
Hasler } w/copies of memo. &
Townsend } Chm's. letter
Con. Adm. & Audit Div. }
Corresp. E778 }
Amend. File }
Chron.

Docket copy
Surname:
Chambers
Ching
Murphy
Ellis
Selbridge
Fairman
Mittelsdorf

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

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

NOV 23 1956

Dear Mr. Trower:

Further reference is made to your memorandum of October 31, 1956, in regard to the need for "Memoranda of Explanation" to be attached to the three following projects: Docket No. DMEA-3565, Contract No. Idm-3778, The Golden Cycle Corporation; Docket No. DMEA-3649, Contract No. Idm-3812, Hamilton, et al and Simpson Mining Company; and Docket No. DMEA-3688, Contract No. Idm-3827, Caddis Mining Company.

The question of placing a "Memorandum of Explanation" under project Contract No. Idm-3812, Docket No. DMEA-3649, Hamilton et al and Simpson Mining Company, is still being considered by the Contract Administration and Audit Division.

Enclosed you will find the "Memoranda of Explanation" for the other two projects considered. We are sending sufficient copies to be filed with and become a part of the copies of the contracts located with the Finance Officer, the Executive Officer, and other offices of the Region.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

Enclosure

JIChambers/wb
November 8, 1956

Copy to: Docket (2) DMEA-3565,DMEA-3688
Admr. Reading File
Operating Committee
Mr. Crawford, USBM
Mr. Kiilsgaard, USGS
Mr. Ellis
Mr. Chambers

R.C.R.

Docket copy

Chambers
Murphy
Ulis

EXPLORATION PROJECT CONTRACT
GOLDEN CYCLE CORPORATION
DOCKET NO. DMEA-3565

MEMORANDUM OF EXPLANATION

Washington, D. C.

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Golden Cycle Corporation are parties to Exploration Project Contract Idm-2778 (Docket No. DMEA-3565), dated March 29, 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) in Exhibit "A" represent the maximum average cost per foot of drilling performed and accepted rather than the maximum cost per foot of drilling performed, as evidenced by a statement of the Chief, Rare and Miscellaneous Metals Division, attached hereto.

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

Administrator, Defense Minerals
Exploration Administration

Date:_____

Surname copy

700

Murphy
Ellis

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

November 6, 1956

Memorandum

To: J. L. Chambers, Chief
Contract Administration & Audit Division

From: Ernest Wm. Ellis, Chief
Rare & Miscellaneous Metals Division

Subject: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-2778
Golden Cycle Corporation
Harrison-Burnett and Small-Lee
groups of claims
Montrose and San Miguel Counties, Colorado

In "Exhibit 'A,' Estimated Cost of Project, Actual Costs, Category (1) Independent Contracts" of Stages I and II under the above-referenced contract it was the intent of the engineer who prepared the contract that the figures $2.50 for each foot of non-core drilling and $3.25 for each foot of core drilling represented the maximum average cost for drilling at any depth, even though in the course of the project work the costs of drilling on individual holes or some parts thereof might exceed these figures.

Ernest Wm. Ellis

Ernest Wm. Ellis

FMMurphy/gla

cc to: Docket
Code 700
Mr. Murphy

Docket copy
Surname:
Chambers
Ching
Ellis
Murphy (EWP)
Selfridge
Johnson

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

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

NOV - 7 1956

Dear Mr. Traver:

Reference is made to your memorandum of October 31, 1956, in regard to the need for "Memoranda of Explanation" to be attached to the three following projects: Docket No. DMEA-3565, Contract No. Idm-E778, The Golden Cycle Corporation; Docket No. DMEA-3649, Contract No. Idm-E812, Hamilton, et al and Simpson Mining Company; and Docket No. DMEA-3688, Contract No. Idm-E827, Gaddis Mining Company.

Mr. Chambers has been in correspondence with Mr. Breding relative to these contracts, and he is of the opinion that Contract No. Idm-E812, Hamilton, et al and Simpson Mining Company, will not need the memorandum but will hold the determination of this fact until he gets further word from Mr. Breding. You are correct in stating that "Memoranda of Explanation" will be needed for the other two contracts and they will be furnished in the next few days.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JB)

APPROVED:

Frank D. Lamb (JB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JB)
Member, Geological Survey

Copy to: Docket (3) DMEA-3565
DMEA-3649
DMEA-3688
Admr. Reading File
Operating Committee
Mr. Crawford, USBM
Mr. Kiilsgaard, USGS
Mr. Ellis
Mr. Chambers

JLChambers/wb
November 6, 1956

Surname copy

Murphy
Chambers
Selfridge
Johnson

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

Mr. Walter F. Burnett
Naturita, Colorado

JUN 29 1956

Re: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-E778
Golden Cycle Corporation
Harrison-Burnett and Small-Lee Groups
Montrose and San Miguel Counties,
Colorado

Dear Mr. Burnett:

Reference is made to the Owners' Consent to Lien which you and Mr. Duncan E. Harrison executed on January 10, 1955, in connection with the DMEA contract for an exploration project on your property located in Montrose and San Miguel Counties, Colorado.

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

Sincerely yours,
G. O. Mittendorf

Administrator

Enclosure

FMMurphy:ai 6-22-56
cc to: Docket
Code 700
Mr. Murphy
Admr. Reading File
-Contract Adm. & Audit Div
Mr. Johnson
DMEA Field Team, Region III (2)
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.C.K.

Surname copy

Murphy
Ellis
Chambers
Selfridge
Johnson

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

JUN 29 1956

Mr. Duncan E. Harrison
Durango, Colorado

Re: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-E778
Golden Cycle Corporation
Harrison-Burnett and Small-Lee Groups
Montrose and San Miguel Counties,
Colorado

Dear Mr. Harrison:

Reference is made to the Owners' Consent to Lien which you and Mr. Walter F. Burnett executed on January 10, 1955, in connection with the DMEA contract for an exploration project on your property located in Montrose and San Miguel Counties, Colorado.

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

Sincerely yours,

G. O. Mittendorf

Administrator

Enclosure

FMMurphy/ai 6-22-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Contract Adm. & Audit Div.
Mr. Johnson
DMEA Field Team, Region III (2)
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.C.S.

Surname copy

Murphy
Chambers
Selfridge
H G Swan

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

Golden Cycle Corporation
Uranium Division
P. O. Box 36
Colorado Springs, Colorado

JUN 29 1956

Re: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-5778
Harrison-Burnett and Small-Lee
Groups
Montrose and San Miguel Counties,
Colorado

Gentlemen:

Reference is made to your 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 program and participation therein are fully appreciated.

Sincerely yours,

G. O. Mittendorf

Administrator

Copies to: Mr. Duncan E. Harrison
Durango, Colorado

Walter W. Burnett
Naturita, Colorado

FMMurphy:ai
6/22/56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Contract Adm. & Audit Div.
Mr. Johnson
DMEA Field Team, Region III (2)
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210

R.C.L.

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

RECEIVED
JUN 27 1956

June 26, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

Subject: Field Team Final Report, DMEA Docket 3565 (Uranium), The Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado

I have reviewed the field team final report, DMEA Docket 3565, the Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado, dated June 8 and received in this office June 19, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The exploration work done under Contract Idm-E778 consisted of 1,444 feet of non-core and 1,033 feet of core drilling at a total accepted cost of $6,994.10; the Government participated in the amount of $5,245.58.

A total of 15 holes drilled failed to penetrate uranium mineralized ground. Therefore the Field Team recommends that the project does not merit certification as a discovery or development. We concur in the recommendation.

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

John E. Crawford

John E. Crawford

Docket
name copy

Murphy
Ellis

PROJECT SUMMARY REPORT

By: F. M. Murphy

June 22, 1956

Docket No. DMEA-3563 (Uranium)
Contract No. Idm-E 778

Operator: Golden Cycle Corporation
Uranium Division
P.O. Box 86
Colorado Springs, Colorado

Operator's Property Rights: Lessee of 121 unpatented mining claims, the Harrison-Burnett and Lee-Small groups, situated in secs. 7, 8, 17 to 20 inclusive, T. 45 N., R. 16 W., N. Mex. Prin Mer., Montrose and San Miguel Counties, Colorado.

Contract: Dated March 29, 1955.
Amendment No. 1 - August 29, 1955, allows recess period.
Mutual termination agreement - November 7, 1955, after completing Stage I.

Work Authorized:

Stage I

Non-core 3400 ft. at $2.50/ft.	$ 8,500.00	
Core drilling 1900 ft. at $3.25/ft.	6,175.00	
Analyses 100 at $5.00 each	500.00	
Incidental allowance, 5300 ft.@$0.55/ft.	2,915.00	
Total cost of Stage I		$ 18,090.00

Stage II

Non-core 3000 ft. @ $2.50/ft.	7,800.00	
Core drilling 500 ft. @ $4.75/ft.	2,375.00	
Analyses 50 @ $5.00 each	250.00	
Incidental allowance 3500 ft. @ $0.55/ft.	1,925.00	
Total cost of Stage II		$ 12,350.00
Total estimated cost of project		$ 30,440.00
Government participation at 75%		$ 22,830.00

Work Completed:

	Claimed		Approved	
	Units	Cost	Units	Cost
Non-core drilling @ $2.50/ft.	2141	$4,282.00	1444	$2,888.00
Core drilling @ $3.25/ft.	1780	4,772.75	1033	2,743.75
Incidental allowance @ $0.55/ft.	3921	2,156.45	2477	1,362.35
		$11,211.20		$6,994.10

Audit Report of Review:

Total cost as billed by Contractor		$ 11,211.20
Exceptions:		
By Finance Officer	$ 4,217.10	
Herewith	000.00	
		$ 4,217.10
Total accepted cost		$ 6,994.10
Government participation at 75%		$ 5,245.58

Excerpts from Final Field Team Report, dated June 12, 1956.

The purpose of the project was to explore for uranium ore bodies at the southeastern edge of the Uravan mineral belt as inferred in the Bull Canyon district. No mineralized rock was penetrated in the potential ore-bearing sandstone, of the salt wash member of the Jurassic Morrison formation, by any of the 15 holes drilled during Stage I. As the Operator drilled 5 of these holes at locations far removed from the locations specified in the contract, the Government participated only in the cost of 10 holes.

The drilling started during May 1955 and continued without interruption until July 15, 1955. A recess was then granted by the Government so that the Operator could drill (on its own account) some adjacent property in the hope that more favorable trends might be indicated. However, no mineralization was found and the contract was terminated by mutual agreement effective October 15, 1955. No further exploration was performed under the contract after July 15, 1955.

The Field Team recommended that no certification be issued and this Division concurs.

F. M. Murphy

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

RECEIVED
JUN 18 1956

224 New Customhouse
Denver 2, Colorado

June 12, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Contract Idm-E778, The Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado - FIELD TEAM FINAL REPORT

Enclosed are the original and three copies of a joint final engineering and geologic report, dated June 8, 1956, pertaining to work completed under the subject contract.

The original and one copy of the Operator's final report were forwarded to you by our memorandum of February 10, 1956.

Final payment to the Operator was processed by this office February 13, 1956, in conformance with the report of review of contract expenditures by the Contract Administration and Audit Division, dated January 31, 1956, which was released to this office February 9, 1956.

The exploration work consisted of 1,444 feet of noncore drilling and 1,033 feet of core drilling, at a total accepted cost of $6,994.10, in which the Government participated to the extent of 75%, or an amount of $5,245.58.

Part of the project area is geologically favorable for uranium deposition, but none of the ten DMEA holes nor the five company holes drilled penetrated uranium mineralized ground. Therefore certification of the project as a discovery or development resulting from the DMEA exploration work is not recommended.

W. M. Traver

E. N. Harshman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
6-20-56
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

IN REPLY REFER TO:
MINERAL DEPOSITS

DMEA
Date Rec'd.
JUN 12 1956

DMEA
RECEIVED
JUN 1 1956

RECEIVED
JUN 18 1956

U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

BUREAU OF MINES
Denver, Colorado

May 29, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman EMH
J. F. Shaw JFS

From: J. William Hasler

Subject: Final joint engineering and geologic report, DMEA docket 3565 (Uranium), contract Idm-E 778, Golden Cycle Corporation, Harrison, Burnett and Small-Lee groups of claims (Bull Canyon district) Montrose and San Miguel Counties, Colo.

Transmitted herewith is a final report on the above-mentioned property by F. M. Byers, Jr., U. S. Geological Survey and H. F. Robertson, U. S. Bureau of Mines.

Enclosed are figures 1 and 2 to accompany the joint engineering and geologic report.

J. William Hasler
J. William Hasler,
Geologist

JWH/mlr

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
6-20-56
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
, SECRETARY

DMEA
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DEFENSE MINERALS EXPLORATION ADMINISTRATION
REGION III

FINAL REPORT

DMEA 3565

Contract Idm-E778

GOLDEN CYCLE CORPORATION

Harrison-Burnett and Small-Lee Groups of Claims

Bull Canyon District

Montrose and San Miguel Counties, Colorado

Uranium

Final Engineering and Geologic Report

By

Reviewed by
DMEA OPERATING COMMITTEE
6-20-56
(date)

F. M. Byers, Jr., Geologist
Geological Survey

H. F. Robertson, Mining Engineer
Bureau of Mines

June 8, 1956

DMEA 3565
Contract Idm-E778
GOLDEN CYCLE CORPORATION
HARRISON-BURNETT AND SMALL-LEE GROUPS OF CLAIMS
BULL CANYON DISTRICT
MONTROSE AND SAN MIGUEL COUNTIES, COLORADO

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DMEA 3565
Contract Idm-E778

GOLDEN CYCLE CORPORATION
Harrison-Burnett and Small-Lee Groups of Claims
Bull Canyon District
Montrose and San Miguel Counties, Colorado

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JUN 18 1956

INTRODUCTION AND SUMMARY

DMEA Contract Idm-E778 authorized the Golden Cycle Corporation, Max E. Bowen, Executive Vice President, P. O. Box 86, Colorado Springs, Colorado to drill 30 holes on the Harrison-Burnett and Small-Lee groups of claims, Bull Canyon district, Montrose and San Miguel Counties, Colorado. The estimated total cost of the project was $30,440.00 with Government participation at 75 percent or $22,830.00. The purpose of the project was to explore for uranium ore bodies at the southeastern edge of the Uravan mineral belt as inferred in the Bull Canyon district. No mineralized rock was penetrated in the ore-bearing sandstone of the Salt Wash member by any of the 15 holes (only 10 of which were approved for DMEA reimbursement under the contract) drilled during Stage I. No further work was recommended and the contract was terminated on October 15, 1955. The total accepted cost of the contract was $6,994.10. Government participation was 75 percent of the total or $5,245.58.

No certification of discovery is recommended. Further exploration by deep drilling with DMEA assistance might be warranted on the western part of the claim area underlain by the Burro Canyon-Dakota formations. Significant discoveries of ore however should be made on or immediately adjacent to the Golden Cycle property before further participation would be warranted.

LOCATION AND ACCESSIBILITY

The Harrison-Burnett and Lee-Small groups of claims are located in secs.7, 8, 17 to 20 inclusive, T. 45 N., R. 16 W., New Mexico Principal Meridian, Montrose and San Miguel Counties, Colorado (fig. 1). The claims

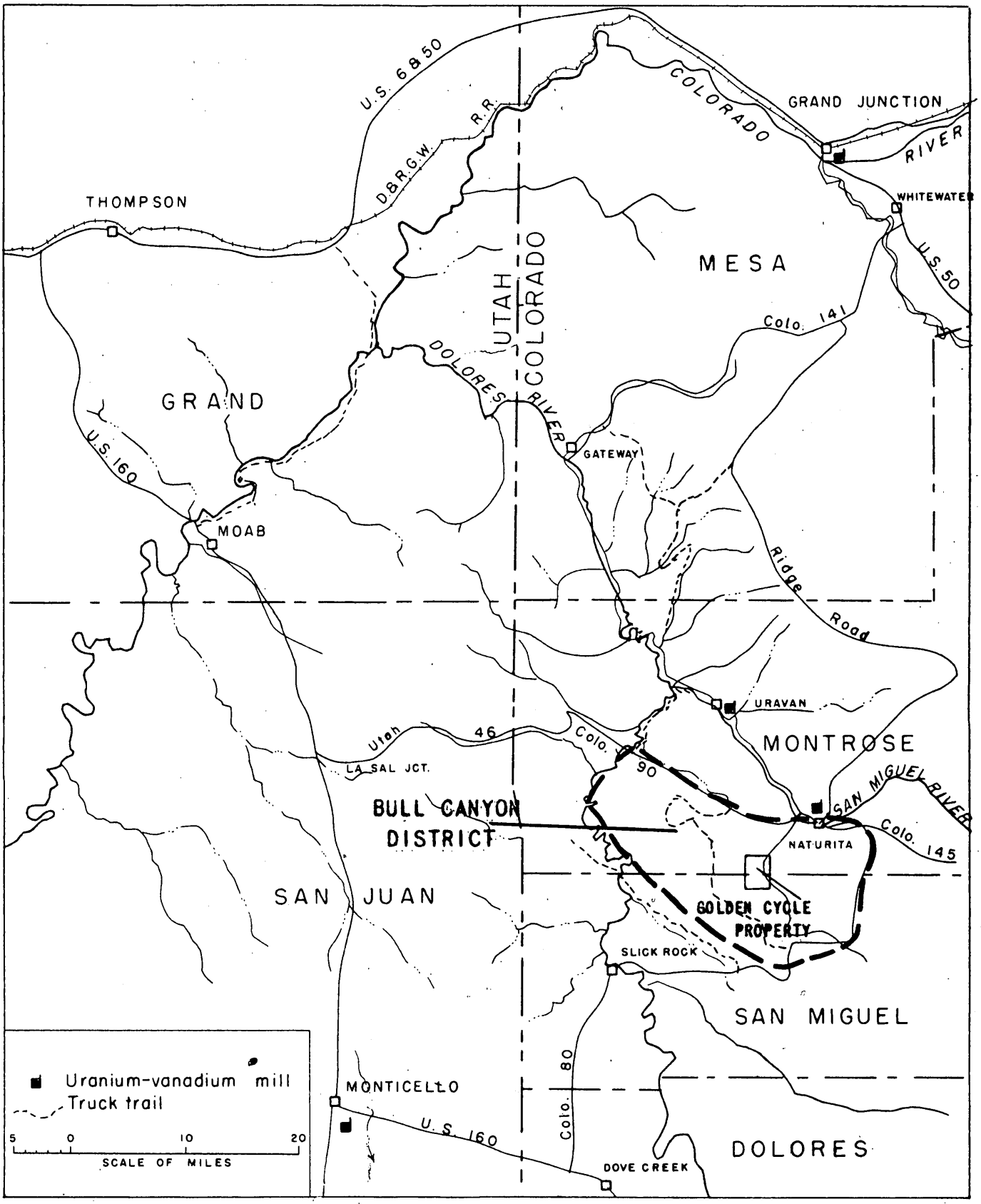

Figure 1. INDEX MAP OF PART OF THE COLORADO PLATEAU SHOWING THE LOCATION OF THE BULL CANYON MINING DISTRICT AND GOLDEN CYCLE PROPERTY, MONTROSE AND SAN MIGUEL COUNTIES, COLORADO

are on the west side of Dry Creek in a dissected area and adjacent to Monogram Mesa in the eastern part of the Bull Canyon Mining district. The property is about 25 miles from Naturita, Colorado, and is accessible by dirt roads east of the main truck route connecting Monogram Mesa and Colorado Highway 80. All roads are usable except during heavy rains or snows.

PROPERTY

The property consists of a total of 121 unpatented claims. The Golden Cycle Corporation leased 98 claims from U. A. Small and Stewart C. Lee on June 18, 1954 and the remaining 23 claims from Duncan E. Harrison and Walter F. Burnett on June 29, 1954. Both leases are for a period of 5 years, with options for renewal for an additional 15 years.

HISTORY

Prospecting for uranium became of interest following the introduction of Government buying schedules in 1948. No mining has been done on or near the property concerned in the DMEA project but the exposed sandstone rims appeared favorable for uranium mineralization.

GEOLOGY AND ORE DEPOSITS

The rocks exposed in the vicinity of the Golden Cycle property dip very gently southwesterly on the southwest flank of the Paradox anticline. They range in age from Triassic (Moenkopi formation) to Cretaceous (Burro Canyon formation). Pertinent to this report is the Jurassic Morrison formation which is divided into two members (fig. 2). The Salt Wash member consists of sandstone lenses and interbedded mudstone layers. The overlying Brushy Basin member is mostly mudstone and siltstone containing lens-shaped sandstone and conglomeratic sandstone that contain interbedded mudstone layers.

Most of the significant uranium deposits in the Bull Canyon mining district occur in the upper half of the Salt Wash member of the Morrison formation. The sandstone in this member is white to light red, is commonly fine- to medium-grained, and contains minor amounts of red, green, or gray mudstone as seams, films, pebbles or interstitial filling. The Salt Wash may contain sparse to abundant carbonaceous material.

Scour and fill, cross lamination, and festoon structures are common in the Salt Wash, particularly in the upper half of the member.

Uranium deposits in this member characteristically are associated with bleached sandstone, with gray or green mudstone (as opposed to red mudstone), and in many places with zones of abundant carbonaceous material. Uranium is nearly everywhere associated with vanadium in the Bull Canyon district.

No ore has been produced from the claims leased by the Golden Cycle Corporation and the claims contain no known outcrops of uranium or vanadium bearing rock.

The 15 holes drilled during Stage I (fig. 2) did not penetrate any ground that was even weakly mineralized. (Holes 3A, 4A, 10A, 16A, and 17A were not paid for by DMEA but were logged by a U.S.G.S. geologist and are incorporated in this report). Of the fifteen holes, only holes 3A and 10A penetrated favorable sandstone (table II); possibly holes 5 and 11 might also be regarded as favorable because of the thick sandstone penetrated but they are rated semifavorable because of the absence of underlying green, altered mudstone. In general, the area of the claims near the Salt Wash rim is regarded as unfavorable on the basis of the drilling; the few favorable holes are largely negated by the surrounding unfavorable holes. However, the large area beneath the Cretaceous Burro Canyon-Dakota formations is untested. No ore bodies are likely to be found within 2,000 feet of the Salt

Wash rim (fig. 2), though undiscovered ore bodies may exist in the untested ground beneath the Dakota-Burro Canyon formation.

The nearest U. S. Geological Survey drill holes are about a mile northwest of the Golden Cycle property. These holes penetrated favorable sandstone but few were mineralized, (Carl H. Roach and D. D. Haynes, personal communication) demonstrating that although significant ore bodies do not occur in unfavorable sandstone, they may also be lacking in areas of favorable sandstone.

THE PROJECT

Examination of the exposed Salt Wash outcrops showed general favorability as a host for uranium ore. The sandstone units are 30-40 or more feet thick, and contain in many places abundant green or gray mudstone. The average sand is fine- to medium-grained. Sparse carbon was observed. Also, the claim area is on the flanks of the Paradox Valley Salt anticline, a favorable structural setting for ore.

The Golden Cycle Corporation proposal, as originally submitted on October 22, 1954, scheduled 1,900 feet of BX core drilling 3,400 feet of BX non-core drilling in a first stage consisting of 20 holes on 500-foot centers and located slightly above and northwest of the Salt Wash-Brushy Basin contact as exposed on the Harrison-Burnett and Small-Lee groups of claims (fig. 2). A second stage consisted of 500 feet of core drilling and 3,000 feet of non-core drilling in 10 holes to be drilled on 100-foot offsets to mineralized first stage holes. A field examination was made on November 17, 1954 by Carl Belser of the U. S. Bureau of Mines, and A. E. Flint and D. D. Haynes of the U. S. Geological Survey. Ben H. Slothower, mining engineer for the Golden Cycle Corporation, accompanied the examining team. The team accepted the applicant's proposal without alteration, except for minor changes and in a report dated January 27, 1955, to the DMEA Field Team, Region III, recommended approval of the project. Contract Idm-E778, dated March 29, 1955, authorized

the above drilling with government participation at 75 percent.

Fifteen drill holes were completed during the exploration program but only 10 of the holes were approved for payment. After the drilling project had started, the Operator's superintendent examined the surface geology more thoroughly and decided that he would have better control of plugging and coring depths by moving some holes closer to the rim. He misinterpreted the provision of the contract which defined hole locations and assumed he was free to drill the holes at any point along the parallel lines 500 feet apart as defined in the contract. Accordingly, he moved the locations of holes nos. 2, 3, 4, 10, 14, 15, 16, and 17 without receiving authorization from the DMEA Field Team, Region III. The holes, designated as 3A, 4A, 10A, 16A, and 17A (fig. 2) were drilled at the unauthorized locations.

Later, Slothower was advised by the operator's manager to check with DMEA personnel. On finding that unauthorized drilling could not be paid for, Slothower suspended drilling of these holes and requested an amendment authorizing the new locations. This request was denied in Washington.

As a result, holes nos. 3A, 4A, 10A, 16A, and 17A (fig. 2) which were completed before the drilling was stopped, could not be approved for payment under the terms of the contract, which states, in part, that Stage I holes "shall be drilled at locations approximately indicated on the attached map ...". (Description of the Work, Exhibit A of the subject contract). It was determined during field inspections that holes nos. 1, 5, 6, 7, 8, 9, 11, 12, 13, and 18 conform with approved locations and were completed in accordance with contract requirements including coring procedures and storage. No chemical analyses were made. Contract maximums were not exceeded.

No uranium mineralization was found in any of the holes completed. As evidenced by sand thickness, two holes were classed as "favorable", four as "semi-favorable", and the balance as "unfavorable" both by the operator and the U. S. Geological Survey.

At the southwest end of the property, holes nos. 16A, 17A, and 18 found practically no sandstone in the upper part of the Salt Wash member. It is evident that this member is becoming unfavorable to the southwest, and there is little possibility of finding ore-bearing sandstone in this direction. In a letter of July 12, 1955 the operator stated that drilling results had been so discouraging that holes nos. 14, 15, 19, and 20 were not drilled and the drill-rigs had been moved from the property.

Hole No. 2 was not drilled because the operator discovered it was on a claim which they did not control. Control of this claim was arranged but, in view of the disappointing results of completed drilling, the operator did not think it worthwhile to drill, either at the original location or at a new location.

The program commenced during May, 1955 and continued without interruption until July 15, 1955. Work under the contract was suspended during the period beginning July 15, 1955 and ending not later than October 15, 1955. This recess was requested by the operator pending completion of drilling on adjacent properties in the hope that some favorable conditions might be indicated. However, no mineralization was found and the contract was terminated effective October 15, 1955. No further exploration was performed under the contract after July 15, 1955.

SUMMARY OF FACTUAL DATA

The operator claimed payment in May 1955 for 585 feet of core drilling and 587 feet of non-core drilling in 4 holes, plus the incidental allowance of $0.55 per foot for 1,172 feet of drilling. A total of $3,425.00 was claimed in which Government participation would be $2,568.83. Approved cost for May 1955 was $1,052.70 (Table I) with Government participation of $789.53.

Payment was claimed in June and July 1955 for 1,195 feet of core drilling and 1,554 feet of non-core drilling in 11 holes plus the incidental allowance of $0.55 per foot for 2,749 feet of drilling. A total of $7,786.20 was claimed in which Government participation would be $5,839.65. Approved cost for June-July, 1955 was $5,941.40 (Table I) with Government participation of $4,456.05.

The total accepted costs of the project amounted to $6,994.10. Total cost to the Government was $5,245.58 (Table I).

DISCUSSION OF CONCLUSION

No abnormal conditions affecting performance of the contract work were encountered. Drill site and access road preparation is normally difficult in the area and consideration is given this fact in preliminary estimates of work planned. With the exception of the misinterpretation of the contract by the Operator's supervisor, the program was competently performed. The 10 holes approved for payment were completed in accordance with contract requirements including coring procedures and storage. The Operator submitted a satisfactory final report of the work completed under the contract including their conclusions concerning the results obtained.

Exploration under the contract failed to locate any significant bodies of uranium ore. Part of the area is geologically favorable for uranium deposition but none of the 15 completed holes penetrated uranium-mineralized ground. All holes were probed with Geological Survey Barnaby equipment and were classed as barren holes. Subsequent drilling of the area surrounding the claims has been unproductive and leaves a rather remote possibility of any significant ore bodies existing on the Harrison-Burnett and Small-Lee groups of claims.

No certification of discovery is recommended as a result of the drilling under Contract Idm-E778. Further exploration by drilling with DMEA assistance would be conceivably possible on the western part of the claim area underlain

by the Burro Canyon-Dakota formations. Significant discoveries of ore should be made on or immediately adjacent to the Golden Cycle property before further participation would be warranted.

Table I. -- Summary of Costs. DMEA 3565, Contract Idm-E778, Golden Cycle Corporation, Bull Canyon Mining District, Montrose and San Miguel Counties, Colo.

Stage I		Allowed Maximum	May 1955 Operations				June-July 1955 Operations				Entire Project				Contract Maximums	
			Claimed		Approved		Claimed		Approved		Claimed		Approved			
Item	Unit	Unit Price	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost
Actual Cost Items:																
Non-Core drilling	Foot	$2.50	587	$1,174.00	185	$ 370.00	1554	$3,108.00	1259	$2,518.00	2141	$4,282.00	1444	$2,888.00	3400	$8,500.00
Core drilling	Foot	3.25	585	1,606.50	169	488.00	1195	3,166.25	864	2,255.75	1780	4,772.75	1033	2,743.75	1900	6,175.00
Fixed Cost Items:																
Incidental Allowance	Ft.	0.55	1172	644.50	354	194.70	2749	1,511.95	2123	1,167.65	3921	2,156.45	2477	1,362.35	5300	2,915.00
Chemical Analyses	Each	5.00	--	--	--	--	--	--	--	--	--	--	--	--	100	500.00
Totals Stage I				$3,425.00		$1,052.70		$7,786.20		$5,941.40		$11,211.20		$6,994.10		$18,090.00
Stage II																
Incidental allowance	Ft.														3500	$1,925.00
Non-Core drilling	Foot														3000	$7,800.00
Core drilling	Foot														500	2,375.00
Chemical Analyses	Each			No Stage II Drilling											50	250.00
Totals Stage II																$12,350.00
Total for Contract																$30,440.00

Government Participation in Approved Costs at 75 percent - $5,245.58
Average Cost of Non-Core Drilling Per Foot - 2.00
Average Cost of Core Drilling Per Foot - 2.66
Average Overall Cost of Drilling Per Foot - 2.27

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TABLE II. - Summary of holes drilled during DMEA Contract Idm-E778, Golden Cycle Property, Bull Canyon Mining District, Montrose and San Miguel Counties, Colorado.

(1) Drill Hole	(2) Total Depth	(3) Total Cored a/	(4) Footage in OBSS	(5) Thickness of OBSS (feet)	(6) Color of OBSS	(7) Thickness of Gn MS under OBSS (feet)	(8) Ore-bearing potential b/ of OBSS
1	354.0	159.0	211 - 248	37	L Gy	0	Semi-favorable
3A*	350.0	260.0	176 - 242	66	L Gy	1.1	Favorable
4A*	274.0	74.0	228 - 255	27	L Gy	0	Unfavorable
5	268.0	108.0	213 - 262	49	L Gy	0	Semi-favorable
6	164.0	94.0	88 - 96	8	L Gy	0	Unfavorable
7	163.0	73.0	108 - 119	11	L Gy	0	Unfavorable
8	232.0	107.0	125(-) - 135	10+	L Gy	0	Un- or Semi-favorable
9	234.0	74.0	184 - 204	20	L Gy	0	Unfavorable
*10A	194.0	81.0	150 - 187	37	L Gy	2.2	Favorable
11	240.0	128.0	167 - 233	66	L Gy	0	Semifavorable
12	214.0	33.0	181(-) -200	19+	R - L Gy	0	Unfavorable
13	259.5	99.5	226 - 256	30	L R - L Gy	0	Unfavorable
*16A	353.0	185.0	213 - 223(+) c/	10+	L Gy	0 c/	Unfavorable
*17A	273.0	148.0	126 - 147	21	L Gy	1.0	Semifavorable
18	351.0	240.0	144 - 159	15	R - L Gy	0	Unfavorable

* Drill holes not reimbursed to operator under DMEA contract.

a/ Cored footage in lower part of drill hole.

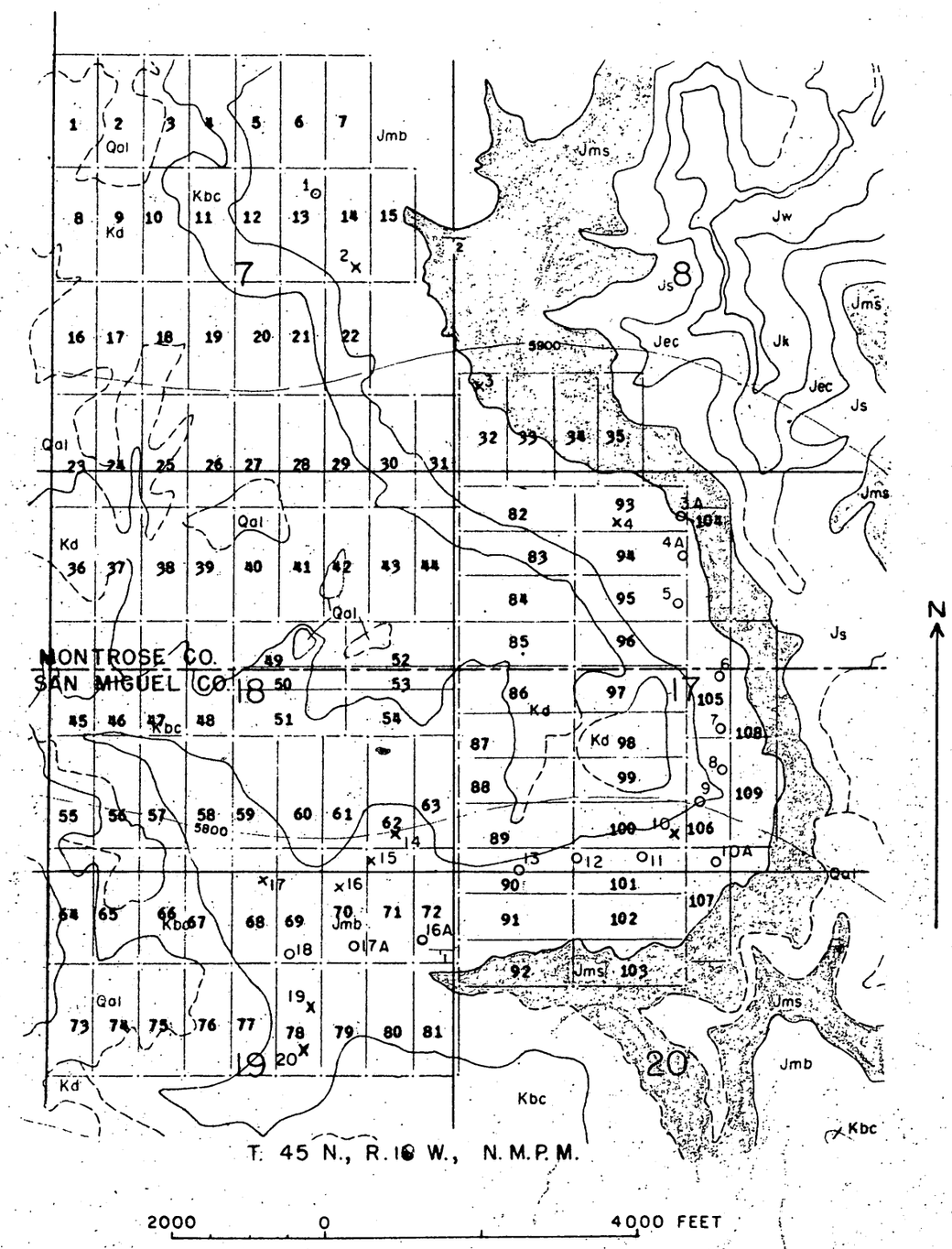
b/ Favorability criteria modified after Weir (1952)

c/ Red mudstone in cuttings where core lost from 223 to 250 feet.

ABBREVIATIONS: OBSS - Main ore-bearing sandstone at top of Salt Wash
MS - Mudstone LR - Light Red Gn - Green
L Gy - Light Gray R - Red

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
MAY 1956
DOCKET 3565
CONTRACT Idm-E778



EXPLANATION

QUATERNARY

Qal — ALLUVIUM

CRETACEOUS

Kd — ~~DAKOTA SANDSTONE~~

UNCONFORMITY

Kbc — BURRO CANYON FORMATION

JURASSIC

Jmb, Jms — MORRISON FORMATION (Jmb, Brushy Basin member) (Jms, Salt Wash member)

Js — SUMMERVILLE FORMATION

Jec — ENTRADA SANDSTONE AND CARMEL FORMATION UNDIVIDED

UNCONFORMITY

Jk — KAYENTA FORMATION

TRIASSIC

Jw — WINGATE SANDSTONE

FORMATION CONTACT

STRIKE AND DIP OF BEDS

5900 — STRUCTURE CONTOUR

x3 — PROPOSED 1ST STAGE DRILL HOLE (NOT DRILLED)

o6 — 1st-STAGE HOLE (DRILLED)

o10A — HOLE DRILLED AT UNAUTHORIZED LOCATION. SUFFIX A INDICATES NO REIMBURSEMENT UNDER DMEA

CLAIM INDEX

1	ASHBACK	56	LOBO NO. 2
2	HARRISON	57	LOBO NO. 3
3	TUG	58	LOBO NO. 4
4	LEE NO. 5	59	LOBO NO. 5
5	LEE NO. 7	60	LOBO NO. 6
6	LEE NO. 9	61	LOBO NO. 7
7	LEE NO. 11	62	LOBO NO. 8
8	DENNY	63	LOBO NO. 9
9	BOGGY	64	WEST FORT NO. 1
10	BOB	65	WEST FORT NO. 2
11	LEE NO. 5	66	WEST FORT NO. 3
12	LEE NO. 6	67	WEST FORT NO. 4
13	LEE NO. 8	68	WEST FORT NO. 5
14	LEE NO. 10	69	WEST FORT NO. 6
15	LEE NO. 12	70	WEST FORT NO. 7
16	EMILY	71	WEST FORT NO. 8
17	PAT	72	WEST FORT NO. 9
18	ELMER	73	MAY NO. 1
19	LEE NO. 13	74	MAY NO. 2
20	LEE NO. 14	75	MAY NO. 3
21	LEE NO 15	76	MAY NO. 4
22	LEE NO. 16	77	MAY NO. 5
23	APRIL NO. 3	78	MAY NO. 6
24	APRIL NO. 2	79	MAY NO. 7
25	APRIL NO. 1	80	MAY NO. 8
26	LEE NO 25	81	MAY NO. 9
27	LEE NO. 24	82	LOBO NO. 24
28	LEE NO 23	83	LOBO NO. 22
29	LEE NO. 22	84	LOBO NO. 20
30	LEE NO. 21	85	LOBO NO. 18
31	LEE NO. 20	86	LOBO NO. 16
32	BORDER NO. 1	87	LOBO NO. 14
33	BORDER NO. 2	88	LOBO NO. 12
34	BORDER NO. 3	89	LOBO NO. 10
35	BORDER NO. 4	90	W.F. NO. 10
36	APRIL NO. 4	91	W.F. NO. 11
37	APRIL NO. 6	92	W.F. NO. 14
38	APRIL NO. 8	93	LOBO NO. 25
39	APRIL NO. 10	94	LOBO NO. 23
40	APRIL NO. 12	95	LOBO NO. 21
41	APRIL NO. 14	96	LOBO NO. 19
42	APRIL NO. 16	97	LOBO NO. 17
43	APRIL NO. 18	98	LOBO NO. 15
44	APRIL NO. 20	99	LOBO NO. 13
45	APRIL NO. 5	100	LOBO NO. 11
46	APRIL NO. 7	101	W.F. NO. 12
47	APRIL NO. 9	102	W.F. NO. 12
48	APRIL NO. 11	103	W.F. NO. 13
49	APRIL NO. 15	104	BORDER NO. 5
50	FRACTION NO. 1	105	BORDER NO. 6
51	APRIL NO. 13	106	LOBO NO. 26
52	APRIL NO. 19	107	W.F. NO. 15
53	FRACTION NO. 2	108	BORDER NO. 7
54	APRIL NO. 17	109	LOBO NO. 28
55	LOBO NO. 1		

BASE FROM USGS GEOLOGIC QUADRANGLE MAP NATURITA NW

NOTE: STRUCTURE CONTOURS DRAWN ON TOP OF ENTRADA SANDSTONE

Figure 2. MAP OF PART OF THE BULL CANYON MINING DISTRICT SHOWING THE LOCATION OF D.M.E.A. DRILL HOLES, GOLDEN CYCLE PROPERTY, MONTROSE AND SAN MIGUEL COUNTIES, COLORADO

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

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224 New Customhouse
Denver 2, Colorado

February 10, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Contract Idm-E778, Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado

In compliance with the "Special Notice" instructions contained 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 Field Team's Final Report will be forwarded as soon as the engineering and geologic sections are available.

W. M. Traver

W. M. Traver

Enclosures

OFFICE OF
THE PRESIDENT

THE GOLDEN CYCLE CORPORATION

COLORADO SPRINGS, COLORADO

December 23, 1955

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Date Rec'd.

DEC 27 1955
BUREAU OF MINES
Denver, Colorado

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

Re: Docket DMEA 3565 (Uranium)
Contract Idm-E778

Dear Mr. Traver:

We enclose original and four copies of final report pertaining to work completed under the above contract. If there is any other information which you require regarding the work completed under this contract, kindly advise.

Yours very truly,

THE GOLDEN CYCLE CORPORATION
URANIUM DIVISION

Max W. Bowen

Max W. Bowen By: H.R.
Executive Vice President

MWB:hr

San Miguel & Montrose County Colo
~~San Juan County Utah~~

GOLDEN CYCLE CORPORATION
Monogram Division

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GEOLOGY OF THE HARRISON-BURNETT AND SMALL-LEE GROUPS OF CLAIMS, MONTROSE AND SAN MIGUEL COUNTIES, COLORADO

Re: Docket DMEA 3565 (Uranium)
Contract Idm-E778

The area as shown on the map, Fig. 1, is on the eastern rim of Monogram Mesa, in Montrose and San Miguel Counties, Colorado. This area lies along the edge of the Uravan Mineral Belt. It was thought, at the time drilling commenced, that the area was within the limits of the belt and that the chances of finding ore were good.

Rim exposures, along the west side of Dry Creek, showed a good thickness of Saltwash sand but no mineralization. The rim was checked for mineralization with an airborne scintillator but no anomalies were observed.

The favorability of the area was based on the thickness of the exposed sand, the position of the ground with relation to the assumed position of the eastern edge of the Uravan Mineral Belt, and the assumed strength of mineralization on Monogram Mesa - the USGS drilling on top having progressed easterly to a point some three-and-one-half miles west of the claim groups.

Work on the roads and drill-hole sites was started April 19th, 1955, and drilling with a diamond drill was commenced April 28th, 1955. At first, the plan was to start at the northern-most location and proceed to the south, drilling the holes in linear order. However, it was soon found necessary to expedite the effort by plugging the holes through the Brushy Basin with a dry rotary drill. So vertical control was established with the diamond drill by skipping holes down the fence and subsequently drilling to the north from the southern end.

The sands around the northern end of the drill fence were quite good, clean, thick, and permeable. The mudstone above and below the sand was well altered to a grey-green. There was a moderate amount of carbon present. None the less, the holes were absolutely barren.

As drilling proceeded to the south, however, the sand, "Able" and "Baker" combined, became more and more contaminated by mud, usually green but often red. The sand seemed to become "tight".

A local change was noted in the area of holes 10 and 11, with a fine, permeable sand replacing the dirty member to the north. But this sand proved to be as barren as the unfavorable mudded member.

South of Hole 11, the sand became not only dirty once more, but quite unpredictable. It degenerated in Hole 18 into a red and green mudstone, so the drilling of the two southernmost holes, 19 and 20, was not completed.

One deep test hole, on the mesa top in Boggy No. 1 claim, was drilled and showed the standard northern sand, thick but with no mineralization.

The crossection A'-A", Fig. 2, shows sand thickness and the Brushy Basin - Saltwash contact. It should be noted that holes 2 and 20 were never started, holes 14, 15, and 19 were not completed, and only holes 1, 5, 6, 7, 8, 9, 11, 12, 13, and 18 are DMEA holes.

Total expenditures made by the Golden Cycle Corporation during the May, June, and July, 1955, period for test drilling are as follows:

Paid drilling contractors	$11,992.75
Expenditure for roads, superintendent and other incidentals	2,746.52
TOTAL	$14,739.27

The area north-east of our claim groups, the Four Corners group in Sections 5, 6, 7, and 8, T45N, R16W, was drilled quite extensively in July and August, 1955, but no mineralization was found.

The area south of our claim groups, in Sections 19 and 20, T45N, R16W, was drilled at the same time and no mineralization was found.

Drilling to the north of our claim groups, on Section 31, T46N, R16W, has been unproductive.

It is the consensus not only of the engineering personel of the Golden Cycle Corporation, but of such members of the USGS and the U.S. Bureau of Mines as are acquainted with the area, as well, that the possibility of finding uranium orebodies on our claim groups is exceedingly small. The entire area seems definitely east of the Uravan Mineral Belt.

Respectfully submitted,

Ben H. Slothower
Exploration Superintendent

s

Colorado Springs, Colorado
December 15, 1955

Talbert

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

FEB 7 1956

Mr. Donald T. Finch
DMEA Auditor
224 New Customhouse Building
Denver 2, Colorado

Re: Report of Review
IDm-2778, DMEA-3565
The Golden Cycle Corp.

Dear Don:

Your Report of Review, in lieu of final audit, for the referenced project is acceptable and normal distribution is authorized after the period covered (in the 7th line of the 1st paragraph) is changed from "months of May, 1955 and June, 1955" to "months of May through July, 1955."

This change has been made in the Washington copies. Please change all other copies.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
February 2, 1956

Copy to: Docket
Admr. Reading File
Mr. Chambers

R. Cohen

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

224 New Customhouse
Denver 2, Colorado

November 22, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Contract Idm-E778, Golden Cycle Corporation, Harrison-Burnett and Small-Lee groups of claims, Montrose and San Miguel Counties, Colorado'

Enclosed are the Government's, Division, and Docket copies of Agreement between the United States of America and Golden Cycle Corporation, terminating Contract Idm-E778, which was forwarded by your letter of November 7, 1955, for signature by the Operator.

Copies of the Termination Agreement have been given to the Operator, the Finance Office, Region III, and distributed to other personnel concerned.

W. M. Traver

By J. W. Townsend
J. W. Townsend

Enclosures

RECEIVED
NOV 25 1955

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

224 New Customhouse
Denver 2, Colorado

November 18, 1955

Mr. Ben Hill Slothower
Exploration Superintendent
Golden Cycle Corporation
Ouray, Colorado

Re: Docket DMEA 3565 (Uranium),
Contract Idm-8778

Dear Mr. Slothower:

Reference is made to your letter of October 23, 1955, wherein you request reconsideration of the Government's denial of your request for the relocation of holes 3, 4, 10, 14, 16, and 17, which were drilled at locations other than approved in the contract.

Your letter was forwarded to the Washington Office, DMEA, for their consideration and we have been advised that the factors you presented have not changed their original opinion and the basis of the Government's denial of your request.

Very truly yours,

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

By J. W. Townsend
J. W. Townsend

JWT:prl
cc: Chairman, Oper. Comm. (2)

Surname Copy

700

Murphy
Ellis
Talbot
Selfridge
Johnson
Mitchell

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

NOV - 8 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
29th New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-1778
Golden Cycle Corporation
Harrison-Burnett and Small-Lee
groups of claims
Montrose and San Miguel Counties,
Colorado

Dear Mr. Traver:

This is to acknowledge your memorandum, dated October 26, and the enclosed letter, dated October 23, 1955, by Mr. Ben H. Slothower, Exploration Superintendent of the Golden Cycle Corporation.

On September 2, we advised the Field Team that this office concurred in its recommendation that the Government should not participate in certain holes drilled by the Operator. We have made a careful study of the points Mr. Slothower makes to justify the drilling of these holes in the locations he selected. However, we believe that A. H. Harshman's memorandum, dated August 30, 1955, refutes the points Mr. Slothower makes. Therefore, we can see no reason for altering our previous opinion in regard to the subject drill holes.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

APPROVED:

/s/ Robert W. Geehan (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

FMMurphy/izm
11-4-55

cc to: Admr. Reading File
Operating Committee
Docket
Code 700
Mr. Murphy

Messrs. JECrawford 3641
THKiilsgaard, 5224
JOHosted, 3210, GSA

R.C.S.

Surname Copy

Murphy
Ellis
Talbut
Selfridge
Johnson

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

NOV - 7 1955

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

Re: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-5778
Golden Cycle Corporation
Harriman-Burnett and Small-Lee
groups of claims
Montrose and San Miguel Counties,
Colorado

Dear Mr. Traver:

Enclosed are the original and five copies of a mutual agreement to terminate the captioned contract, signed by the Administrator. This agreement has been prepared in accordance with your memorandum, dated October 20, 1955.

If you and the Operator find the proposed termination agreement in order, please have the latter sign the original and all five copies. Thereafter, kindly make the usual distribution.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

/s/ Robert W. Geehan (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

FMurphy/izm
11/2/55
cc to: Admr's Reading File
Operating Committee
Docket
Code 700
Mr. Murphy
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.C.G.

DOCKET COPY

Murphy

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

November 7, 1955

Memorandum

To: The File

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

Subject: Termination of Contract.
Docket No. DMEA-3565 (Uranium)
Contract No. Idm-E778
Golden Cycle Corporation
Harrison-Burnett and Small-Lee
groups of claims
Montrose and San Miguel Counties, Colorado

Stage I of the subject contract authorized the drilling of 20 holes at locations approximately shown on a map attached to the contract.

The Operator completed 16 of the authorized holes, namely: Nos. 1, 3, 4, 5, 6, 7, 8 9, 10, 11, 12, 13, 14, 16, 17, and 18. However, holes Nos. 3, 4, 10, 14, 16, and 17 were disallowed because they were drilled at locations ranging from 700 to 4800 feet from the locations given in the contract.

No geologic structure nor host rock, which might indicate favorable possibilities of uranium mineralization, were encountered in any of the above-mentioned holes.

The holes drilled indicate that the Salt Wash member of the Jurassic Morrison formation underlying the subject property is not favorable for uranium mineralization. Therefore, the drilling of additional holes would only increase the cost of the project with very little chance of discovering a deposit of uranium ore.

The Field Team and Operator recommend that the subject contract be terminated by mutual consent. For the reasons given above, the Rare and Miscellaneous Metals Division concur in this recommendation.

F M Murphy

F. M. Murphy

700

Murphy
Ellis

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

November 7, 1955

Memorandum

To: The File

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

Subject: Termination of Contract.
Docket No. DMEA-3565 (Uranium)
Contract No. Idm-3778
Gehman Cycle Corporation
Harrison-Burnett and Small-Lee
groups of claims
Montrose and San Miguel Counties, Colorado

Stage I of the subject contract authorized the drilling of 20 holes at locations approximately shown on a map attached to the contract.

The Operator completed 16 of the authorized holes, namely: Nos. 1, 3, 4, 5, 6, 7, 8 9, 10, 11, 12, 13, 14, 16, 17, and 18. However, holes Nos. 3, 4, 10, 14, 16, and 17 were disallowed because they were drilled at locations ranging from 700 to 4800 feet from the locations given in the contract.

No geologic structure nor host rock, which might indicate favorable possibilities of uranium mineralization, were encountered in any of the above-mentioned holes.

The holes drilled indicate that the Salt Wash member of the Jurassic Morrison formation underlying the subject property is not favorable for uranium mineralization. Therefore, the drilling of additional holes would only increase the cost of the project with very little chance of discovering a deposit of uranium ore.

The Field Team and Operator recommend that the subject contract be terminated by mutual consent. For the reasons given above, the Rare and Miscellaneous Metals Division concur in this recommendation.

F M Murphy

F. M. Murphy

FMMurphy/gla
cc to: Admr.'s Reading File
Operating Committee
Docket (original)
Code 700 Mr. Murphy

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

RECEIVED
OCT 31 1955

224 New Customhouse
Denver 2, Colorado

October 26, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Contract Idm-E778, The Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado

In conjunction with the matter discussed in your letters of August 1, and September 2, 1955, we are enclosing the original and three copies of a letter dated October 23, 1955, from Ben H. Slothower, Exploration Superintendent of The Golden Cycle Corporation. Mr. Slothower requests reconsideration of the Government's decision for nonparticipation in the cost of drill holes Nos. 3, 4, 10, 14, 16, and 17.

The matter as presented by him does not alter our prior opinion or recommendations that the Government not participate in the costs of drilling the holes at locations not authorized in the contract.

After you have reviewed the matter, we will appreciate your advice before replying to Mr. Slothower.

W. M. Traver

W. M. Traver

Enclosure

DMEA
Date Rec'd.
OCT 25 1955
BUREAU OF MINES
Denver, Colorado

BEN HILL SLOTHOWER
NUCLA, COLORADO

October 23rd, 1955

RECEIVED
OCT 31 1955

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

Re: DMEA Docket 3565 (uranium)
Contract Idm-E778, The Golden Cycle Corporation, Harrison-Burnett - Small-Lee groups of claims, Montrose and San Miguel Counties, Colorado

SUBJECT: Request for Reconsideration of Requested Amendment to Contract Idm-E778 to Relocate Certain Stage I Drill-Hole Sites
(Letter: DMEA Field Team from Slothower, June 7, 1955)

Dear Mr. Traver:

I am asking you, at this time, to reconsider the above cited amendment because there are two factors upon which I may have failed to properly elaborate and which may have effected the thinking of your Washington office when it denied my amendment.

I'm sorry to bother you with what is possibly a closed matter, but it seems vital to me because it may help me to understand the requirements of your office should we request another DMEA loan (and I'm sure we shall) and because we certainly had not planned on the added expense of denied holes.

There are two factors in this matter which I consider to be important and which I possibly did not emphasize enough in my amendment request of June 7, 1955. The first is the drill pattern, which I maintain was not changed by the change in drill-hole locations. The second is the evaluation of the overall job.

I. Drill Pattern

In our exploration project contract, the second paragraph of that portion of Exibit "A" entitled "Stage I" states:

> "Not to exceed twenty (20) drill holes shall be drilled at locations approximately indicated on the attached map, Figure 2. The holes shall be drilled from points just above the upper rim of the Salt Wash member of the Morrison formation, shall penetrate the Salt Wash member, and shall be located on perpendiculars

"spaced at 500-foot centers from a line striking N. 30° - 30' E."

The fact which I wish to stress is that the drill pattern was an attempt at following the USGS's thinking of "fences" striking N. 30° 30' E. We couldn't utilize a straight-line fence, due to extreme drilling depths, so we located the holes along evenly-spaced perpendiculars to the assumed "fence line". I felt that any location, so long as it was along a perpendicular, was acceptable. When I changed some of the hole locations, I picked ones which were accessable and which were at a practical drilling depth, and which were on the perpendicular - the only necessities to a geologically good drilling pattern. Let me again stress the fact that all of the hole locations which were changed from the proposed locations, as shown on your "Figure 2", were moved along the perpendicular so that the original pattern was not changed.

Because my amendment requested a change in drill-hole location but not a change in drilling pattern, I think that it is quite a reasonable request.

II. Evaluation of the Overall Job

The thing which hurts me is that all of us in the field (your field men, Salsbury of the Bureau of Mines and Flint and Hasler of the USGS, included) think that the job has been done as well with the relocated holes as it would have been done had I used the original locations.

I was trying to do the job as expertly, as quickly, and as cheaply as possible, and that was what I thought I was doing until I got my copy of your letter to Mr. Max W. Bowen, dated September 2, 1955, in which you denied payment for holes Nos. 3, 4, 10, 16, and 17.

I can't help but think that you must feel that I was trying to be a little underhanded in shifting the holes as I did. That really wasn't at all what I was trying to do. I was simply trying to improve and expedite, in the field, a job which I had planned mostly in the office during very bad weather.

One point which I have heard (strictly hearsay) and which may be in our favor: I have heard that we got more money into actual drilling - even in our rough and unfavorable location - than many organizations which were drilling at the same time.

I am trying to convince you of the fact that our drilling pattern wasn't changed and that our ground was adequately evaluated even though I changed - indeed, because I changed - the location of some of the holes. And it seems to me that if we got the job done, we should be paid for it.

I do hope that you will find time to give some thought to this matter.

Very truly yours,

Ben H. Slothower
Exploration Superintendent
Golden Cycle Corporation

s

Surname copy

Murphy 700
Ellis

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

October 26, 1955

Memorandum

To: Associate Solicitor, Division of Mineral Resources

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

Subject: Docket No. DMEA-3565 (Uranium)
Contract No. Ldm-8778
Golden Cycle Corporation
Harrison-Burnett and Small-Lee
groups of claims
Montrose and San Miguel Counties, Colorado

Will you kindly prepare a Termination Agreement of the captioned contract according to DMEA Circular 33, June 30, 1954.

The effective date of the agreement is as of October 15, 1955. The Operator has completed the Stage I drilling with negative results. The Operator and Field Team concur in the recommendation that no further exploration work should be performed under the contract.

/s/ FMMurphy

F. M. Murphy

FMMurphy/gla
10-26-55
cc to: Docket
Code 700
Mr. Murphy

Note: Legal Div. forwarded the original & 5 copies of ~~[illegible]~~ Termination agreement to this Divison. Orig. & 5 copies sent to Field Team for execution.

FMM

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

RECEIVED
OCT 24 1955

224 New Customhouse
Denver 2, Colorado

October 20, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium) Contract Idm-E778, The Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado

Enclosed are the original and three copies of a letter dated October 13, 1955 from the Operator wherein he requests that Contract Idm-E778 be cancelled as of October 15, 1955 which is the expiration date of the recess of operations authorized by Amendment No. 1.

We recommend that the necessary termination agreement be prepared to terminate the contract as of the date requested by mutual agreement. The exploration work completed prior to the recess of operations did not result in a discovery or development of ore on which a certification can be issued.

W. M. Traver

W. M. Traver

Enclosures

RECEIVED
OCT 24 1955
DMEA
Doc Rec'd
OCT 14 1955
BUREAU OF MINES
Denver, Colorado

BEN HILL SLOTHOWER
NUCLA, COLORADO

October 13, 1955

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

Re: DMEA Docket 3565 (Uranium)
Contract Idm-E778, The Golden Cycle Corporation, Harrison-Burnett - Small-Lee groups of claims, Montrose and San Miguel Counties, Colorado

Subject: CANCELLATION OF CONTRACT

Dear Mr. Traver:

Since it is my belief that no commercial uranium ore bodies lie within the boundries of our Monogram Mesa leases, I ask that you cancel our DMEA drilling commitment and release us from any obligation to mine this property.

Will you please make this requested cancellation effective October 15, 1955?

Very truly yours,

GOLDEN CYCLE CORPORATION

by Ben Hill Slothower
Ben Hill Slothower
Exploration Superintendent

s

cc: Mr. Max W. Bowen
Executive Vice-President
and
Mr. John Jacobs, Jr.
Treasurer
The Golden Cycle Corporation

BEN HILL SLOTHOWER
NUCLA, COLORADO
October 13, 1955

RECEIVED
OCT 24 1955

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

Re: DMEA Docket 3565 (Uranium)
Contract Idm-E778, The Golden Cycle Corporation, Harrison-Burnett - Small-Lee groups of claims, Montrose and San Miguel Counties, Colorado

Subject: CANCELLATION OF CONTRACT

Dear Mr. Traver:

Since it is my belief that no commercial uranium ore bodies lie within the boundries of our Monogram Mesa leases, I ask that you cancel our DMEA drilling commitment and release us from any obligation to mine this property.

Will you please make this requested cancellation effective October [illegible], 1955?

Very truly yours,

GOLDEN CYCLE CORPORATION

by Ben Hill Slothower
Ben Hill Slothower
Exploration Superintendent

s

cc: Mr. Max W. Bowen
Executive Vice-President
and
Mr. John Jacobs, Jr.
Treasurer
The Golden Cycle Corporation

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

September 8, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA 3565 (Uranium), Contract Idm-E778, Golden Cycle Corporation, (Harrison-Burnett and Small-Lee groups), Montrose and San Miguel Counties, Colorado

Enclosed are the Government, Division, and Docket copies of Amendment No. 1 to the subject contract properly executed by the Operator. The amendment was submitted to this office for signature by your letter of August 30, 1955.

A copy has been forwarded to the Operator, the Region III, Finance Officer, copies distributed to the concerned field offices and are retained for our files.

W. M. Traver

W. M. Traver

Enclosures

Surname 700
Murphy
Ellis
Selfridge
Mitchelson

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

SEP - 2 1955

Mr. W. M. Travers
Executive Officer
DMEA Field Team, Region III
22d New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-5778
Golden Cycle Corporation
Harrison-Burnett and Small-Lee
groups of claims
Montrose and San Miguel Counties,
Colorado

Dear Mr. Travers:

This is to acknowledge your memorandum, dated August 24, 1955, and the enclosed memoranda from E. M. Burnham and John F. Shaw, all relating to drill hole location changes made by the Operator without Government approval.

We concur in your recommendation that the Government shall not participate in the costs of drilling holes Nos. 3, 4, 10, 14, 16, and 17 in the locations chosen by the Operator. However, we have no objection to the Operator drilling the above-numbered holes from the sites described under the contract.

Mr. Slather in a letter, dated June 7, 1955, addressed to your office, requested an amendment authorizing a change of drill-hole locations and an increase in the footage allotment under the contract.

It is suggested that the Field Team advise the Operator that this request is denied. We note that the Field Team recommended denial of the request for additional drilling footage in a memorandum, dated June 21, 1955.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JB)

APPROVED:

P. F. Yopes (JB)
Member, Bureau of Mines

(S) N. E. Nelson (JB)
Member, Geological Survey

Code 700
Mr. Murphy

Messrs. J. E. Crawford, Rm. 3641
T. H. Killsgaard, Rm. 5222
J. O. Hosted, Rm. 3210, GSA

Admr. Heading File
Operating Committee
Docket

Murphy:am
8-31-55
cc to:

R.C.S.

700

Surname copy

FMMurphy
Elg
Selfridge
Talbot

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

AUG 30 1955

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

Re: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-2778
Golden Cycle Corporation
Harrison-Burnett and Small-Lee
groups of claims
Montrose and San Miguel Counties,
Colorado

Dear Mr. Traver:

Enclosed are the original and five copies of Amendment No. 1 to the subject contract.

If you and the Operator find the amendment in order, please have all six copies signed by the latter and make the usual distribution thereafter.

We have taken no action in regard to an amendment pertaining to drill-hole locations pending your response to our letter of August 1, 1955, concerning thismatter.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GB)

Enclosures

APPROVED:

P. F. Yopes (GB)
Member, Bureau of Mines

/s/ N. E. Nelson (GB)
Member, Geological Survey

FMMurphy/gla
8-25-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224, GSA
JOHosted, Rm. 3210, GSA
Code 700
F. M. Murphy

R.S.4.

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

RECEIVED
AUG 29 1955

August 24, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA-3565 (Uranium), Contract Idm-E778, Golden Cycle Corporation, Harrison-Burnett and Small-Lee groups of claims, Montrose and San Miguel Counties, Colorado

Enclosed are memoranda from the Survey and Bureau of Mines in reply to your letter of August 1, 1955.

We recommend no Government participation in the drilling of holes numbers 3, 4, 10, 14, 16, and 17, because the Golden Cycle Corporation has not adhered to the program of exploration agreed to in the contract.

DMEA Field Team, Region III

W. M. Traver

E. N. Harshman

Enclosures

IN REPLY REFER TO:

DMEA
Date Rec'd.
AUG 1 7 1955
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

August 10, 1955

Memorandum

RECEIVED
AUG 2 9 1955

To: Executive Officer, DMEA Field Team, Region XII

From: E. N. Harshman

Subject: DMEA Docket 3565 (Uranium), Contract Ism-2776, Golden Cycle Corp., Small-Ice group of claims, Montrose and San Miguel Counties, Colorado

Your memorandum of August 4, 1955, requested comments on the Acting Chairman's letter of August 1, 1955, on the above subject exploration project.

Paragraph 3 of that letter is particularly pertinent in that it points out that the intent of the exploration program, as outlined in the contract, was to drill an offset fence of holes on 500-foot centers, each hole being drilled as far back as possible from the barren outcrop of the ore horizon. By drilling holes 3, 4, 10, 13, 16, and 17 at locations ranging from 700 to 4,800 feet from the locations given in the contract, and in every case closer to the barren outcrop, the Golden Cycle Corporation has not adhered to the program of exploration agreed to by the Government and the Corporation or the intent of that program.

There is no known geologic reason to justify drilling the seven holes at the unauthorized positions and certainly their relocation has not enhanced the possibility of finding ore as contended in the operator's letter of June 7, 1955. The more shallow drilling at the relocated positions of the holes was a factor which must have been realized at the time the program was laid out, and in spite of the greater drilling depths the holes were located as far as possible from the barren outcrop.

From the geological point of view, I can find no justification for the contention that the program of drilling partially completed by the Golden Cycle Corporation is superior to or even as good as that outlined in the contract.

The relocation of hole 2, not yet drilled, appears justified.

E. N. Harshman

E. N. Harshman
Member, Field Team

EHHarshman:mrh

DMEA
Date Rec'd.

AUG 24 1955

BUREAU OF MINES
Denver, Colorado

Region III

Building 20
Denver Federal Center
Denver 2, Colorado
August 23, 1955

RECEIVED
AUG 29 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw

Subject: DMEA 3565, Contract Ibn-8778, Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado

Reference is made to the letter dated August 1, 1955, from the Acting Chairman of the Operating Committee regarding Government participation in the drilling of holes Nos. 3, 4, 10, 14, 16 and 17.

We do not believe that Government participation in drilling the above holes is justified.

John F. Shaw
Supervising Mining Engineer

cc: 9
8778
Chron

JFS/cm

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

RECEIVED
AUG - 8 1955

2 New Customhouse
Denver 2, Colorado

August 4, 1955

Memorandum

To: J. P. Shaw
E. N. Harshman } w/copy Op. Committee's Letter

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3565 (Uranium), Contract Idm-E778
Golden Cycle Corp. (Harrison-Burnett, Small-Lee Groups of Claims)
Montrose and San Miguel Counties, Colorado

Attached are copies of a letter of August 1, 1955 from the Acting Chairman of the Operating Committee regarding justification of drill holes under Stage I of the subject contract.

You were furnished a copy of the applicant's letter of July 12, 1955, requesting a recess until October 15, which the Acting Chairman indicates is being acted on. That letter also indicates the drill equipment was removed from the project before completion of holes Nos. 2, 14, 15, 19, and 20, as quoted in the attached letter. This is presumed to be true, and the Operator is not requesting reimbursement for those holes.

Will you please make an analysis of the Acting Chairman's letter as soon as possible and submit your recommendations for transmittal to Washington, to eliminate as much delay as possible in the payment of claims by the Operator that are being held pending a Washington office decision.

W. M. Traver

Encl.

W. M. Traver

WMT:bh
cc - Act. Ch. Op. Comm.(2)
Hasler
Townsend } w/copy Op. Committee's Letter
Subject
Chron.

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

Surname copy
Murphy
Ellis
Martin
Jackson
Muttendorf

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

AUG - 1 1955

Re: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-8778
Golden Cycle Corporation
Harrison-Burnett and Small-Lee
groups of claims
Montrose and San Miguel
Counties, Colorado

Dear Mr. Traver:

We refer to your memorandum, dated June 23, and enclosures; also, to our teletype of July 15, 1955, in which we stated that the proposed Amendment No. 1 to the captioned contract was being carefully reviewed.

A study of all the data available does not disclose any geological reason that would enable us to justify the Golden Cycle Corporation's drilling of Stage I holes Nos. 3, 4, 10, 14, 15, 16, and 17, in the locations chosen by their engineers. It is granted that the original holes Nos. 2 and 3, being on conflict ground, should have been moved. The new location of hole No. 2 appears to be justified; however, the Operator should have requested the change of location. In our opinion, the change of location of hole No. 3 to the new location near the rim contact can not be justified.

The locations of the drill holes in Stage I of the contract were plotted to form a fence on a N. 30°-30' E. bearing. The holes along the fence line were located at intervals of 500 feet to drill as far back from the barren, exposed contact as was possible without drilling from the Burro Canyon formation or its talus slope.

If the map attached to the contract is geologically correct, then all the drill holes mentioned above, except No. 2, were drilled too close to the exposed contact of the Salt Wash and the Brushy Basin members of the Morrison formation.

We note in Mr. Slethower's letter to you, dated July 12, that holes Nos. 2, 14, 15, 19, and 20 have not been drilled and, moreover, the drilling rigs have been moved off the ground.

R.C.S.

The subject contract does not specify that all the work authorized for Stage I would have to be completed. It is quite possible that if the work had been completed as outlined under the contract the project might have been more successful in discovering oil or at least in indicating favorable structure.

If you have additional data that will enable us to justify the Government's participation in the drilling of holes Nos. 3, 4, 10, 14, 16, and 17, from the new locations, will you please forward it to this office.

We are presently preparing the requested amendment for a recess of the project work. The recess amendment will be called No. 1.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee (216)

APPROVED:

/s/ Robert W. Geehan (216)

Member, Bureau of Mines

Thor H. Kiilsgaard (216)

Member, Geological Survey

F. Murphy:gla:am
7-26-55: 7-28-55

cc to: Admr. Reading File
Operating Committee
Docket

Messrs. J. E. Crawford, Rm. 3641
T. H. Kiilsgaard, Rm. 5222
J. O. Hosted, Rm. 3210, GSA
Code 700
Mr. Murphy

The subject contract does not specify that all the work authorized for Stage I would have to be completed. However, we feel that there has been a considerable lack of cooperation by the Operator in this project and, also, that if the work had been completed as outlined under the contract, the project might have been more successful in discovering ore or at least in indicating favorable structure.

If you have additional data that will enable us to justify the Government's participation in the drilling of holes Nos. 3, 4, 10, 14, 16, and 17, from the new locations, will you please forward it to this office.

We are presently preparing the requested amendment for a recess of the project work. The recess amendment will be called No. 1.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

FMMurphy/gla
7-26-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKillsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Murphy

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

RECEIVED
JUL 25 1955

224 New Customhouse
Denver, Colorado

July 21, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA FieldTeam, Region III

Subject: DMEA 3565, Contract Idm-E778 (Uranium), Golden Cycle Corporation, (Harrison-Burnett, Small-Lee Groups), Montrose and San Miguel Counties, Colorado

Enclosed are four copies of a letter from the operator of the subject contract requesting a recess of operations until October 15, 1955.

In response to our teletype of July 14 you indicated by return teletype July 15 that you will prepare the amendment.

W. M. Traver

W. M. Traver

Enclosures

BEN HILL SLOTHOWER
NUCLA, COLORADO

July 12, 1955

DMEA
Date Rec'd.
JUL 14 1955
BUREAU OF MINES
Denver, Colorado

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

RECEIVED
JUL 25 1955

RE: Docket DMEA 3565 (Uranium)
Contract Idm-E778, Golden
Cycle Corp., (Harrison-Burnett
- Lee-Small groups of claims),
Montrose and San Miguel Coun-
ties, Colorado

Dear Mr. Traver:

Since I last talked with you, I have completed all the first-stage drilling on our Small-Lee group except holes 2, 14, 15, 19, and 20. The drilling most recently completed, holes 5, 6, 7, 8, and 9 which were drilled in an area that I felt had great promise, proved to be so very poor that I have lost hope of finding mineralization. We seem to be completely out of the mineral belt. So convinced am I of this that I have stopped drilling and have moved the rigs off our ground.

Mr. Arthur Flint, Monogram Mesa Party Chief for the USGS, concurs with my evaluation of the area and feels, too, that is definitely out of the Uravan Mineral Belt.

I had thought of asking permission to terminate our contract on this date, as per the provisions outlined in Article 10 of our Exploration Project Contract. I am sure that, after a field examination by your field team, you would allow the termination.

However, as we have until October 31, 1955 to complete the project (see Article 3 of the contract), I request that the Golden Cycle Corporation be allowed to recess operations for an indefinite period not to exceed three months. It is possible that proposed drilling to the north and to the south of our land may throw new lighton the possibilities of ore deposition in our area. If this should prove to be the case, we might consider second-stage drilling as an offset to mineralization found adjacent to our ground.

In other words, rather than terminate the contract now, we should like to keep it active but do no additional drilling. If no new favorable information is made available to us during this recess, we will terminate the contract in mid-October, 1955.

My June report will be completed within a very few days, as will the one for July if the requested recess is allowed, so you may look for this additional corroborative information soon after the first of next week.

Very truly yours,

Ben Hill Slothower
Exploration Superintendent
Golden Cycle Corporation

s

CC:

Mr. William Hasler
U. S. Geological Survey
P. O. Box 360
Grand Junction, Colorado

Mr. Max W. Bowen
Executive Vice-President
Golden Cycle Corporation

Mr. [illegible]
Mines Manager
Golden Cycle Corporation

Surname 700

Murphy
Chinlg
Kilsgaard
Gubon
Selfridge
Kirkendall
Mitchell

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

Depart ment of the Interior

DMEA
14X1401(01) Revolving Fund, Defense Production Act, Interior
(Allocated Working Fund to the Office of the Secy.)

JUL 1 5 1955

T E L E T Y P E

W. M. TRAVER, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BLDG.
DENVER 2, COLORADO

REURTTS DOCKET DMEA 3565, CONTRACT IDM-E778 GOLDEN CYCLE CORPORATION, RECOMMENDED AMENDMENT NO. 1 BEING CAREFULLY REVIEWED. WILL ADVISE WHEN DECISION IS REACHED. WILL PREPARE THE REQUESTED AMENDMENT FOR RECESS PERIOD.

George C. Selfridge
(WB)
GEORGE C. SELFRIDGE,
CHAIRMAN, OPERATING COMMITTEE

FMMurphy:Gla:am
7-12-55: 7-15-55
cc to: Admr. Reading File
Operating Committee
Docket
Messrs. J. E. Crawford,Rm.3641
T. H. Kiilsgaard,Rm.5222
J. O. Hosted,Rm.3210,GSA
Code 700
Mr. Murphy
Confirmation to DMEA Field Team, Region III

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

Surname copy
F Murphy
Shirley

Department of the Interior

DMEA
14X4401(01) Revolving Fund, Defense Production Act, Interior
(Allocated Working Fund to the Office of the Secy.)

T E L E T Y P E

(Uranium)

W. M. TRAVER, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BLDG.
DENVER 2, COLORADO

REURTEL DOCKET DMEA 3565, CONTRACT IDM-E778 GOLDEN CYCLE CORPORATION, AMENDMENT NO. 1 BEING PREPARED IN ACCORDANCE WITH FIELD TEAM'S RECOMMENDATION. WILL FORWARD SHORTLY.

GEORGE C. SELFRIDGE,
CHAIRMAN, OPERATING COMMITTEE

FMMURPHY/gla 7-12-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. J. E. Crawford, Rm. 3641
T.H. Kiilsgaard, Rm. 5224
J.O. Hosted, Rm. 3210, GSA
Code 700
Mr. Murphy
Confirmation to DMEA Field Team, Region III

Chairman, Opr. Comm. D.M.E.A.

RECEIVED
JUL 15 1955

BUR MINES DN 235 7-14-55 4-30 PM

CHAIRMAN, OPERATING COMMITTEE, DMEA

OPERATOR DMEA -3565, CONTRACT IDM-E778, GLXXX GOLDEN CYCLE CORPORATION, HAVE COMPLETED STAGE I WITH UNFAVORABLE RESULTS IN ALL HOLES DRILLED. THEY REQUEST RECESS OF OPERATIONS UNTIL OCTOBER 15,1955 IN ORDER TO EVALUATE DRILLING IN PROGRESS ON ADJOINING PROPERTIES. IF RESULTS ARE UNFA VORABLE THEY WILL REQUEST TERMINATION AT EXPIRATION OF RECESS. PLEASE PREPAR E AMENDMENT TO ALLOW RECESS OR AUTHORIZE US TO OXXX DO SO.

W M TRAVER

Denver, Colo.

JUL 15 8 12 AM '55

BUREAU OF MINES
MAIL ROOM
WASHINGTON D.C.

Chairman, Operating Comm. DMEA.

RECEIVED
JUL 12 1955

BUR MINES DN 235 7-11-55 9-11 AM

CHAIRMAN, OPERATING COMMITTEE, DMEA

RE DOCKET DMEA 3565, CONTRACT IDM-E778, GOLDEN CYCLE CORPORATION, MAXXX MATERIAL FORWARDED BY OUR MEMORANDUM OF JUNE 23. PLEASE TELETYPE ADVICE AT EARLIEST POSSIBLE MOMENT AS TO YOUR DECISION IN THE MATTER.

W M TRAVER

Denver, Colo.

JUL 11 12 46 PM '55

MAIL ROOM
WASHINGTON, D. C.

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

224 New Customhouse
Denver 2, Colorado

June 23, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Contract Idm-E778, Golden Cycle Corporation, Harrison-Burnett, Small-Lee groups of claims, Montrose and San Miguel Counties, Colorado

Enclosed is the following material relative to an amendment to the subject contract:

1. Original and three copies of a letter from the operator, dated June 9, 1955.

2. Four copies of a map provided by the operator.

3. One copy of a drilling agreement between the operator and the independent contractor.

4. Original and three copies of data consisting of a memorandum dated June 13, 1955 from A.E. Flint, memorandum dated June 13, 1955 from J.W. Hasler, and memorandum dated June 17, 1955 from E.N. Harshman, U.S. Geological Survey.

5. Original and three copies of data consisting of a memorandum dated June 21, 1955 from M.H. Salsbury and memorandum of the same date from John F. Shaw, U.S. Bureau of Mines.

It appears that the requested change in the location of eight of the drill holes is to correct the operator's error in the location of the holes as drilled. However, in all probability the change in hole locations would have been approved had the operator requested such approval prior to the drilling of the holes.

There are certain benefits to the Government, because had the holes been drilled to their objective at the original locations it would have involved footage in excess of that originally estimated.

We are in doubt as to how to proceed in the matter and it is referred to you for your review and appropriate action or advice to this office as to how we should proceed.

We are of the opinion that it is sufficiently in the Government's interest to approve the requested change in the location of the eight holes.

In reference to hole 10, contrary to the recommendations of field engineers and geologists we believe that it should also be approved at the new location since conditions have been known to change in a much less distance than involved with the hole.

As to the balance of the operator's request relative to a change in the distribution of funds under category 1, we see no reason for the change at this time. We interpret the allowable maximum unit cost established for core and non-core drilling to include all incidental costs such as reaming, standby time, and other incident costs to the drilling billed by the independent contractor.

To eliminate a possible suspension of operations please advise us soon of your decision.

W.M. Traver

W.M. Traver

Enclosures

BEN HILL SLOTHOWER
NUCLA, COLORADO

June 7, 1955

DMEA
Data Rec'd.
JUN 16 1955
BUREAU OF MINES
Denver, Colorado

DMEA Field Team
Region III
224 New Customhouse
Denver 2, Colorado

RE: Docket DMEA 3565 (Uranium)
Contract Idm-E778, Golden
Cycle Corp., (Harrison-Burnett
- Small-Lee groups of claims),
Montrose and San Miguel Coun-
ties, Colorado

SUBJECT: Amendment of Contract

Gentlemen:

It is the desire of the Golden Cycle Corporation to amend its contract with you in two ways that will, we believe, improve the accuracy and completeness of the work to be performed, and facilitate the field operation.

This corporation wishes to change the locations of a number of drill holes and to increase the footage allotment of the Stage I drilling for the reasons outlined below.

1. Drill Hole Location Changes

As the contract now states, not over twenty holes shall be located on perpendiculars spaced at 500-foot centers from a line striking N. 30° 30' E. It is not our wish to alter this basic plan in any fashion.

However, an unexpected tresspass has impaired our control of the claims which hold the locations of drill holes number 3 and 4. We have known of this tresspass, on the part of our lessors, for some time but were told that it was resolved in the favor of the lessors. There now appears to be some validity to these prior claims. In view of this, we wish to move the location of Hole 2 north-west along its perpendicular to Lee 6 claim, and Hole 3 south-east along its perpendicular to Lobo 25 claims. The enclosed map shows the moves, which places Hole 3 among the group of holes on the eastern side of our area. Hole 2 cannot be moved in this direction and still remain above the ore horizon on our ground.

In order to have a better line of holes along the eastern side of our claims, and to reduce the noncore drill depth, we should like to move Hole 4 down its perpendicular until its site is south of Hole 3. This move, as are all the proposed moves, is shown on the enclosed map.

It is desired to move Hole 10 to the south-east along its perpendicular to West Fork 15 claim to be assured of the correct stratigraphic target while plug drilling the holes to the north of it. This move will have the advantage of reducing the noncore-drill depth while not placing it so close to the Saltwash exposure as to merely duplicate the exposed section with its core.

We should like to move Holes 14, 15, 16, and 17 in the manner shown on the map in order to further reduce the total noncore drilling and to make a more continuous line of drill sites for correlation purposes.

In all, it is requested that eight drill-hole locations be changed.

As the contract now stands, it will be very difficult to drill the twenty holes on the present locations, due to a shortage of core and noncore footage. This shortage is caused by an error at selecting the upper Salt Wash contact. The changes requested would help alleviate this shortage.

2. Increase in Footage Allotment

In its application for the DMEA loan bound by Contract Idm-E778, the Golden Cycle Corporation based its drilling cost estimates on the going winter rates as it expected to be drilling by February, 1955. As it happens however, the majority of Stage I drilling will be performed in June of this year. Because the drill contractor can enjoy excellent weather during the operation, the drill costs-per-foot are actually substantually below thoes shown in the contract. Because of this lower cost-per-foot-of-hole, it is evident that the footage allotments of both noncore and core drilling can be increased without increasing the total cost for drilling Stage I.

It is requested that the Stage I drilling costs be changed to approximately the following:

4/0, 3,800 feet of noncore rotary drilling @ $2.00/ft.	$7,600.00	
3½ 2,222 feet of BX-core diamond drilling @ $3.00/ft.	6,666.00	
34 hours of standby @ $12.00/hr.	408.00	$14,674.00

(The incidental allowance 1/ for each foot of drilling completed should be cut down to make the total the same.)

This additional footage would safely allow the holes to be placed back from the rim far enough to assure that no duplication of rim information will be gathered and that enough coring will be done to assure that no possible ore-bearing sand will be unexplored.

The above changes in the contract are requested in the belief that they will enhance the possibility of finding ore in the area and will in no way jeopardize the coverage of the original drilling program or increase its cost.

Respectfully,

GOLDEN CYCLE CORPORATION

by Ben H. Schroeder
Exploration Superintendent

s
Encl.:

4 cc.
9 maps
1 drill agreement

cc: Mr. Arthur Flint, USGS
Messrs. Max W. Bowen
Charles H. Carlton

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DMEA
Date Rec'd.
JUN 22 1955
BUREAU OF MINES
Denver, Colorado

Region III

Building 20, Room 137
Denver Federal Center
Denver 2, Colorado
June 21, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw

Subject: DMEA 3565, contract Idm-E778, Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado

Enclosed are the original and nine copies of a memorandum by M. H. Salsbury covering the operator's request for an amendment to contract Idm-E778. The operators request that the locations of 8 drill holes be changed and that the unit cost of drilling be reduced to allow the operator to perform additional drilling. It is recognized that the proposed drill hole locations may have merit from a geologic and engineering view point. However, the operator started to drill on these holes without the knowledge or consent of the Government. It is contrary to the established DMEA policy to amend contracts for the purpose of correcting the operator's mistakes. Therefore, it is recommended that this request be denied.

The estimated cost of independent contracts as listed in "Exhibit A" of the contract are maximums. The actual costs are the basis of payment, therefore, it is not necessary to amend the contract to reduce the unit cost per foot of drilling.

John F. Shaw
Supervising Mining Engineer

enclosures

cc 9
E778
DMEA Chron.

JFS/pah

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region III

Building 20, Room 137
Denver Federal Center
Denver 2, Colorado
June 21, 1955

Memorandum

To: John F. Shaw, Supervising Mining Engineer

From: M. H. Salsbury

Subject: DMEA 3565 (Uranium) Contract Idm-E778, Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado - Recommendations on amendment to the contract requested by the operator

The operator under the subject contract has requested an amendment thereto authorizing a change in location of a number of holes listed under Stage I of the contract as shown on a map, figure 2 attached to the contract. Authorization of more core drilling footage at no increase in the maximum cost allowed under Stage I of the contract is also requested.

Accompanying the operator's request is a map showing revised locations on 8 holes which have been moved. All holes are still on the perpendiculars spaced 500 feet apart, as provided in the contract, but 7 of them have been relocated along their respective perpendiculars a distance of 700 to 1600 feet from the original locations, and 1 hole, No. 3, has been moved 4,800 feet. It does not appear that the new hole locations meet the requirements of the contract in which it is stated under Stage II that ".....holes shall be drilled at locations approximately indicated on the attached map, figure 2."

One hole, No. 1, at an approved location, is being claimed in May 1955, and the operator will claim reimbursement in June 1955 for holes No. 3, 4, and 10 at unauthorized locations, which had been completed at the time of the inspection on June 7, 1955. Holes No. 14, 15, 16, and 17 at unauthorized locations had been plug-drilled but not completed.

The operator is currently engaged in drilling other holes, locations of which have not been changed. Reimbursement for some of these holes will also be claimed in June 1955. Favorable sandstone has been encountered in most of the holes but no mineralization.

Relocation of holes No. 2, 3, and 4 was made by the operator's superintendent because they were originally on Lee claims Nos. 10, 12, and 16, which were found to be in conflict with prior locations. Holes No. 4, 14, 15, 16, and 17 were moved towards the rim to cut down on the drilling depth to the potential ore horizon. Hole No. 10 was relocated near the rim as a control because the depth to the contact between Salt Wash and Brushy Basin members had proved to be less than originally estimated in

holes 1, 3, and 4, and the operator's superintendent believed that more accurate information on plug drilling depths would result.

The original estimates on plug and core drilling were in error, and the operator anticipates running short of core-drilling footage. He includes in the proposed amendment a change in the maximum footages permitted. This could be done without exceeding the maximum under Stage I, because the actual prices paid the driller are less than the maximum rates allowed in the DMEA contract.

With the exception of hole No. 10, the changes made in drilling sites by the operator are logical and reasonable from an engineering standpoint and do not change the intent of the contract or result in incomplete exploration of the area on the wide-spaced pattern, provided that geologic requirements are still satisfied. Hole No. 10 is about 350 feet from the Salt Wash rim and may duplicate to some extent information which is obtainable from rim exposures. Its relocation for control of plug drilling depths, as explained by the operator's superintendent, may have been advisable, but equally good control could probably have been realized by utilizing other available data.

Because the proposed amendment to contract Idm-E778, except as it applies to Hole No. 10, is one which, in all probability, would have been approved by the Field Team, Region III, if it had been presented properly in advance, and because the operator's manager, M. W. Bowen, took immediate steps to have DMEA representatives notified about unauthorized changes as soon as he became aware of them, it is recommended that the proposed amendment, except as it applies to standby time, and to relocation of hole No. 10, be approved. The holes are being probed by the Geological Survey but this is not a requirement of the contract, and therefore standby time is not justified as part of the DMEA exploration cost.

M. H. Salsbury
Mining Engineer

cc 9
E778
DMEA Chron.

MHS/pah

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

IN REPLY REFER TO:

Date Rec'd,
JUN 20 1955
BUREAU OF MINES
Denver, Colorado

June 17, 1955

Memorandum

To: Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 3565 (Uranium), Contract Idm-E778, Golden Cycle Corporation, Montrose County, Colorado

Enclosed are 10 copies each of a memorandum by A. E. Flint and a memorandum by J. W. Hasler, 4 copies of an amendment request by the applicant, 8 copies of a map accompanying that request, and 1 copy of a drilling agreement, all on the above subject contract.

The amendment request by the applicant proposes the moving of 8 of the 20 first-stage holes authorized under the contract. Actually, 7 of the 8 holes the applicant proposes to move have been completed or partially completed at the proposed new locations not authorized under the contract. The new locations are from 700 to 4,800 feet removed from the locations now authorized.

With the exception of hole No. 10, the proposed changes do not appear to materially affect the plan of exploration, although to admit that the new proposed locations are fully as satisfactory as the old, is an admission that the original locations, with a greater depth to the ore horizon, were poorly selected. The shifting of Hole No. 10 to a point about 300 feet from a barren outcrop of Salt Wash is not within the intent of Stage I drilling, and I suggest the request for this change be denied.

Approval or denial of the request to amend the contract to permit a shift in the location of 8 first-stage holes (7 of which have already been drilled at unauthorized locations) is a policy decision to be made at the Field Team level; therefore, no recommendations are made.

E. N. Harshman

E. N. Harshman

Enclosures (25)

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

June 13, 1955

Memorandum

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

From: J. W. Hasler

Subject: Amendment of contract, DMEA Docket 3565 (Uranium), contract Idm-E 778, Golden Cycle Corporation (Harrison-Burnett-Small-Lee groups of claims, Montrose County, Colo.)

The Operator has requested an amendment of the subject contract through its engineer, Mr. Ben H. Slothower. Mr. Slothower has proposed location of 8 holes, 6 of which, by taking advantage of the topography, will reduce drilling costs, 2 of which will move holes from claims whose ownership is in doubt to claims of definite ownership by the Golden Cycle Corporation.

I have reviewed the request for amendment with Mr. Slothower and Mr. M. H. Salsbury, engineer of the U. S. Bureau of Mines, as well as the accompanying memorandum written by Arthur E. Flint, project geologist in the Monogram Mesa area. Although one or two of the diamond-drill holes are proposed to be moved several thousand feet, they are being moved in the direction parallel to the sedimentary trend, which is also the trend of favorable ground. They should not affect the overall drilling plan.

As stated in Mr. Flint's memorandum, the proposed holes are down slope from the original holes and closer to rim exposures, but are not placed so near the rim that information available from outcrops would be duplicated in any of the drill holes. Drill hole No. 10 may be a possible exception, which is between 300 and 400 feet from the nearest Salt Wash outcrop. Drilling

experience in that area has shown that rocks in many places change significantly in distances of 300 to 400 feet. The holes planned to be drilled under the new amendment will allow for some additional footage in both non-core and core drilling, but will not increase the total amount of money stipulated under the contract. As the contract now stands, it would be difficult to drill the 20 holes on the present locations, due to a shortage of core and non-core footage. This shortage is caused by an error in selecting the upper Salt Wash contact and the changes requested would help to alleviate this shortage. Because of the changes in lithology, the upper Salt Wash contact with the Brushy Basin is sometimes very difficult to ascertain, and may be easly missed. I concur with Mr. Flint's and Mr. Slothower's request for an amendment and recommend that approval be granted the Golden Cycle Corporation to make the proposed changes in the contract. The Government's interest in the contract should not be impaired by these changes.

Enclosed is an original and three copies of a letter to the Field Team from Mr. Slothower, one photostatic copy of the drilling agreement between the Golden Cycle Corporation and Johnson and Youvan Drilling Company, Naturita, Colorado, twelve copies of Mr. Flint's memorandum to Mr. Williams. Eight copies of the map showing the proposed amendment were sent to Denver with Mr. Salsbury Friday, June 10. One copy of the map and Mr. Slothower's letter will be retained in this office for future reference.

Mr. Salsbury will contact you regarding the proposed amendment.

J. William Hasler

J. William Hasler,
Geologist

JWH/mlr
Enclosures

MINERAL DEPOSITS
DMEA
RECEIVED
JUN 15 1955
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

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

June 13, 1955

Memorandum

To: DMEA Field Team, Region III
Through: W. P. Williams

From: A. E. Flint, Bull Canyon Project, Colorado Plateau District

Subject: Golden Cycle DMEA Docket 3565, contract Idm-E 778

Attached is a request for an amendment of subject contract by Mr. Ben Slothower, engineer in charge of exploration for Golden Cycle Corp. Mr. Slothower has proposed relocation of 8 holes, 6 of which, by taking advantage of topography, will reduce drilling costs, 2 of which will move holes from claims whose ownership is in doubt to claims whose ownership is not questioned. The proposed hole locations will reduce the amount of non-core drilling substantially.

The map accompanying the request for amendment shows the present and proposed hole sites. As a general statement, where drilling is on a pattern of holes spaced at distance of 500 to 1,000 feet, a great number of combinations of hole locations may be laid out that maintain the integrity of the overall drilling plan. This is particularly true where the number of holes is limited and not sufficient to drill in a true grid pattern. In the case of this request for amendment the proposed hole sites are moved in a direction parallel to the sedimentary trend, hence also the trend of favorable ground, and the overall drilling plan is not affected.

The proposed holes are down slope from the original holes and closer to rim exposures, but none are placed so near the rim that information available from outcrops would be duplicated in the drill hole. A possible exception is hole 10, which is between 300 and 400 feet from the nearest Salt Wash outcrop. Slothower feels that a hole drilled here is necessary for stratigraphic control. Whether or not this is true, our own drilling experience has shown that rocks in many places change significantly in distances of 300 to 400 feet.

Obviously it is desirable to move the two original hole locations from the claims now of doubtful ownership.

I recommend that approval be granted Golden Cycle to make the proposed changes in drill hole sites indicated on the attached map. The Government's interest in the contract is not impaired by the proposed changes, and the reduction of non-core drilling in the zone above the ore-bearing sandstone will decrease substantially the total cost of the proposed holes.

Slothower has also requested an amendment that will permit using the savings in drilling costs below the total amount of money set up in the contract to drill 400 additional feet of non-core and 322 feet more of core. It is doubtful if the total footage now provided in the contract will permit drilling to completion the number of holes deisgnated. Hence, if an amendment to increase the amount of footage requested is not contrary to policy, I recommend such request for amendment be granted.

AEF/mlr

Attachment

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

MAY 26 1955

Memorandum

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

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-3565 (Uranium), The Golden Cycle Corporation, Harrison-Burnett and Small-Lee Group of claims, Contract No. Idm-E778

Pursuant to Mr. Murphy's memorandum dated May 13, we have reviewed the letter dated May 2 from the Operator to the Executive Officer and the latter's memorandum dated May 5 to the Chairman of the Operating Committee, in connection with the discussion in our memorandum dated March 10 concerning the leasehold interests held by the Operator.

Two groups of claims are the subject of the Contract. The docket disclosed originally that the first group (Burnett-Harrison) had been relocated under P.L. 585, but there was no such disclosure for the second group (Lee-Small). The substance of our March 10 memorandum was that in the absence of evidence that the second group had been relocated under P.L. 585, evidence of the Operator's right to possession, i.e., a copy of the basic leasehold from the A.E.C., was required.

As it now appears that the second group of claims also was relocated under P.L. 585, and as the Operator has submitted a Performance Bond for this group of claims, the docket now appears to be in order.

J. L. Hofflund
Acting Assistant Solicitor,
Defense Minerals

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

MAY 26 1955.

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J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor,
Defense Minerals

Rubin

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

MAY 26 1955.

Memorandum

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

From: Acting Assistant Solicitor, Defense Minerals

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J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor,
Defense Minerals

HCRubin:gjb 5/26/55
Copy to: DMEA Docket
Sol. Docket
E. W. Ellis (2)
J. L. Hofflund
H. C. Rubin
Chron. File

Surname copy
Murphy
Ellis

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

May 13, 1955

Memorandum

To: Acting Assistant Solicitor, DMEA

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

Subject: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-E778
The Golden Cycle Corporation
Harrison-Burnett and Small-Lee Group of claims
Montrose and San Miguel Counties, Colorado

With reference to your memoranda dated March 10 and 24, and letter from the Chairman of the Operating Committee dated April 20, 1955, we are referring you to Mr. Traver's memorandum of May 5 and the Operator's letter of May 2 regarding information requested on the "basic lease from the Atomic Energy Commission" which we requested be submitted for our review.

Kindly let us have your comments after a review of these communications.

F.M. Murphy

F. M. Murphy

FMMurphy/gla
5-16-55
cc to: Docket
Code 700
Mr. Murphy

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

224 New Customhouse
Denver 2, Colorado

May 5, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Contract Idm-E778, Golden Cycle Corporation, (Harrison-Burnett - Small-Lee groups of claims), Montrose and San Miguel Counties, Colorado

This responds to your letter of April 20, 1955 in which you requested that the Applicant submit a basic lease from the Atomic Energy Commission for inspection.

Enclosed is a copy of a letter from the Applicant dated May 2, 1955 in which he states that the claims covered in the application have been validated under Public Law No. 585, and that the leases under Atomic Energy Commission Circular 7 are non-existent.

If the information contained in the Applicant's letter does not suffice, will you please advise

W. M. Traver

W. M. Traver

Enclosure

OFFICE OF
THE PRESIDENT

THE GOLDEN CYCLE CORPORATION

COLORADO SPRINGS, COLORADO

May 2, 1955

/DMEA
Date Rec'd.
MAY 4 1955
BUREAU OF MINES
Denver, Colorado

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

RE: Docket DMEA 3565 (Uranium)
Contract Idm-E778, Golden
Cycle Corp., (Harrison-Burnett
- Small-Lee groups of claims),
Montrose and San Miguel Coun-
ties, Colorado

Dear Bill:

The following morning after my visit in your office Thursday, I called Mr. Slothower concerning the "basic lease from the Atomic Energy Commission" of the Small-Lee and the Harrison-Burnett groups. Ben discussed this with Mr. Lee and Mr. Burnett and advises that their applications for these leases have been returned to them, together with the fee which they had submitted to the Atomic Energy Commission. Consequently, it is impossible for us to submit these leases for their inspection since there are no leases in existence.

For our own information, we would like to know why it would be necessary to have these leases, since the above two groups have complied with Law 585 in every detail and, of course, the lease referred to was covered under Atomic Energy Commission Circular 7, which is not applicable since 585 was passed.

Trusting that this is satisfactory, but should there be any further questions, we will be pleased to hear from you. I am enclosing a carbon copy of this letter, which you may wish to send to Mr. Selfridge in Washington, D. C.

Yours very truly,

THE GOLDEN CYCLE CORPORATION
URANIUM DIVISION

Max W. Bowen

Max W. Bowen
Executive Vice President

MWB:hr

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

224 New Customhouse
Denver 2, Colorado

April 25, 1955

Mr. Max Bowen
Executive Vice President
Golden Cycle Corporation
Uranium Division
Post Office Box 86
Colorado Springs, Colorado

Re: Docket DMEA 3565 (Uranium)
Contract Idm-E778, Golden
Cycle Corp., (Harrison-
Burnett - Small-Lee groups
of claims), Montrose and
San Miguel Counties, Colorado

Dear Max:

We are in receipt of the following message from our Washington office:

"The copies of the leases attached to the application are in order. However, the Legal Division states that the basic lease from the Atomic Energy Commission should be submitted for our inspection. Therefore, will you kindly advise the Applicant to forward a copy of said document to this Office."

The basic lease from the Atomic Energy Commission should be forwarded to:

Mr. George C. Selfridge
Chairman of the Operating Committee
United States Department of the
Interior
Defense Minerals Exploration
Administration
Washington 25, D. C.

Very truly yours,

W. M. TRAVER,

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

HMC:sr

cc Chairman Op. Comm. (2)
Subject
Chron

WMT:sr

700

Surname

Murphy
Selfridge
F E Johnson

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

APR 2 0 1955

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

Re: Docket No. DMEA-3565 (Uranium)
Contract No. Idm-E778
Golden Cycle Corporation
Harrison-Burnett and Small-Lee
groups of claims
Montrose and San Miguel Counties
Colorado

Dear Mr. Traver:

This is to acknowledge your memorandum, dated April 1, 1955, concerning the leases which should be part of the subject contract.

The copies of the leases attached to the application are in order. However, the Legal Division states that the basic lease from the Atomic Energy Commission should be submitted for our inspection. Therefore, will you kindly advise the Applicant to forward a copy of said document to this Office.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JHB)

APPROVED:

J. H. Hedges (JHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

FMMurphy:am
4-20-55
cc to: Admr. Reading File
Operating Committee
Docket
Messrs. J. E. Crawford, Rm. 3641
T. H. Kiilsgaard, Rm. 5224
J. O. Hosted, Rm. 3210, GSA
Code 700
Mr. Murphy

R.C.G.

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

Defense Minerals Administration
RECEIVED
APR 14 1955

224 New Customhouse
Denver 2, Colorado

April 11, 1955

REGISTERED

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Contract Idm-E778, The Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado

Enclosed are the Government, Division and Docket copies of Contract Idm-E778 which was prepared in Washington and forwarded by your letter of March 29, 1955 for signature by the operator.

Copies of the contract have been given to the operator, the Finance Office, Region III, and a copy has been retained for our files.

W. M. Traver

W. M. Traver

Enclosures

4/4/55 gla

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

224 New Customhouse
Denver 2, Colorado

April 1, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Golden Cycle Corp., (Harrison-Burnett and Small-Lee groups of claims), Montrose and San Miguel Counties, Colorado

This has reference to your letter on the subject docket dated March 29, 1955 wherein the Legal Division states that:

> "We do not have copies of the uranium lease or leases and therefore are not aware of the lease terms. However, in general, we understand that they are not for any fixed term, running so long as exploration for and mining of uranium is continued. Copies of the uranium lease should be furnished to the Government."

In our transmittal letter to you dated February 21, 1955 (Item 4) we forwarded you a photostatic copy of the memorandum of agreement dated June 18, 1954 between Small-Lee and the Golden Cycle Corporation. The contents of this agreement provide for a lease and fix the term of the lease at five years.

Item 5 included in our transmittal letter to you dated February 21, 1955 was a photostatic copy of a memorandum of agreement dated June 29, 1954 between Harrison-Burnett and the Golden Cycle Corporation. The contents of this agreement provide for a lease and specify that this lease is for a five year period.

Will you please advise if the Legal Division rules that the above-mentioned memoranda of agreement are not acceptable as leases.

W. M. Traver

W. M. Traver

RECEIVED
APR 6 1955
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

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

224 New Customhouse
Denver 2, Colorado

April 1, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Golden Cycle Corp., (Harrison-Burnett and Small-Lee groups of claims), Montrose and San Miguel Counties, Colorado

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W. M. Traver

W. M. Traver

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

Surname copy

Murphy
Ellis
Chandler
Selfridge
Ferguson
Mattendorf

MAR 29 1955

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

Re: Docket No. DMEA-3565 (Uranium)
Golden Cycle Corporation
Harrison-Burnett and Small-Lee
Groups of claims
Montrose and San Miguel Counties,
Colorado

Dear Mr. Traver:

Enclosed are the original and five copies of a proposed long-form contract between the Government and the Golden Cycle Corporation. You will note when you receive the extra copy of the contract and the two additional copies of Annex I and Exhibit "A", that we have not included copies of the list of individual claims.

Our Legal Division has made the following comments in regard to the property rights mentioned in the proposed contract:

> "A lease agreement dated June 18, 1954, with S. C. Lee and U. A. Small, granting the Operator a lease of the mineral rights in certain claims listed under the heading 'As Filed under Colorado Mining Law'; and assigning uranium lease rights to be acquired for those claims listed under the heading: 'As filed under Circular 7.' We are unable to determine from the docket whether the Operator's lessor has taken advantage of Public Law 585 with respect to any of the claims listed under . . . above, however, to our knowledge, there is no requirement that he must do so."

The lessors, W. F. Burnett and Duncan E. Harrison, appear to have complied with that law and apparently have validated their mining claim locations.

The Legal Division furthermore states that:

> "We do not have copies of the uranium lease or leases and therefore are not aware of the lease terms. However, in general, we understand that they are not for any fixed term, running so long as exploration for and mining of uranium is continued. Copies of the uranium lease should be furnished to the Government."

R.C.S.

Will you please advise the Operator in regard to the above request for copies of such uranium leases.

If you and an authorized representative of the Operator find the proposed contract in order, please have the latter sign all six copies and make the usual distribution thereafter.

You will note on map Figure 2 that 12 claims have been sketched in. Also, under "Claim Index" the "West Fork" claims 64 to 72 were wrongly printed "West Fort." Furthermore, "101 W.F. No. 17" has been changed to "Lobo No. 27."

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Enclosures

APPROVED:

J. H. Hedges (JHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

FMMurphy/gla
3-14-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. J. E. Crawford, Rm. 3641
T. H. Kiilsgaard, Rm. 5224
J.O. Hosted, Rm. 3210, GSA
Code 700
Mr.Murphy

P. S. You will note that the long-form contract has been used, placing the drilling under "Independent Contracts" and the other costs under "Fixed Unit Costs." The total estimated cost of $30,440 in this proposed contract is lower than the Operator's estimate of $31,700, because no allowance has been made for contingencies.

The reason for specifying "Independent Contracts" on drilling is to permit the Government to benefit in case the unit cost is lower than our estimate. It is possible that in the future we will require applicants for drilling programs to submit bids for such drilling from three independent contractors. This would only apply to projects recommended by the Field Team, in which cases probably the short-form contracts may be used.

Division copy

MF-200A
(Revised June 1954)

Docket No. DMEA [illegible]

Commodity Uranium

Contract No. Idm-E

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT[1]
(Short Form)

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] The Golden Cycle Corporation, Uranium Division, a West Virginia Corporation, whose mailing address is P. O. Box 36 Colorado Springs, 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-200A), the attached Exhibit "A," Annex I, and .....

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 Colorado, County of Montrose and San Miguel, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] lessee of [5] See Annex I 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 of the land (lessor, seller, optionor, etc.), are attached, as follows: See Annex I

[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."

16—70618-1

(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 7, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 7(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 May 1, 1955, ... shall commence the work, and on or before October 31, 1955, ... (unless the Operator's obligation to complete the work is terminated—see Article 8) shall complete the 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) *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.*—A fixed cost for each unit of work to be performed (per foot of drifting, per foot of drilling, per hour of operations, etc.) is hereby agreed upon, and is set forth in Exhibit "A" in connection with the estimated total cost of the project in the sum of $31,750.00 ..... The Government will contribute 75 ..... percent of the fixed unit costs as work is performed, in a total sum not in excess of $23,775.00 .....: *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. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 6(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. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine 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.

(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 a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit 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 the unit costs thereof.

(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 7. *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 6) 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 thereof 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 8. *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 the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further 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 the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and 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 8 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 9. *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 10. *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 11. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

THE GOLDEN CYCLE CORPORATION

(Operator)

By

THE UNITED STATES OF AMERICA

By

Administrator, Defense Minerals Exploration Administration

Chamberlain

Hopkins

Mingling

Ellis

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.

Selfridge

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70618-1

EXPLORATION PROJECT CONTRACT
THE GOLDEN CYCLE CORPORATION
DOCKET NO. DMA-3565

EXHIBIT "A"

Description of the Work

The object of this project is to explore the Salt Wash member of the Jurassic Morrison formation for uranium ore deposits by means of core and noncore diamond drilling. The work shall be done in two successive stages.

Stage I

Twenty (20) drill-hole locations are indicated on the attached map, Figure 2. The holes shall be drilled from points just above the upper rim of the Salt Wash member of the Morrison formation, to approximate depths of 250 feet each, and shall be located on perpendiculars spaced at 500-feet centers from a line striking N. 30° 30' E.

Not to exceed 3,400 feet of noncore drilling and 1,900 feet of core drilling shall be performed under this Stage I.

Stage II

If authorized in writing in advance by the Government, the Operator shall drill ten (10) holes to approximate depths of 350 feet each to delineate ore bodies penetrated in Stage I drilling.

Not to exceed 3,000 feet of noncore drilling and 500 feet of core drilling shall be performed under this Stage II.

General Provisions

1. All drill holes shall be BX size minimum, and shall be started with a noncore bit; however, on reaching the estimated depth of the mineralized zone the holes shall be BX core drilled.

2. Core barrel equipment and drilling practices shall be such as to provide a maximum core recovery.

3. All core shall be split into two halves, and one-half shall be retained and properly stored for later use by the Government.

4. All drill core shall be checked for the presence of uranium by a radiometric instrument. Each section showing significant mineralization shall be chemically analyzed for U_3O_8 and V_2O_5, using the Operator's one-half of the core for the sample.

5. An engineer-geologist shall be on the property at all times when the drills are in operation and shall supervise and direct all drilling.

6. Copies of all assay results and drill logs shall accompany the final engineering report.

7. The Government will not contribute to the costs of any hole which is not completed.

8. Upon completion of Stage I, the Operator will submit five (5) copies of the following data to the Government:

(a) Drill logs and assay results of holes drilled and a map showing the location of the holes.

(b) Location of holes proposed to be drilled under Stage II in relation to holes drilled under Stage I and a listing showing the estimated depths of the proposed holes.

9. All holes shall be logged radiometrically and five (5) copies of the results shall be provided the Government for each stage of drilling.

10. The location, depth, type, and method of drilling, and the method of sampling are subject to Government approval.

Fixed Unit Costs

Stage I

3,400 feet noncore drilling @ $2.84/ft.	$ 9,656.00	
1,900 feet BX core drilling @ $4.91/ft.	9,329.00	
30 assays @ $6.00/ea.	180.00	
		$19,165.00

Stage II

3,000 feet noncore drilling @ $3.17/ft.	9,510.00	
500 feet BX core drilling @ $5.81/ft.	2,905.00	
20 assays @ $6.00/ea.	120.00	
		$12,535.00

Estimated total cost of the project	$31,700.00
Government participation @ 75%	$23,775.00

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

MAR 24 1955.

Memorandum

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

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-3565, The Golden Cycle Corporation (Uranium)

Pursuant to Mr. Murphy's memorandum dated March 18, we have redrafted the attached contract covering the subject project, converting the initial draft from a short form to a long form.

My memorandum dated March 10 transmitting the first draft of the contract applies to the long as well as the short form.

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments

Rubin

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

MAR 24 1955.

Memorandum

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

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J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments

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

Surname copy
Murphy
EDW

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

March 18, 1955

Memorandum

To: Acting Assistant Solicitor, DMEA

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

Subject: Docket No. DMEA-3565 (Uranium)
Golden Cycle Corporation
Harrison-Burnett and Small-Lee Group of claims
Montrose and San Miguel Counties, Colorado

A short-form contract with the Golden Cycle Corporation was prepared by your office and forwarded to the Administrator, DMEA, on March 10, 1955.

In reviewing the contract, the Administrator recommended that this type of drilling contract should be on the "long form" (MF-200) instead of the short form (MF-200A). In using the long form the drilling could be set up under "Independent Contracts" and the Government would then benefit if the unit costs were lower than our estimate. In the future this Division will request that all applicants for drilling projects submit bids for such work from three drilling contractors.

Therefore, will you kindly prepare new copies of the contract, using Form MF-200. On the MF-200 form attached you will please note the changes recommended in Exhibit "A" under "Description of the Work" and the new "Estimated Costs of the Project".

I would appreciate your calling me if there are any questions on the changes recommended.

/s/ F. M. Murphy

F. M. Murphy

FMMurphy/gla
cc to: Docket
Code 700
Mr. Murphy

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

MAR 10 1955

Memorandum

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

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-3565, Golden Cycle Corporation (Uranium)

Pursuant to the request in Mr. Murphy's memorandum dated March 2, we have prepared the attached, proposed contract covering the subject project.

It will be noted that there are a considerable number of claims, 121, which are the subject of this proposed exploration project contract. We have not checked all the claims shown on the map "Figure 2" against the listing of these claims in the leases and Owner's Consent to Lien.

As pointed out in Mr. Murphy's memorandum, 12 claims have been added to the "Division copy" of the map "Figure 2," and they should also be added to all other copies of Figure 2.

It will be noted that Annex I recites that the Operator's interests in the land are derived from two leases:

1. A lease agreement dated June 29, 1954, with W. F. Burnett and Duncan E. Harrison, covering uranium leases from A.E.C., in which lease agreement the lessors undertook to relocate their claims under Public Law 585, 83d Congress, approved August 13, 1954. The lessors appear to have complied with that law and apparently have validated their mining claim locations. Accordingly, Annex I sets forth that the Operator's interest under that lease consists of mineral rights in the mining claims listed.

2. A lease agreement dated June 18, 1954, with S. C. Lee and U. A. Small, granting the Operator a lease of the mineral rights in certain claims listed under the heading "As Filed under Colorado Mining Law"; and assigning uranium lease rights to be acquired for those claims listed under the heading: "As filed under Circular 7." We are unable to determine from the docket whether the Operator's lessor has taken advantage of Public Law 585 with respect to any of the claims listed under the second heading above, however, to our knowledge, there is no requirement that he must do so.

We do not have copies of the uranium lease or leases and therefore are not aware of the lease terms. However, in general, we understand that they are not for any fixed term, running so long as exploration for and mining of uranium is continued. Copies of the uranium lease should be furnished to the Government.

Lastly, it will be noted in the contract form that the Owner's Consent to Lien is attached only for the Harrison-Burnett group of claims. However, a performance bond of the United States Fidelity and Guaranty Company, Baltimore, Maryland, is attached to the "Government's copy" of the contract and the contract form recites that the Owner's Consent to Lien for the Lee and Small group of claims is waived. As there are only two copies of the guaranty company's surety bond, the second copy should remain in the DMEA docket covering this contract.

Except for the copies of the A.E.C. lease for Lee & Small, the contract is in satisfactory legal form for execution.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments

Public

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

MAR 10 1955.

Memorandum

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

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-3565, Golden Cycle Corporation (Uranium)

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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.

OFFICE OF
THE PRESIDENT

THE GOLDEN CYCLE CORPORATION

COLORADO SPRINGS, COLORADO

March 2, 1955

Defense Minerals Administration
RECEIVED
MAR 4 - 1955

DMEA-3565

Mr. George C. Selfridge
Defense Minerals Exploration Administration
U. S. Department of the Interior
19th and E. Streets, N. W.
Washington, D. C.

Dear Mr. Selfridge:

Upon returning home I found a notice on my desk that the papers covering our application and contract for a loan had been forwarded from the Denver office to the Washington, D. C., office on February 21st. I trust that this has arrived in your office and that you will expedite the processing of same, as we are most anxious to start this drilling program. I will appreciate anything you may do to help us out in this matter.

I was very glad to have made your acquaintance and to have had the short visit with you in Chicago at the A.I.M.E. meeting.

Thanking you for your cooperation, I am

Yours very truly,

Max W. Bowen

Max W. Bowen By: H.R.
Executive Vice President

MWB:hr
(Dictated but not read)

Surname 700

Murphy

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

March 2, 1955

Memorandum

To: Acting Assistant Solicitor, DMEA

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

Subject: Docket No. DMEA-3565 (Uranium)
Golden Cycle Corporation
Harrison-Burnett and Small-Lee Group of claims
Montrose and San Miguel Counties, Colorado

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

You will note that not all the claims mentioned in "Annex I" are shown on the map Figure 2, which we plan to attach to the contract. I have indicated the missing claims in pencil on the copy marked "Division Copy" and if you consider it necessary, I can do the same on the other copies.

FMM

Fred M. Murphy

Attachment

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

3/15/55 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 15 1955

March 14, 1955

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

From: Bureau of Mines Member
Uranium Commodity Committee

Subject: Report of Examination, DMEA Docket 3565,
Golden Cycle Corp., Montrose and San Miguel
Counties, Colorado

I have reviewed the Field Team report of examination on the Harrison-Burnett and Small-Lee group of claims, Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado. Joseph O. Hosted, Washington representative of the Atomic Energy Commission, has also reviewed the report and we have discussed it together.

Mr. Hosted and I concur with the Field Team representative's recommendation that the Government enter into an exploration contract with the Golden Cycle Corporation.

The Field Team report of examination is being forwarded to the Chief, Division of Minerals, in accord with the routing slip attached thereto.

John E. Crawford
John E. Crawford

Copy to: Branch of Rare and Precious Metals
Division of Minerals
J. O. Hosted (2)
J. E. Crawford (2)

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

March 14, 1955

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BUREAU OF MINES
WASHINGTON 25, D. C.

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Copy to: Branch of Rare and Precious Metals
Division of Minerals
J. O. Hosted (2)
J. E. Crawford (2)

2/28/55 gfa

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

224 New Customhouse
Denver 2, Colorado

TRANSMITTED
FEB 21 1955

February 21, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Golden Cycle Corporation, Harrison-Burnett and Small-Lee Groups, Montrose and San Miguel Counties, Colorado

Enclosed are four copies of the report of examination on the subject docket and the following information pertaining thereto:

1. Copy of the applicant's amendment to the original application.

2. Signed copy of performance bond with attached certified copy of general power of attorney on the Small-Lee group. (The applicant was unable to obtain the Owner's Consent to Lien on this group.)

3. Photostatic copy of power of attorney from U.A. Small to Stewart C. Lee.

4. Photostatic copy of memorandum of agreement dated June 18, 1954 between Small-Lee and the Golden Cycle Corporation.

5. Photostatic copy of memorandum of agreement dated June 29, 1954 between Harrison-Burnett and the Golden Cycle Corporation.

6. Photostatic copy of the recording of the Harrison-Burnett group.

7. Six extra copies of Figure 1 and Figure 2 for use in the contract.

8. Six signed copies of Owner's Consent to Lien on the Harrison-Burnett group.

9. Six copies of a tentative Annex I showing the claims in the Small-Lee group and the Harrison-Burnett group.

As we interpret Order 2684 as applied to the old Region IV, the new Region III Field Team is no longer authorized to enter into or prepare any contracts. Accordingly this application is transmitted for the Washington office to prepare the contract.

Reviewed by
DMEA OPERATING COMMITTEE
2-28-55
(date)

It is suggested that the following items be included in the contract:

1. Core barrel equipment and drilling practices shall be such as to provide a maximum of core recovery.

2. All core will be split and one-half retained and properly stored for later use by the Government.

3. All drill core will be checked for the presence of uranium by radiometric instrument. Each section showing significant mineralization will be chemically analyzed for U_3O_8 and V_2O_5, using the operator's one-half of the core for the sample.

4. Copy of all assay results and drill logs will accompany the final engineering report.

5. An engineer-geologist will be on the property at all times the drill logs are in operation and will supervise and direct all drilling.

6. In Stages I and II the last hole will not be started unless sufficient unexpended footage remains to assure completion of the hole to its objective within the total allowable footage.

7. Upon completion of Stage I the operator will request in writing authorization for Stage II work. The request will be submitted in sextuplicate complete with the following:

(a) Drill logs and assay results of holes drilled and a map showing the location of the holes.

(b) Logs of proposed holes in relation to holes previously drilled and a listing showing the estimated depths of the proposed holes.

8. All Stage I and Stage II holes will be logged radiometrically and a copy of the results will be provided the Government on completion of Stage I and be made a part of the final report.

Encls.

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

OFFICE OF
THE PRESIDENT

THE GOLDEN CYCLE CORPORATION

COLORADO SPRINGS, COLORADO

January 21, 1955

DMEA 3565.

RE: Application for DMEA Loan
The Golden Cycle Corporation
Uranium Division

United States Department of the Interior
Defense Minerals Exploration Administration
New Customhouse Building
Denver, Colorado

Gentlemen:

The attached four copies covers an amendment to our Application for DMEA Loan which was recently submitted, to cover exploration work on Monogram Mesa, Colorado. This amendment covers the following:

Para. 4 - Physical Description
" 5 - The Exploration Project
" 6 - Estimate of Costs

as requested by Messrs. Travers and Connors 1/14/55. Although in the amended paragraphs as stated above, we have designated certain holes to be cored drilled, should either the local DMEA office or their field engineers desire to change the designation of the holes to be core drilled this will be worked out with the engineers in charge of our operations in the field.

Trusting that this gives all the information necessary for the further processing of our Application and awaiting your reply with interest, I am

Yours very truly,

THE GOLDEN CYCLE CORPORATION
URANIUM DIVISION

Max W. Bowen

Max W. Bowen
Executive Vice President

MWB:hr

P.S. We are also enclosing copies of Standard Form #25-Performance Bond in lieu of "Owner's Consent to Lien".

4. Physical description.-(a) - There is no mining or exploration now in progress on our group of claims, and to our knowledge, there has never been any in the past.

(b) See Above.

(c) There are a few rim exposures, which we believe are sufficiently promising that it is a reasonable exploration project. We have discussed at various times this area with the U.S.G.S. and they have assured us that they will cooperate with us to their fullest extent in working out the geology and drilling plan and will supply us with any and all technological information which they may have covering this area. Another reason for our desire to do exploratory drilling on this ground is that the Atomic Energy Commission has withdrawn all ground west of the section line, which is also the line between Range 16 West and Range 17 West. Further, the Commission has been drilling this ground and we understand that results have been favorable.

(d) 1/ Access Roads- The top of Monogram Mesa is serviced by the "all weather" Monogram Truck Route. Roads from the truck route to our ground are dirt. On the top of the Mesa the grades are slight. On the south end of our ground, Sec. 19, T45N, R16W, a very steep "Jeep Trail" gives access to the southwest claims. A quite steep road descends the rim in Sec. 6, T45N, R16W for access to Sec. 5. The U.S.G.S., Colorado Plateau Project, has built a road over the rim in Sec. 6, from which a road south-southeast along our Morrison exposure can be made.

2/& 3/ Distance to Shipping, Supply and Residence Points-Naturita, Colorado, about 25 miles distant, is the closest town.

(e) Manpower, materials, supplies and equipment will be furnished by the drilling contractor. Our supervisory and engineering personnel can, if necessary, live on the location. Drilling water can be obtained from Dry Creek, just east of our ground. All power will be portable diesel or gasoline.

5. The exploration project.

(b) The work will be divided into two stages, the second contingent upon favorable indications discovered in the first stage.

The first stage of work will consist of building access roads for drill sites and drilling twenty vertical holes from somewhere above the contact between the Salt Wash and Brushy Basin members of the Morrison formation down thru the Salt-Wash member.

The drill sites will be placed just back from the Saltwash rim and should average about 250 feet in depth. They will be located by striking a line N30½E thru the area, measuring 500 foot centers along this line, and at the center points striking normal lines which intersect the rim at irregular points. Drill-hole locations will be made along the normal lines as shown on the attached 1:6000 map.

The first three holes to be drilled, numbers one, six and seventeen, shall be cored, size BX or greater, their entire depth by diamond bits. The other Stage One holes shall be diamond drilled their entire depth with a BX or larger core recovered only thru the ore sand, or about the last fifty feet of hole. The first three holes will be bottomed at the top of the Entrada sandstone. The other Stage One holes will be bottomed just below the bottom of the ore sand.

The Second Stage drilling, to be done with diamond plug bit to the top of the ore horizon and BX core bit thru the ore sand, will be offset drilling, at 100 foot centers, around favorable Stage One holes. It has been assumed that two Stage One holes shall be found favorable and that each of these will be offset with five 350 foot deep holes. Only the bottom fifty feet of these holes will be cored. We have indicated Holes #15 and #19 will have the offset drilling, but should Stage One drilling disclose more favorable mineralization in some other holes, the offset drilling would be done at the most favorable holes.

(c) The work will be started within 30 days after the loan has been approved, and 60 working days will be required for each stage.

(d) The Golden Cycle Corporation has, for the past many years, carried on numerous successful exploratory and diamond-drilling programs. It has been actively mining throughout its life and is fully aware of the risk and remunerative possibility of any large-scale exploration program.

The supervisory personnel are graduate mining engineers who have been active in the development of an exploration for uranium, gold and zinc ores for The Golden Cycle Corporation.

To be confirmed with Flint & the channel

The U.S.G.S., Colorado Plateau Project, has offered to gamma-ray log each of our holes and to help with the stratigraphic and economic evaluation of our cores. Mr. Slothower checked with Mr. Art Flint 1/20/55 and he stated he would have a gamma-ray logging crew in this district through 1957 and would be available upon advance notice to log each of our holes.

6. Estimate of costs:

STAGE ONE

(a)	Bulldozer, etc....80 hrs @ $11/hr	$ 880.00	
	Compressor - 5 days @ $15/day	75.00	
	3400 feet of non-core diamond drilling @ $2.50/ft	8500.00	
	1900 feet of BX core diamond drilling @ $3.25/ft	6175.00	
			$15,630.00
(b)	Labor for road building: 120 hrs @ $1.75/hr	$ 210.00	
	Sup and Eng for 1 month	450.00	$ 660.00
(c)	Dynamite for road: 250# @ $20/100#	$ 50.00	
	Caps & Fuse for road	10.00	
	Gas	57.60	
	Gas	52.00	
	Butane for heat	8.00	
			$ 177.60
(d)	Jeep: 30 days @ $6.00/day	$180.00	
	Generator: 30 Days @ $1.00/day	30.00	
	Transit, drafting equipment and calculator: 30 days @ $1.00/day	30.00	
			$ 240.00
(e)	None		
(f)	Map shack & stove	$ 100.00	
	Toilet & gen. shed	35.00	
			$ 135.00
(g)	Accounting	$ 100.00	
	Compensation Insurance, General Liability Insurance and Payroll Taxes	75.00	$ 175.00
	Sub-Total		$17,017.60
(h)	Contingencies (including assaying) 15%		2,552.64
	TOTAL - STAGE ONE		$19,570.24

STAGE TWO

(a)	Bulldozer, etc., 90 hrs @ $11/hr	$ 990.00	
	Compressor 5 days @ $15/day	75.00	
	3000 feet of non-core diamond drilling @ $2.60/ft	7800.00	
	1500 feet of BX core diamond drilling @ $3.75/ft	1875.00	
			$10,740.00
(b)	Labor for road building 92 hrs @ $1.75/hr	$ 161.00	
	Supervision and engineering	450.00	
			$ 611.00
(c)	Dynamite for roads: 150 lbs. @ $20.00/100 lbs.	$ 30.00	
	Caps and fuse for road	5.00	
	Gasoline for Jeep: 180 gals. @ 32¢/gal	57.60	
	Gasoline for generator: 200 gals. @ 26¢/gal.	52.00	
			$ 144.60
(d)	Jeep: 30 days @ $6.00/day	$ 180.00	
	Generator: 30 days @ $1.00/day	30.00	
	Transit, drafting equipment and calculator: 30 days @ $1.00/day	30.00	
			$ 240.00
(e)	None		
(f)	None		
(g)	Accounting	$ 50.00	
	Compensation Insurance, General Liability, Insurance and Payroll Taxes	40.00	
			$ 90.00
	Sub-Total		$11,825.60
(h)	Contingencies (including assaying) 15%		1,773.84
	TOTAL STAGE TWO		$13,599.44

TOTAL - STAGE ONE	$19,570.24
TOTAL - STAGE TWO	13,599.44
TOTAL	$33,169.68

7. (b) We will use whatever equipment necessary that we own, such as Jeeps, trucks, etc. If we do not have the equipment necessary we will then hire such equipment such as bulldozers, compressors, etc., that is needed in addition to that furnished by the drilling contractor. As marked in the form we will furnish whatever amount of money is necessary to pay for the work done by the drilling contractor as he completes the work.

DMEA
Date Rec'd
FEB 18 1955
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

FEB 24 1955

Region III

TRANSMITTED
FEB 21 1955

Building 20, Room 137
Denver Federal Center
Denver 2, Colorado
February 17, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw, Project Supervisor

Subject: DMEA 3565 (Uranium), Harrison and Burnett and Small and Lee groups of claims, Golden Cycle Corporation, Montrose and San Miguel Counties, Colorado.

Enclosed are the original and ten copies of a "Summary, Conclusions, and Recommendations" by Carl Belser, mining engineer, Bureau of Mines and Donald H. Haynes, geologist, Geological Survey. Also, enclosed are the original and ten copies of Carl Belser's engineering report on the above docket.

It is recommended that the Government enter into an exploration contract with the Golden Cycle Corporation at an estimated cost of $31,700.00.

We are returning the brochure and a Request for Amendment to the original application, to which is attached a copy of a signed Performance Bond in the amount of $25,000.00, and a certified copy of a General Power of Attorney.

John F. Shaw

John F. Shaw

Enclosures

JFS/cm

cc 10
DMEA 3565
Chron

Reviewed by
DMEA OPERATING COMMITTEE
2-28-55
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

FEB 3 1955

FEB 24 1955

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 3565, Harrison and Burnett and Small and Lee groups of claims

Golden Cycle Corporation

Montrose and San Miguel Counties, Colo.

Uranium

Donald D. Haynes, Geologist
Geological Survey

Carl Belser, Mining Engineer
Bureau of Mines

January 27, 1955

Reviewed by
DMEA OPERATING COMMITTEE
2-28-55
(date)

DMEA 3665

HARRISON AND BURNETT AND SMALL AND LEE GROUPS OF CLAIMS GOLDEN CYCLE CORPORATION MONTROSE AND SAN MIGUEL COUNTIES, COLO.

Summary, Conclusions, and Recommendations

By Donald D. Haynes
Geologist
Geological Survey

Carl Belser
Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE

2-28-55
(date)

DMEA 3565

HARRISON AND BURNETT AND SMALL AND LEE GROUPS OF CLAIMS GOLDEN CYCLE CORPORATION MONTROSE AND SAN MIGUEL COUNTIES, COLO.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By Donald D. Haynes and Carl Belser

The Golden Cycle Corporation, Max E. Bowen, Executive Vice-President, P. O. Box 86, Colorado Springs, Colorado, has applied for a Defense Minerals Exploration loan of $33,169.68, to explore the Harrison and Burnett and Small and Lee groups of claims by 8,800 feet of core-hole drilling.

A field investigation was made on November 17, 1954, by an examining team from the Geological Survey and the Bureau of Mines. Ben H. Slothower, mining engineer with the Golden Cycle Corporation, accompanied the examining team.

The Harrison and Burnett and Small and Lee groups of claims form a compact block on the east end of Monogram Mesa. The exposed rocks are Burro Canyon (Lower Dakota) on the top of the mesa, the Brushy Basin or upper Morrison on the upper slopes on the end of the mesa, and the Salt Wash or lower Morrison on the lower slopes. The uranium ore deposits occur in the Salt Wash member of the Morrison formation. The Salt Wash is expected to average about 335 feet thick and appears to be fairly uniform along the cliff exposures. No defined channels have been noticed. The overlying Brushy Basin member is about 400 feet thick. The formations appear to be nearly flat, dipping about 2° S.W.

Reviewed by
DMEA OPERATING COMMITTEE

2-28-55
(date)

No ore has been produced from the property. The Geological Survey is drilling the area to the west on Monogram Mesa. The Joe Dandy mine is on the north slope of Monogram Mesa, about 3 miles northwest of the north portion of the claim group.

The applicant's proposal called for 1,900 feet of BX size core drilling and 3,400 feet of BX plug-bit drilling (20 holes) in a first stage to be drilled to estimated depths of 250 feet on 500-foot centers perpendicular to a N. 30° 30' E. base line from points slightly above the Salt Wash - Brushy Basin contact. A second stage consisted of 3,000 feet of plug-bit drilling and 500 feet of core drilling (about 10 holes). These holes to be drilled on 100-foot centers around favorable first stage holes.

The examining team accepts the applicant's exploration program and costs without alteration, except for contingencies and minor changes.

Accepting most of their estimates, the first stage with 3,400 feet of non-core drilling at $2.84 a foot, 1,900 feet of core drilling at $4.91 a foot, and 30 assays at $6.00 an assay, will amount to $19,165.00, and the second stage with 3,000 feet of non-core drilling at $3.17 a foot, 500 feet of core drilling at $5.81 a foot, and 20 assays at $6.00 each, will amount to $12,535.00, or a total of $31,700.00; Government participation 75 percent, or $23,775.00.

A short-form, unit-cost contract is suggested and written authorization for second stage drilling and designation of hole locations by the DMEA Region III Field Team should be required.

DMEA 3565

HARRISON AND BURNETT AND SMALL AND LEE GROUPS OF CLAIMS GOLDEN CYCLE CORPORATION MONTROSE AND SAN MIGUEL COUNTIES, COLO.

Engineering Report

By Carl Belser
Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE

2-28-55
(date)

DMEA 3565

HARRISON AND BURNETT AND SMALL AND LEE GROUPS OF CLAIMS GOLDEN CYCLE CORPORATION MONTROSE AND SAN MIGUEL COUNTIES, COLO.

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ILLUSTRATIONS

Figure	Follows page
1. Location map, Harrison and Burnett and Small and Lee groups of claims, Golden Cycle Corporation, Montrose, and San Miguel Counties, Colo.	2
2. Claim map, showing proposed Stage I drill holes, Harrison and Burnett and Small and Lee groups of claims, Golden Cycle Corporation, Montrose and San Miguel Counties, Colo.	14

DMEA 3565

HARRISON AND BURNETT AND SMALL AND LEE GROUPS OF CLAIMS GOLDEN CYCLE CORPORATION MONTROSE AND SAN MIGUEL COUNTIES, COLO.

ENGINEERING REPORT

By

Carl Belser

INTRODUCTION

Golden Cycle Corporation, Max E. Bowen, Executive Vice-President, P. O. Box 86, Colorado Springs, Colo., on October 22, 1954, submitted an application for a Defense Minerals Exploration Administration loan on the Harrison and Burnett and Small and Lee groups of claims on the east end of Monogram Mesa, Montrose and San Miguel Counties, Colo. The application, DMEA 3565, requested aid in completing 8,800 feet of core-drill holes at a total estimated cost of $33,169.68, Government participation 75 percent, or $24,877.26. This proposed exploration was to test the Salt Wash member of the Morrison formation for uranium mineralization.

A joint field examination was made by a Geological Survey and Bureau of Mines examining team on November 17, 1954. The examining team, as a result of their investigation, recommended Government assistance of the applicant's proposal for the exploratory drilling.

Reviewed by
DMEA OPERATING COMMITTEE
2-28-55
(Date)

ACKNOWLEDGMENTS

Ben H. Slothower, mining engineer with Golden Cycle Corporation, accompanied the examining team and represented the applicant.

Arnold L. Brokaw, District Supervisor, Geological Survey, Grand Junction, Colorado, assigned Donald D. Haynes, geologist, to make the examination as the Geological Survey member of the team. Haynes was accompanied by Arthur E. Flint, geologist in charge of the Geological Survey drilling program on Monogram Mesa.

The Atomic Energy Commission was consulted regarding past production and ore possibilities in the east Monogram Mesa area.

LOCATION, TOPOGRAPHY, AND CLIMATE

The property, as shown on the applicant's maps, consists of 121 unpatented claims, which form a solid block on the east end of Monogram Mesa, and are located in secs. 6, 7, 8, 17, 18, 19, and 20, T. 45 N., R. 16 W., New Mexico principal meridian, Montrose and San Miguel Counties, Colorado (fig. 1).

The claims cover part of the steep southeast slopes of Monogram Mesa and a portion of the east part of the south sloping top of the mesa. Altitudes range from about 6,000 feet near the southeast corner of the claim block to about 7,300 feet near the northeast corner. Steep access roads about 3 miles in length extend upwards from the Salt Wash rims in sections 8 and 19 to an all weather truck road on top of the mesa from whence it is 15 miles northeast to paved Colorado State Highway 161, 18 miles to Naturita, 35 miles to Norwood, 75 miles east to Ridgeway on the Denver and Rio Grande Western Railroad, 32 miles north to Uravan, and 120 miles northeast to Grand Junction.

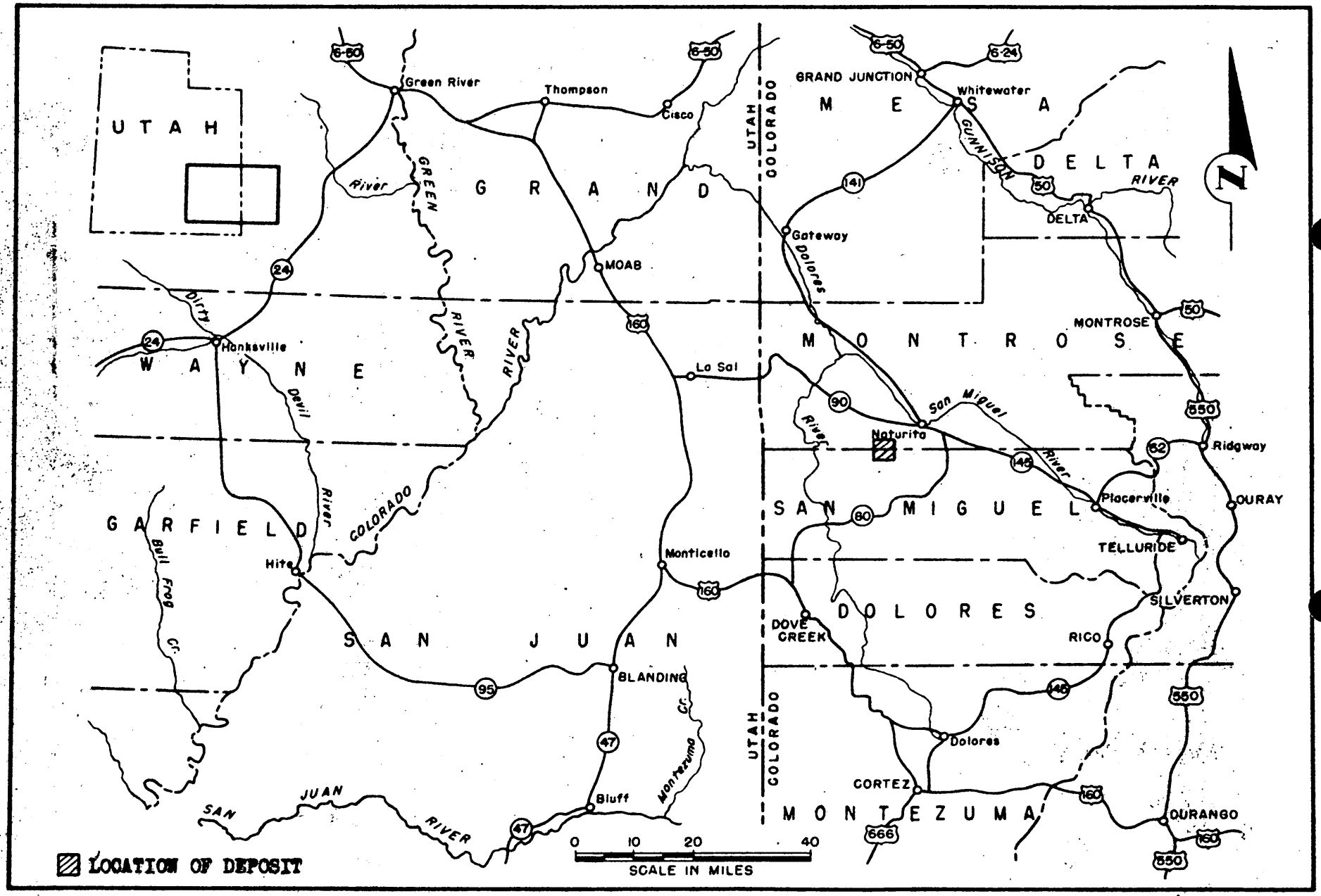


FIGURE 1 - LOCATION MAP, HARRISON AND BURNETT AND SMALL AND LEE GROUPS OF CLAIMS, GOLDEN CYCLE CORPORATION, MONTROSE AND SAN MIGUEL COUNTIES, COLO. (DMEA 3565)

Labor, supplies, and light equipment can be obtained in Naturita, Norwood, and Uravan. Heavy equipment can be obtained in Grand Junction. The nearest railroad is at Ridgeway. Pinon, suitable for some mine uses, grows on the property. Large timbers and dimension lumber can be purchased locally. The nearest mills and ore depots are at Naturita and Uravan.

Annual rainfall is light and the country is classed as semi-arid. Winter snowfalls are light and year around operations can be maintained. Water for drilling purposes can be obtained from reservoirs on Monogram Mesa or from Dry Creek. Water for domestic use is hauled from Naturita.

HISTORY AND PRODUCTION

Prospecting for uranium became of interest following the introduction of Government buying schedules in 1948. No mining has been done on or near the property but the exposed sandstone rims appeared favorable for uranium mineralization. The claims were acquired by the present owners who leased their claims in June, 1954, to the Golden Cycle Corporation.

OWNERSHIP AND EXTENT

The property as shown in the applicant's brochure and accompanying maps list 121 unpatented claims of which 98 were leased from U. A. Small and Stewart C. Lee on June 18, 1954, and the remaining 23 claims were leased from Duncan E. Harrison and Walter F. Burnett on June 29, 1954. Both leases are for a period of 5 years, with options for renewal for an additional 15 years. The books and pages, upon which the claim recordings have been made in the respective County Clerk and Recorder offices are shown in the brochure.

DESCRIPTION OF DEPOSITS

The exposed rocks on the claim groups are of the Dakota formation of the Lower Cretaceous on the higher parts of the mesa, with rocks of the Morrison formation of Upper Jurassic below. The Brushy Basin member of the Morrison, about 400 feet thick, is exposed on the lower portion of the mesa and on the upper part of the flanks, while the Salt Wash member of the Morrison, about 335 feet thick, is exposed, generally as cliffs, on the lower flanks. These exposures, which extend for about 4 miles along the claim block, appear to be favorable for uranium deposition. The Salt Wash upper and lower rims are strong and persistent. The nearest productive area is about 3 miles northwest of the property. The Joe Dandy mine in this area has been exceedingly productive with the ore occurring in the upper sandstone strata of the Salt Wash.

The sections west of the lease block have been withdrawn from mineral entry and are now being drilled by the Geological Survey.

MINEABLE ORE RESERVES

There are no known mineable ore reserves on the property.

PRESENT STATUS

Exploration and Development

No exploration or development work has been done on the property to date.

Mining and Milling Equipment and Other Facilities

There is no mining or milling equipment on the property and the only facilities are a limited amount of access roads.

PROPOSED EXPLORATION

The applicant proposed to explore the claims with 30-core drill holes, to be drilled in two stages. Stage I consisted of 3,400 feet of BX size non-core drilling and 1,900 feet of BX size core drilling (20 holes). The holes were to be drilled from points just above the upper rim of the Salt Wash member of the Morrison formation to estimated depths of about 250 feet and located on perpendiculars spaced on 500-foot centers from a line striking N. 30° 30' E. Stage II consisted of 3,000 feet of BX size non-core drilling and 500 feet of BX size core drilling (10 holes), drilled on 100-foot centers to delineate ore bodies penetrated in Stage I drilling. The total over-all cost was estimated at $31,680.00, or $3.60 a foot.

The examining team approves the drilling project as outlined in the application but differ with the applicant as to contingencies, and some other costs.

ESTIMATED COST OF PROJECT

The application, as submitted, included most costs.

Estimated Cost of Drilling

The applicant expects to subcontract all drilling and bulldozing to independent contractors. Bids have been submitted for BX size core drilling at $3.25 and $3.75, and non-core drilling at $2.50 and $2.60 a foot. The applicant's estimated costs follow:

Stage I

Independent contracts		
Bulldozer, etc., 80 hours at $11.00/hr.	$ 880.00	
Compressor - 5 days at $15.00/day	75.00	
3,400 feet of non-core diamond drilling at $2.50/ft.	8,500.00	
1,900 feet of BX core diamond drilling at $3.25/ft.	6,175.00	
Total independent contracts		$15,630.00
Labor and supervision		
Labor (for road building) 120 hours at $1.75 an hour	210.00	
Supervision		
Supervisor-engineer 1 month at $450.00/mo.	450.00	
Total labor and supplies		660.00
Operating material and supplies		
Dynamite-250 lbs. at $20.00/100 lbs.	50.00	
Caps and fuse	10.00	
Gasoline for jeep, 180 gals. at $.32/gal.	57.60	
Gasoline for generator, 200 gals. at $.26/gal.	52.00	
Butane for heat	8.00	
Total operating material and supplies		177.60
Operating equipment		
Jeep - 30 days at $6.00/day	180.00	
Transit, drafting equipment, calculator 30 days at $1.00/day	30.00	
Generator - 30 days at $1.00/day	30.00	
Total operating equipment		240.00
Initial rehabilitation and repairs		
None		
New buildings, improvements, etc.		
Map shack and store	100.00	
Toilet and generator sheds	35.00	
Total new buildings, improvements, etc.		135.00

Miscellaneous

Accounting	$ 100.00	
Compensation insurance, general liability insurance and payroll taxes	75.00	
Total miscellaneous		$ 175.00
Contingencies (including assaying) 15 percent		2,552.64
Total estimated Stage I drilling costs		$19,570.24

Stage II

Independent contracts

Bulldozer, etc., 90 hours at $11.00/hr.	990.00	
Compressor - 5 days at $15.00/day	75.00	
3,000 feet non-core drilling at $2.60/ft.	7,800.00	
500 feet of BX core diamond drifting at $3.75/ft.	1,875.00	
Total independent contracts		10,740.00

Labor and supervision

Labor (for road building) 92 hours at $1.75/hr.	161.00	
Supervision		
Supervisor-engineer 1 month at $450.00/mo.	450.00	
Total labor and supervision		611.00

Operating material and supplies

Dynamite for roads 150 lbs. at $20.00/100 lbs.	30.00	
Caps and fuse	5.00	
Gasoline for jeep, 180 gals. at $.32/gal.	57.60	
Gasoline for generator, 200 gals. at $.26/gal.	52.00	
Total operating materials and supplies		144.60

Operating equipment

Jeep - 30 days at $6.00/day	180.00	
Generator - 30 days at $1.00/day	30.00	
Transit, drafting equipment, calculator 30 days at $1.00/day	30.00	
Total operating equipment		240.00

Initial rehabilitation and repair

None

New buildings, improvements, etc.
None

Miscellaneous

Accounting	$ 50.00	
Compensation insurance, general liability insurance and payroll taxes	40.00	
Total miscellaneous		$ 90.00
Contingencies (including assaying)		1,773.84
Total estimated Stage II drilling costs		$13,599.44
Total estimated Stage I and Stage II drilling costs		$33,169.68
Estimated cost per foot (8,800 feet)		$ 3.77

Engineer's Estimated Cost of Project

Stage I

Non-core Drilling

Independent contracts		
Bulldozing roads and drillsites 40 hours at $11.00/hr.	440.00	
Non-core drilling 3,400 feet at $2.50/ft.	8,500.00	
Total independent contracts		8,940.00
Labor and supervision		
Labor (for road building) 60 hours at $1.75 an hour	105.00	
Supervision Supervisor--engineer 1/2 month at $450.00/mo.	225.00	
Total labor and supervision		330.00
Operating materials		
Dynamite for roads 125 lbs. at $20.00/100 lbs.	25.00	
Caps and fuse	5.00	
Gasoline for jeep, 90 gals. at $.32/gal.	28.80	
Gasoline for generator, 100 gals. at $.26/gal.	26.00	
Butane for heat	4.00	
Total operating materials		88.80

Operating equipment			
Rentals			
Jeep - 15 days at $6.00/day	$ 90.00		
Generator - 15 days at $1.00/day	15.00		
Transit, drafting equipment, calculator - 15 days at $1.00/day	15.00		
Compressor - 2 1/2 days at $15.00/day	37.50		
Total operating equipment		$	157.50
Initial rehabilitation and repairs			
None			
New buildings, improvements, etc.			
Map shack and store	50.00		
Toilet and generator sheds	17.50		
Total new buildings and improvements			67.50
Miscellaneous			
Accounting	50.00		
Compensation and liability insurance and payroll taxes $380.00 at 5 percent	19.00		
Total miscellaneous			69.00
Total estimated Stage I non-core drilling costs		$	9,652.80
Estimated cost per foot (3,400 feet)		$	2.84

Core Drilling

Independent contracts		
Bulldozing roads and drill sites 40 hours at $11.00/hr.	440.00	
1,900 feet BX core drilling at $4.25/ft. (includes standby)	8,075.00	
Total independent contracts		8,515.00
Labor and supervision		
Labor (for road building) 60 hours at $1.75/hr.	105.00	
Supervision Supervisor-engineer 1/2 month at $450.00/mo.	225.00	
Total labor and supervision		330.00

Operating materials		
Dynamite for roads 125 lbs. at $20.00/100 lbs.	$ 25.00	
Caps and fuse	5.00	
Gasoline for jeep, 90 gals. at $.32/gal.	28.80	
Gasoline for generator, 100 gals. at $.26/gal.	26.00	
Butane for heat	4.00	
Core boxes - 20 at $5.00/each	100.00	
Total operating materials		$ 188.80
Operating equipment		
Rentals		
Jeep - 15 days at $6.00/day	90.00	
Generator - 15 days at $1.00/day	15.00	
Transit, drafting equipment, calculator - 15 days at $1.00/day	15.00	
Compressor - 2 1/2 days at $15.00/day	37.50	
Total operating equipment		157.50
Initial rehabilitation and repairs		
None		
New buildings, improvements, etc.		
Map shack and stove	50.00	
Toilet and generator sheds	17.50	
Total new buildings and improvements		67.50
Miscellaneous		
Accounting	50.00	
Compensation and liability insurance and payroll taxes $380.00 at 5 percent	19.00	
Total miscellaneous		69.00
Total estimated Stage I core drilling costs		$ 9,327.80
Estimated cost per foot (1,900 feet)		$ 4.91
Stage I assaying - 30 assays at $6.00/each		180.00
Total estimated cost - Stage I		$19,160.60

Stage II

Non-core Drilling

Independent contracts		
Bulldozing, etc., 72.0 hours at $11.00/hr.	792.00	
Non-core drilling 3,000 feet at $2.60/ft.	7,800.00	
Total independent contracts		8,592.00

Labor and supervision		
Labor (for road building)		
74 hours at $1.75/hr.	$129.50	
Supervision		
Supervisor-engineer 4/5 month at $450.00/mo.	360.00	
Total labor and supervision		$ 489.50
Operating materials and supplies		
Dynamite for roads 120 lbs. at $20.00/100 lbs.	24.00	
Caps and fuse	4.00	
Gasoline for jeep, 135 gals. at $.32/gal.	46.08	
Gasoline for generator, 160 gals. at $.26/gal.	41.60	
Total operating materials and supplies		115.68
Operating equipment		
Rental		
Jeep - 24 days at $6.00/day	144.00	
Generator - 24 days at $1.00/day	24.00	
Transit, office equipment - 24 days at $1.00/day	24.00	
Compressor - 4 days at $15.00/day	60.00	
Total operating equipment		252.00
Initial rehabilitation and repairs		
None		
New buildings, improvements, etc.		
None		
Miscellaneous		
Accounting	40.00	
Compensation and liability insurance and payroll taxes, 5 percent of $529.50	26.48	
Total miscellaneous		66.48
Total estimated Stage II non-core drilling costs		$9,515.66
Estimated cost per foot (3,000 feet)		$ 3.17

Core Drilling

Independent contracts		
Bulldozing, etc., 18 hours at $11.00/hr.	198.00	
500 feet of BX core drilling at $4.75/ft. (includes standby)	2,375.00	
Total independent contracts		2,573.00

Labor and supervision		
Labor (for road building)		
18 hours at $1.75/hr.	$ 31.50	
Supervision		
Supervisor-engineer 1/5 month at $450.00/mo.	90.00	
Total labor and supervision		$ 121.50
Operating materials and supplies		
Dynamite 30 lbs. at $20.00/100 lbs.	6.00	
Caps and fuse	1.00	
Gasoline for jeep, 36 gals. at $.32/gal.	11.52	
Gasoline for generator, 40 gals. at $.26/gal.	10.40	
20 core boxes at $5.00/each	100.00	
Total operating material and supplies		128.92
Operating equipment		
Rental		
Jeep - 6 days at $6.00/day	36.00	
Generator - 6 days at $1.00/day	6.00	
Transit, office equipment - 6 days at $1.00/day	6.00	
Compressor - 1 day at $15.00/day	15.00	
Total operating equipment		63.00
Initial rehabilitation and repair		
None		
New buildings, improvements, etc.		
None		
Miscellaneous		
Accounting	10.00	
Compensation and liability insurance and payroll taxes, 5 percent of $131.50	6.57	
Total miscellaneous		16.57
Total estimated Stage II core-drilling costs		$2,902.99
Estimated cost per foot (500 feet)		$ 5.81
Stage II assaying - 20 assays at $6.00/each		120.00
Total estimated cost - Stage II		$12,538.65
Total estimated cost Stage I and Stage II		$31,699.25

SUMMARY COSTS OF PROJECT

Stage I

3,400 feet non-core drilling at $2.84/ft.	$9,656.00	
1,900 feet BX core drilling at $4.91/ft.	9,329.00	
30 assays at $6.00/each	180.00	
Total Stage I estimated costs		$19,165.00

Stage II

3,000 feet non-core drilling at $3.17/ft.	9,510.00	
500 feet BX core drilling at $5.81/ft.	2,905.00	
20 assays at $6.00/each	120.00	
Total Stage II estimated costs		$12,535.00

Total cost of project	$31,700.00
Government participation - 75 percent	$23,775.00
Total time for completion - 3 months	

CONCLUSIONS

The applicant has a large, solid block of claims containing a thick section of Salt Wash sandstone, which appears favorable for the discovery of deposits of uranium ore. The examining team believes that the claims merit the exploration project proposed and outlined in this report.

The engineering cost estimates are essentially the same as those presented by the applicant; except that the latter makes an allowance for contingencies, while this estimate allows standby time.

The other main differences between the estimates, all small, are some slight additional costs for materials and supplies, and an allowance for sampling and analyses. They are all indeterminate depending on the operational procedures adopted by the operator and the outcome of first stage drilling. The time consumed will be determined by the number of drills operated, the supplies mainly by

the amount the equipment used, and sampling and analyses by whether the first stage holes are successful in penetrating ore.

Personnel of the Golden Cycle Corporation from their experience on the Colorado Plateau, are considered qualified to make acceptable engineering estimates.

RECOMMENDATIONS

It is recommended that a unit-cost, short form contract be prepared for a two-stage program, accepting the applicant's costs for the work proposed, comprising the following:

Stage I

Core-hole drilling a maximum of 5,300 feet (20 BX size holes) at locations shown on figure 2. Holes 1, 6, and 19 to be cored, size BX or greater, their entire depth to the top of the Entrada sandstone. The other Stage I holes to be bottomed just below the ore-bearing sandstone and to be cored, size BX or larger, for the last 50 feet. The recommended cost for a maximum of 3,400 feet of non-core drilling is $2.84 a foot, or $9,656.00. The recommended cost of core drilling a maximum of 1,900 feet is $4.91 a foot, or $9,329.00. A maximum of 30 chemical assays are also permitted for Stage I drilling at a cost of $6.00 an assay or $180.00. The total cost of Stage I is $19,165.00.

Stage II

Core-hole drilling a maximum of 3,500 feet (10 BX size holes) to delineate ore discovered in Stage I drilling. Holes to be drilled on 100-foot centers and to extend to the bottom of the ore-bearing sandstone. The bottom 50 feet of each hole to be cored BX size or larger. Prior approval of Stage II holes by representatives of the Field Team is

recommended. The recommended cost for a maximum of 3,000 feet of non-core drilling is $3.17 a foot, or $9,510.00. The recommended cost of core drilling a maximum of 500 feet is $5.81 a foot, or $2,905.00. A maximum of 20 chemical assays is also recommended for Stage II drilling at a cost of $6.00 an assay or $120.00. The total cost of Stage II is $12,535.00.

The total, if both stages are completed, will be $31,700.00, with Government participation 75 percent or $23,775.00.

The locations of Stage II drill holes and authorization to proceed should require prior written approval by the DMEA Region III Field Team.

The application states under Item 5(d):

"The U. S. G. S. Colorado Plateau Project has offered to gamma-ray log each of our holes and to help with the stratigraphic and economic evaluation of our cores".

If the Geological Survey is no longer assuming the responsibility for radiometric logging, the applicant should be advised before a contract is prepared to determine if the obligation can be undertaken by them without an increase in their estimated costs.

/cm

Date Rec'd. 1
JAN 28 1955
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

TRANSMITTED
FEB 21 1955

January 27, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 3565 (uranium), Golden Cycle Corporation, Harrison-Burnett and Small-Lee groups, Montrose and San Miguel Counties, Colorado

Your memorandum of January 24, 1955, transmitted a revised project proposal by the applicant and requested me to make any changes in the geologic report deemed necessary at this time.

The location, depth, and number of Stage I holes in the revised program is the same as in the original program. The type of drilling is changed from 100 percent core drilling to part core drilling and part non-core diamond drilling. Stage II drilling is reduced from 21 offset wagon drill holes to 10 offset diamond drill holes, in part drilled with a plug bit and in part core drilled. The change in Stage II drilling methods is mandatory, for a wagon drill cannot be used to drill holes 350 feet deep as proposed by the applicant in the original request and approved by the Examining Team.

Since the geologic aspects of the proposed exploration program remain unchanged, I suggest that the geologic report not be revised and that the revised engineering report be used in preparation of the contract.

The revised program submitted by the applicant has my approval.

E. N. Harshman

E. N. Harshman
Member, Field Team

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
2-28-55

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

Mining Division
Date Rec'd.
DEC 16 1954
BUREAU OF MINES
Denver, Colorado

December 16, 1954

Memorandum

To: DMEA Field Team, Region IV

From: E. N. Harshman

Subject: DMEA Docket 3565 (uranium), Golden Cycle Corporation, Uranium Division, Harrison and Burnett group of claims and Small and Lee group of claims, Montrose County, Colorado

Enclosed are 10 copies of a geologic report by A. E. Flint of the U. S. Geological Survey covering the above docket.

Exploration for uranium deposits in the Salt Wash member of the Morrison formation is recommended. This recommendation is based on the fact that the property is located on the flank of the Paradox Valley anticline, a favorable structural setting for ore, that the Salt Wash sandstone members are 30-40 feet or more thick, that the sandstone contains abundant green or grey mudstones and that carbon trash is present in the sandstone - all favorable criteria for the presence of uranium ore deposits.

Flint points out the lack of ore in the rather extensive Salt Wash outcrops along Dry Creek. The lack of ore exposures is disturbing and on the evidence presented in the report might outweigh the favorable character of the Salt Wash in that area. However, in a conversation with Arnold Brokaw, he pointed out that the U. S. Geological Survey drilling on Monogram Mesa immediately northwest of the Golden Cycle property has been successful in locating ore and has established the presence of southeasterly trending ore belts projecting toward the Golden Cycle property.

These supplemental data, provided by Brokaw, and the data contained in the geologic report are considered sufficient to justify the exploration program recommended for approval by Flint.

Nine extra copies of the maps accompanying Mr. Flint's report are enclosed.

E. N. Harshman
E. N. Harshman
Project Chief

Reviewed by
DMEA OPERATING COMMITTEE
2-28-55
(date)

Enclosures (19)

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

Mining Division
Date Rec'd.
DEC 10 1954
BUREAU OF MINES
Denver, Colorado

December 10, 1954

Memorandum

To: A. H. Koschmann, Supervising Geologist, DMEA Field Team, Region IV

From: Arnold L. Brokaw, District Supervisor

Subject: DMEA 3565 (Uranium), Golden Cycle Corporation, Uranium Division, Harrison and Burnett group of claims and Small and Lee group of claims, Montrose County, Colorado

Transmitted herewith are ten copies of a geologic report by A. E. Flint, covering a field examination of the above-referenced property. On the basis of field examination, Flint recommends that inasmuch as favorable geologic conditions exist on the property, a DMEA contract be prepared to provide for exploration of subject claims. Flint points out, however, no mineralization is known on the property, nor is the property immediately adjacent to existing significant production.

This application has been brought to the attention of the Exploration Division, U. S. Atomic Energy Commission, Grand Junction Operations Office. The Commission has been asked for its help and advice in evaluating the property.

We are enclosing nine extra copies of the maps accompanying Flint's report.

W. P. Williams (R)
For Arnold L. Brokaw

WPW/mlr
Enclosures 10

Reviewed by
DMEA OPERATING COMMITTEE
2-28-55
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 3565, Harrison and Burnett and Small and Lee groups of claims Golden Cycle Corporation Montrose and San Miguel Counties, Colo.

Uranium

Donald D. Haynes, Geologist
Geological Survey

Carl Belser, Mining Engineer
Bureau of Mines

December 3, 1954

Reviewed by
DMEA OPERATING COMMITTEE
2-28-55
(date)

UNITED STATES DEPARTMENT OF THE INTERIOR

DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 3565, Golden Cycle Corporation, Uranium Division, Harrison and Burnett group of claims and Small and Lee group of claims Montrose County, Colorado

Uranium

Geologic Report

by

Arthur E. Flint
U. S. Geological Survey

December 6, 1954

Reviewed by
DMEA OPERATING COMMITTEE
2-28-55
(date)

INTRODUCTION AND SUMMARY

The Golden Cycle Corporation, Uranium Division, P. O. Box 86, Colorado Springs, Colorado, has applied (DMEA Docket 3565) to the Defense Minerals Exploration Administration for aid to conduct exploration for uranium ore on the Harrison and Burnett and on the Lee and Small groups of claims in secs. 7, 8, 17 to 20, inclusive, T. 45 N., R. 16 W., New Mexico Principal Meridian, Montrose and San Miguel Counties, Colorado (fig. 1). The applicant proposes to drill about 41 holes at a total estimated cost of $33,242.35.

The property was examined October 17, 1954, by Carl Belser, U. S. Bureau of Mines, A. E. Flint and D. D. Haynes, U. S. Geological Survey, and Ben Slothower, representative of the applicant.

The above-mentioned groups of claims are on the west side of Dry Creek in the dissection and on the adjacent upland in the eastern part of the Bull Canyon Mining district. The claims are about 25 miles from Naturita, Colorado, and are accessible by dirt roads off the main truck route connecting Monogram Mesa and Colorado Highway 80. Except in very wet weather all roads are usable.

The applicant does not name the supervisory personnel, but states they are graduate engineers with experience in mineral exploration and development work.

GEOLOGY AND ORE DEPOSITS

The rocks exposed in the vicinity of the proposed exploration range in age from Triassic (Moenkopi formation) to Cretaceous (Burro Canyon formation). Pertinent to this report are the Jurassic Morrison and younger strata of the Cretaceous. The Morrison formation is divided into two members. The Salt Wash member consists of sandstone lenses and interbedded mudstone layers. The overlying Brushy Basin member is mostly mudstone and silstone containing lens-shaped sandstone and conglomeratic sandstone that contain interbedded mudstone layers.

Most of the significant uranium deposits in the Bull Canyon Mining district, which includes the ground proposed for testing by the applicant, occur in the upper half of the Salt Wash member of the Morrison formation. The sandstone in this member is white to light red in color, is commonly fine to medium grained, and contains minor amounts of red, green, or gray mudstone as seams, films, pebbles or interstitial filling. The Salt Wash may contain sparse to abundant carbonaceous material.

Scour and fill, cross-lamination, and festoon structures are common in the Salt Wash, particularly in the upper half of the member.

Uranium deposits in this member characteristically are associated with bleached sandstone, with gray or green mudstone (as opposed to red mudstone), and in many places with zones of abundant carbonaceous material. Uranium is nearly everywhere associated with vanadium in this mining district.

No ore has been produced from the claims listed by the applicant, and the claims contain no known outcrops of uranium or vanadium mineralized rock.

PROPOSED EXPLORATION

The applicant proposes to explore the claims or part of the claims forming an arcuate area on a bench in the Dry Creek dissection by a first stage of drill holes set in a 500-foot grid to delineate favorable ground. The applicant has reserved footage for an estimated 21 holes to offset favorable holes (estimated to be three) from first stage drilling. The offset holes are to be spaced 100 feet from any other hole. The entire program is expected to cost $35,242.35 if carried to completion. If first stage drilling discloses no favorable ground, the contract is to be terminated. The examining geologists concur with the applicant's proposal for the locations of drill holes as shown on figure 2.

The first stage exploration is to be diamond core-drilled (inferred from "BX drill hole" listed in cost breakdown); the offset holes are to be wagon drilled. The applicant's estimate of 250 feet average depth of first stage drill holes is probably correct as is his estimate of 350 feet average depth for offset holes. The greater depth for the offset holes presupposes that some drill holes may start on the upland instead of the topographically lower bench.

There are no mines on the applicant's claims and the nearest significant uranium mine is nearly 6 miles away, although a small uranium-copper prospect is about 2 miles northeast from the claims. Consequently, the "target" size for determining the optimum spacing for drill holes in first-stage drilling is difficult to determine. It is believed, from knowledge of the ground in the Monogram Mesa area to the northwest, that favorable belts where present will be more than 500 feet wide, hence,

the 500-foot spacing seems satisfactory. The applicant probably correctly assumes for the area a northwesterly trend and has set up his drilling pattern to intersect that trend (not too apparent in the first stage drill hole arrangement). Locations of two drill holes were changed by general agreement during the field examination; originally the drill holes were located outside the claim boundaries.

Examination shows that in general the exposed Salt Wash beds are favorable as a host for uranium ore. The sandstone units are 30-40 or more feet thick, and contain in many places abundant green or gray mudstone. The average sand size is about fine-medium. Sparse carbon was observed. Also, the applicant's claims are on the flanks of the Paradox Valley Salt anticline, a favorable structural setting for ore.

Lack of known ore on or near the claims is an unfavorable factor but one that is difficult to evaluate.

CONCLUSIONS AND RECOMMENDATIONS

Field examination in the vicinity of the Harrison and Burnett and the Lee and Small groups of claims reveals a favorable geologic setting for the occurrence of uranium ore. No data are available to indicate probable size or shape or ore bodies that may be present, but drilling in the grid pattern proposed by the applicant should penetrate areas of favorable ground that are present.

Chances for finding uranium ore appear to be fair to good, and it is recommended that a DMEA contract be approved to provide for the proposed exploration project. If, however, the DMEA feels that the lack of mineralized outcrops on or near the applicant's claims outweigh the otherwise favorable geologic evidence, it is proposed, but not favored as an alternative to the above recommendation, that the applicant produce at his own expense evidences of uranium mineralization on his claims (by drilling or rim stripping) before DMEA aid is granted.

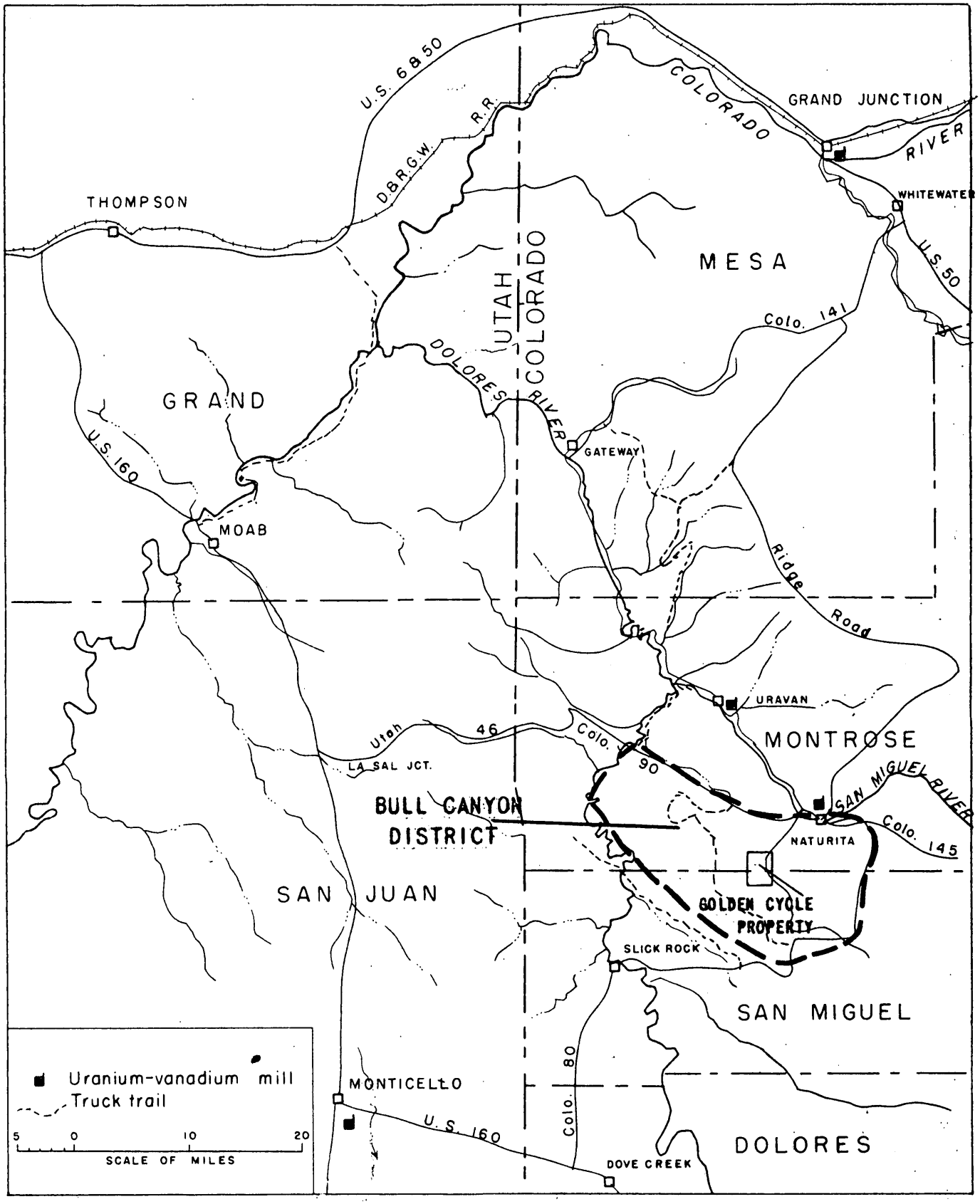
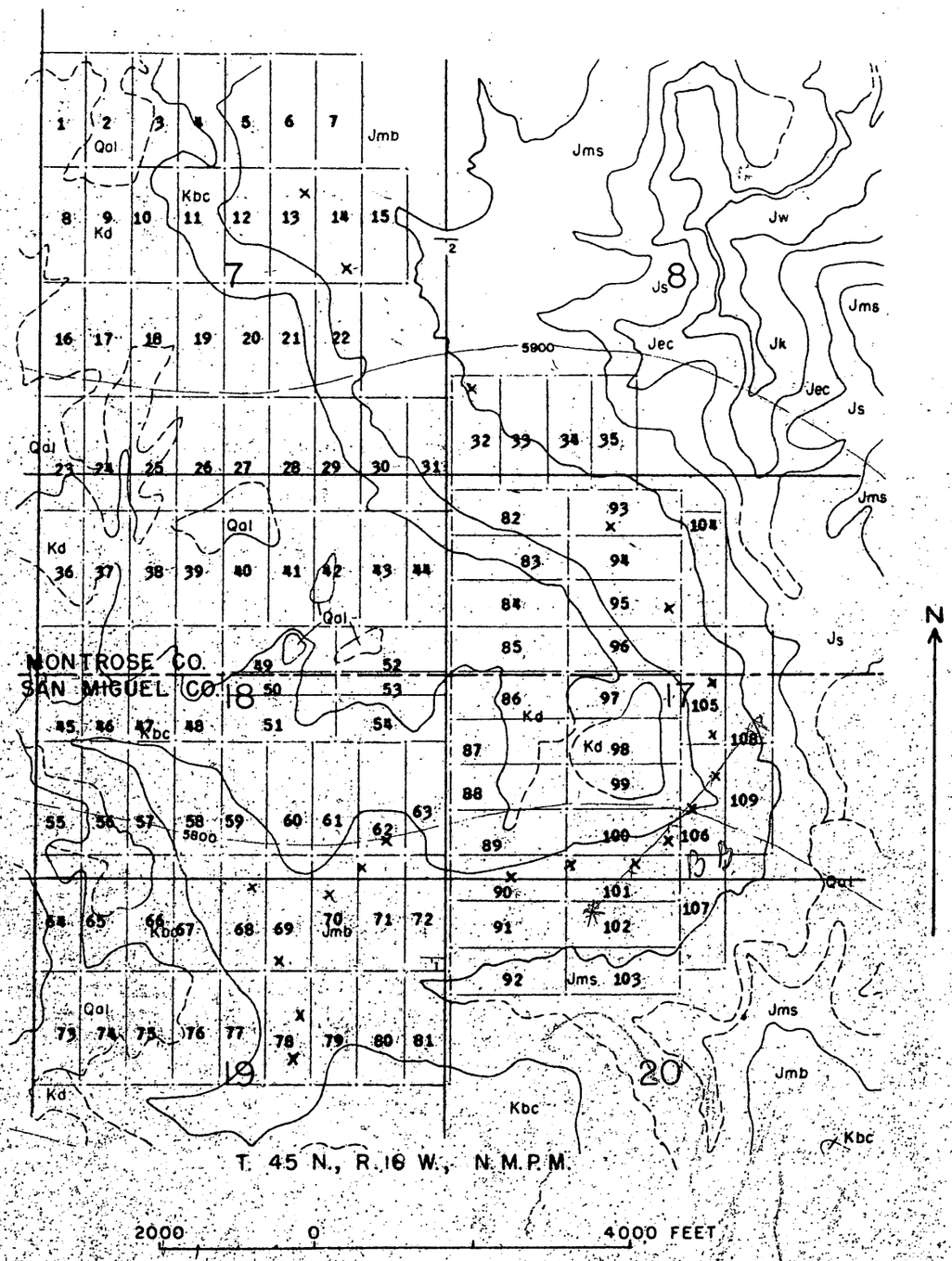


Figure 1. INDEX MAP OF PART OF THE COLORADO PLATEAU SHOWING THE LOCATION OF THE BULL CANYON MINING DISTRICT AND GOLDEN CYCLE PROPERTY, MONTROSE AND SAN MIGUEL COUNTIES, COLORADO

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 3565



EXPLANATION

QUATERNARY

Qal — ALLUVIUM

CRETACEOUS

Kd — ~~DAKOTA SANDSTONE~~

UNCONFORMITY

Kbc — BURRO CANYON FORMATION

JURASSIC

Jmb / Jms — MORRISON FORMATION

Js — SUMMERVILLE FORMATION

Jec — ENTRADA SANDSTONE AND CARMEL FORMATION UNDIVIDED

UNCONFORMITY

Jk — KAYENTA FORMATION

TRIASSIC

Jw — WINGATE SANDSTONE

FORMATION CONTACT

STRIKE AND DIP OF BEDS

5900 — STRUCTURE CONTOUR

X — PROPOSED 1ST STAGE DRILL HOLE

CLAIM INDEX

1	ASHBACK	56	LOBO NO. 2
2	HARRISON	57	LOBO NO. 3
3	TUG	58	LOBO NO. 4
4	LEE NO. 5	59	LOBO NO. 5
5	LEE NO. 7	60	LOBO NO. 6
6	LEE NO. 9	61	LOBO NO. 7
7	LEE NO. 11	62	LOBO NO. 8
8	DENNY	63	LOBO NO. 9
9	BOGGY	64	WEST FORT NO. 1
10	BOB	65	WEST FORT NO. 2
11	LEE NO. 5	66	WEST FORT NO. 3
12	LEE NO. 6	67	WEST FORT NO. 4
13	LEE NO. 8	68	WEST FORT NO. 5
14	LEE NO. 10	69	WEST FORT NO. 6
15	LEE NO. 12	70	WEST FORT NO. 7
16	EMILY	71	WEST FORT NO. 8
17	PAT	72	WEST FORT NO. 9
18	ELMER	73	MAY NO. 1
19	LEE NO. 13	74	MAY NO. 2
20	LEE NO. 14	75	MAY NO. 3
21	LEE NO 15	76	MAY NO. 4
22	LEE NO. 16	77	MAY NO. 5
23	APRIL NO. 3	78	MAY NO. 6
24	APRIL NO. 2	79	MAY NO. 7
25	APRIL NO. 1	80	MAY NO. 8
26	LEE NO 25	81	MAY NO. 9
27	LEE NO. 24	82	LOBO NO. 24
28	LEE NO 23	83	LOBO NO. 22
29	LEE NO. 22	84	LOBO NO. 20
30	LEE NO. 21	85	LOBO NO. 18
31	LEE NO. 20	86	LOBO NO. 16
32	BORDER NO. 1	87	LOBO NO. 14
33	BORDER NO. 2	88	LOBO NO. 12
34	BORDER NO. 3	89	LOBO NO. 10
35	BORDER NO. 4	90	W.F. NO. 10
36	APRIL NO. 4	91	W.F. NO. 11
37	APRIL NO. 6	92	W.F. NO. 14
38	APRIL NO. 8	93	LOBO NO. 28
39	APRIL NO. 10	94	LOBO NO. 29
40	APRIL NO. 12	95	LOBO NO. 21
41	APRIL NO. 14	96	LOBO NO. 19
42	APRIL NO. 16	97	LOBO NO. 17
43	APRIL NO. 18	98	LOBO NO. 15
44	APRIL NO. 20	99	LOBO NO. 13
45	APRIL NO. 5	100	LOBO NO. 11
46	APRIL NO. 7	101	W.F. NO. 12
47	APRIL NO. 9	102	W.F. NO. 12
48	APRIL NO. 11	103	W.F. NO. 13
49	APRIL NO. 15	104	BORDER NO. 5
50	FRACTION NO. 1	105	BORDER NO. 6
51	APRIL NO. 13	106	LOBO NO. 26
52	APRIL NO. 19	107	W.F. NO. 15
53	FRACTION NO. 2	108	BORDER NO. 7
54	APRIL NO. 17	109	LOBO NO. 28
55	LOBO NO. 1		

BASE FROM USGS GEOLOGIC QUADRANGLE MAP NATURITA NW

NOTE: STRUCTURE CONTOURS DRAWN ON TOP OF ENTRADA SANDSTONE

Figure 2. MAP OF PART OF THE BULL CANYON MINING DISTRICT SHOWING THE LOCATION OF PROPOSED DRILL HOLES, GOLDEN CYCLE PROPERTY, MONTROSE AND SAN MIGUEL COUNTIES, COLORADO

DEPARTMENT OF THE INTE
Defense Minerals Administrat
RECEIVED
JAN 27 1955

224 New Customhouse
Denver 2, Colorado

January 24, 1955

Memorandum

To: E. M. Barshman

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Golden Cycle Corporation, Harrison-Burnett and Small-Lee groups, Montrose and San Miguel Counties, Colorado

Enclosed are a revised project proposal by the applicant on the subject application and bound copies of both the Bureau of Mines and USGS original reports.

The engineering report and estimates are being revised.

Please indicate if you desire changes made in the geologic report.

W. M. TRAVER

W. M. Traver

Enclosures

WMT:jp
cc Subject
Chron
Chairman, Op. Comm.
Shaw

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

RECEIVED
JAN 24 1955

224 New Customhouse
Denver 2, Colorado

January 21, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Golden Cycle Corporation

Enclosed is one copy of an amendment to the subject application which should be included with your copy of the original brochure.

W. M. Traver

W. M. Traver

Enclosure

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 24 1955

224 New Customhouse
Denver 2, Colorado

January 21, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3565 (Uranium), Golden Cycle Corporation

Enclosed is one copy of an amendment to the subject application which should be included with your copy of the original brochure.

W. M. Traver

W. M. Traver

Enclosure

January 21, 1955

DMEA-3565

RE: Application for DMEA Loan
The Golden Cycle Corporation
Uranium Division

United States Department of the Interior
Defense Minerals Exploration Administration
New Customhouse Building
Denver, Colorado

Gentlemen:

The attached four copies covers an amendment to our Application for DMEA Loan which was recently submitted, to cover exploration work on Monogram Mesa, Colorado. This amendment covers the following:

Para. 4 - Physical Description
" 5 - The Exploration Project
" 6 - Estimate of Costs

as requested by Messrs. Travers and Connors 1/14/55. Although in the amended paragraphs as stated above, we have designated certain holes to be cored drilled, should either the local DMEA office or their field engineers desire to change the designation of the holes to be core drilled this will be worked out with the engineers in charge of our operations in the field.

Trusting that this gives all the information necessary for the further processing of our Application and awaiting your reply with interest, I am

Yours very truly,

THE GOLDEN CYCLE CORPORATION
URANIUM DIVISION

Max W. Bowen

Max W. Bowen
Executive Vice President

MWB:hr
P.S. We are also enclosing copies of Standard Form #25-Performance Bond in lieu of "Owner's Consent to Lien".

4. Physical description.-(a) - There is no mining or exploration now in progress on our group of claims, and to our knowledge,there has never been any in the past.

(b) See Above.

(c) There are a few rim exposures, which we believe are sufficiently promising that it is a reasonable exploration project. We have discussed at various times this area with the U.S.G.S. and they have assured us that they will cooperate with us to their fullest extent in working out the geology and drilling plan and will supply us with any and all technological information which they may have covering this area. Another reason for our desire to do exploratory drilling on this ground is that the Atomic Energy Commission has withdrawn all ground west of the section line, which is also the line between Range 16 West and Range 17 West. Further, the Commission has been drilling this ground and we understand that results have been favorable.

(d) 1/ Access Roads- The top of Monogram Mesa is serviced by the "all weather" Monogram Truck Route. Roads from the truck route to our ground are dirt. On the top of the Mesa the grades are slight. On the south end of our ground, Sec. 19, T45N, R16W, a very steep "Jeep Trail" gives access to the southwest claims. A quite steep road descends the rim in Sec. 6, T45N, R16W for access to Sec. 5. The U.S.G.S.,Colorado Plateau Project, has built a road over the rim in Sec. 6, from which a road south-southeast along our Morrison exposure can be made.

2/& 3/ Distance to Shipping, Supply and Residence Points-Naturita, Colorado, about 25 miles distant, is the closest town.

(e) Manpower, materials, supplies and equipment will be furnished by the drilling contractor. Our supervisory and engineering personnel can, if necessary, live on the location. Drilling water can be obtained from Dry Creek, just east of our ground. All power will be portable diesel or gasoline.

5. The exploration project.

(b) The work will be divided into two stages, the second contingent upon favorable indications discovered in the first stage.

The first stage of work will consist of building access roads for drill sites and drilling twenty vertical holes from somewhere above the contact between the Salt Wash and Brushy Basin members of the Morrison formation down thru the Salt-Wash member.

The drill sites will be placed just back from the Saltwash rim and should average about 250 feet in depth. They will be located by striking a line N30°E thru the area, measuring 500 foot centers along this line, and at the center points striking normal lines which intersect the rim at irregular points. Drill-hole locations will be made along the normal lines as shown on the attached 1:6000 map.

The first three holes to be drilled, numbers one, six and seventeen, shall be cored, size BX or greater, their entire depth by diamond bits. The other Stage One holes shall be diamond drilled their entire depth with a BX or larger core recovered only thru the ore sand, or about the last fifty feet of hole. The first three holes will be bottomed at the top of the Entrada sandstone. The other Stage One holes will be bottomed just below the bottom of the ore sand.

The Second Stage drilling, to be done with diamond plug bit to the top of the ore horizon and BX core bit thru the ore sand, will be offset drilling, at 100 foot centers, around favorable Stage One holes. It has been assumed that two Stage One holes shall be found favorable and that each of these will be offset with five 350 foot deep holes. Only the bottom fifty feet of these holes will be cored. We have indicated Holes #15 and #19 will have the offset drilling, but should Stage One drilling disclose more favorable mineralization in some other holes, the offset drilling would be done at the most favorable holes.

(c) The work will be started within 30 days after the loan has been approved, and 60 working days will be required for each stage.

(d) The Golden Cycle Corporation has, for the past many years, carried on numerous successful exploratory and diamond-drilling programs. It has been actively mining throughout its life and is fully aware of the risk and remunerative possibility of any large-scale exploration program.

The supervisory personnel are graduate mining engineers who have been active in the development of an exploration for uranium, gold and zinc ores for The Golden Cycle Corporation.

The U.S.G.S., Colorado Plateau Project, has offered to gamma-ray log each of our holes and to help with the stratigraphic and economic evaluation of our cores. Mr. Slothower checked with Mr. Art Flint 1/20/55 and he stated he would have a gamma-ray logging crew in this district through 1957 and would be available upon advance notice to log each of our holes.

6. Estimate of costs:

STAGE ONE

(a)	Bulldozer, etc....80 hrs @ $11/hr	$ 880.00	
	Compressor - 5 days @ $15/day	75.00	
	3400 feet of non-core diamond drilling @ $2.50/ft	8500.00	
	1900 feet of BX core diamond drilling @ $3.25/ft	6175.00	
			$15,630.00
(b)	Labor for road building: 120 hrs @ $1.75/hr	$ 210.00	
	Sup and Eng for 1 month	450.00	$ 660.00
(c)	Dynamite for road: 250# @ $20/100#	$ 50.00	
	Caps & Fuse for road	10.00	
	Gas	57.60	
	Gas	52.00	
	Butane for heat	8.00	
			$ 177.60
(d)	Jeep: 30 days @ $6.00/day	$180.00	
	Generator: 30 Days @ $1.00/day	30.00	
	Transit, drafting equipment and calculator: 30 days @ $1.00/day	30.00	
			$ 240.00
(e)	None		
(f)	Map shack & stove	$ 100.00	
	Toilet & gen. shed	35.00	
			$ 135.00
(g)	Accounting	$ 100.00	
	Compensation Insurance, General Liability Insurance and Payroll Taxes	75.00	$ 175.00
	Sub-Total		$17,017.60
(h)	Contingencies (including assaying) 15%		2,552.64
	TOTAL - STAGE ONE		$19,570.24

STAGE TWO

(a)	Bulldozer, etc., 90 hrs @ $11/hr	$ 990.00	
	Compressor 5 days @ $15/day	75.00	
	3000 feet of non-core diamond drilling @ $2.60/ft	7800.00	
	500 feet of BX core diamond drilling @ $3.75/ft	1875.00	
			$10,740.00
(b)	Labor for road building 92 hrs @ $1.75/hr	$ 161.00	
	Supervision and engineering	450.00	
			$ 611.00
(c)	Dynamite for roads: 150 lbs. @ $20.00/100 lbs.	$ 30.00	
	Caps and fuse for road	5.00	
	Gasoline for Jeep: 180 gals. @ 32¢/gal	57.60	
	Gasoline for generator: 200 gals. @ 26¢/gal.	52.00	
			$ 144.60
(d)	Jeep: 30 days @ $6.00/day	$ 180.00	
	Generator: 30 days @ $1.00/day	30.00	
	Transit, drafting equipment and calculator: 30 days @ $1.00/day	30.00	
			$ 240.00
(e)	None		
(f)	None		
(g)	Accounting	$ 50.00	
	Compensation Insurance, General Liability Insurance and Payroll Taxes	40.00	
			$ 90.00
	Sub-Total		$11,825.60
(h)	Contingencies (including assaying) 15%		1,773.84
	TOTAL STAGE TWO		$13,599.44

TOTAL - STAGE ONE	$19,570.24
TOTAL - STAGE TWO	13,599.44
TOTAL	$33,169.68

7. (b) We will use whatever equipment necessary that we own, such as Jeeps, trucks, etc. If we do not have the equipment necessary we will then hire such equipment such as bulldozers, compressors, etc., that is needed in addition to that furnished by the drilling contractor. As marked in the form we will furnish whatever amount of money is necessary to pay for the work done by the drilling contractor as he completes the work.

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

224 New Customhouse
Denver 2, Colorado

December 21, 1954

Memorandum

To: Administrator, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: Report of Examination, DMEA Docket 3565 (Uranium), Golden Cycle Corporation, Harrison-Burnett and Small-Lee groups, Montrose and San Miguel Counties, Colorado.

The application for Government assistance in exploration work estimated to Cost $33,264.00, has been approved by us and a contract is being prepared.

Government participation will be 75 percent, or $24,948.00.

Four copies of the Report of Examination and two copies of Form 3b will be forwarded with your copy of the contract.

W H King
W. H. King

DRWacharen
for E. N. Harshman

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved
Budget Bureau No. 42-R135.2.

Defense Minerals Administration
RECEIVED
NOV 8 - 1954

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

Not to be filled in by applicant

Docket No. 3565
Metal or Mineral Uranium
Date Received
Estimated Cost $33,242
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: THE GOLDEN CYCLE CORPORATION, URANIUM DIVISION, P.O. BOX 86, COLORADO SPGS., COLO.
A West Virginia Corporation Merrill E. Shoup, President, P.O. Box 86, Colo. Spgs., Colo.
Max W. Bowen, Exec. Vice-Pres. " " " " " "
H. Bates, Secretary " " " " " "

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

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

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract See Attached

(*b*) State any mine name by which the property is known. The Harrison and Burnett Group of Claims and the Small and Lee Group of Claims

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property. See attached Purchase Agreement. Leases as per this Agreement will be executed in near future

(*e*) If you own the land, describe any liens or encumbrances on it Lessee - no liens or encumbrances to our knowledge

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Refer to 3. (a)

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. See (a) above

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

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

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Uranium

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

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

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

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

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

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

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

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

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project. See Attached

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project. See Attached

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

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

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

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

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

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

Explain in detail on acompanying paper. See Attached

CERTIFICATION

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

Dated 10/22, 1954

THE GOLDEN CYCLE CORP., URANIUM DIV.
(Applicant)

By Max W. Bowen V.P.

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

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

4. Physical description.-(a) - There is no mining or exploration now in progress on our group of claims, and to our knowledge, there has never been any in the past.

(b) See Above.

(c) There are a few rim exposures, which we believe are sufficiently promising that it is a reasonable exploration project. We have discussed at various times this area with the U.S.G.S. and they have assured us that they will cooperate with us to their fullest extent in working out the geology and drilling plan and will supply us with any and all technological information which they may have covering this area. Another reason for our desire to do exploratory drilling on this ground is that the Atomic Energy Commission has withdrawn all ground west of the section line, which is also the line between Range 16 West and Range 17 West. Further, the Commission has been drilling this ground and we understand that results have been favorable.

(d) 1/ Access Roads- The top of Monogram Mesa is serviced by the "all weather" Monogram Truck Route. Roads from the truck route to our ground are dirt. On the top of the mesa the grades are slight. On the south end of our ground, Sec. 19, T45N, R16W, a very steep "Jeep Trail" gives access to the south-west claims. A quite steep road descends the rim in Sec. 6, T45N, R16W for access to Sec. 5.

The U.S.G.S. Colorado Plateau Project, is planning a road over the rim in Sec. 6, from which a road south-south-east along our Morrison exposure can be made.

2/& 3/ Distance to Shipping, Supply and Residence Points-Naturita, Colorado, about 25 miles distant, is the closest town.

(e) Manpower, materials, supplies and equipment will be furnished by the drilling contractor. Our supervisory and engineering personnel can, if necessary, live on the location. Drilling water can be obtained from Dry Creek, just east of our ground. All power will be portable diesel or gasoline.

5. The exploration project

(b) The work will be divided into two stages, the second contingent upon favorable indications discovered in the first stage.

The first stage of work will consist of building access roads for drill sites and drilling twenty vertical holes from somewhere above the contact between the Salt Wash and Brushy Basin members of the Morrison formation down thru the Saltwash member.

The holes will be placed just back from the Saltwash rim and should average about 250 feet in depth. They will be located by striking a line N30½E thru the area, measuring 500-foot centers along this line, and at the center points striking normal lines which intersect the rim at irregular points. Drill-hole locations will be made along the normal lines as shown on the attached 1:6000 map.

The second-stage drilling, to be done with dry wagon drills if no water is encountered in the first stage, will be offset drilling, at 100-foot centers, around favorable stage-one holes. It has been assumed that three favorable stage-one holes shall be drilled and that each of these will be offset with seven 350-foot-deep holes.

(c) The work will be started within 30 days after the loan has been approved, and 60 working days will be required for each stage.

(d) The Golden Cycle Corporation has, for the past many years, carried on numerous successful exploratory and diamond-drilling programs. It has been actively mining throughout its life and is fully aware of the risk and remunerative possibility of any large-scale exploration program.

The supervisory personnel are graduate mining engineers who have been active in the development of and exploration for uranium, gold and zinc ores for The Golden Cycle Corporation.

The U.S.G.S, Colorado Plateau Project, has offered to gamma-ray log each of our holes and to help with the stratigraphic and economic evaluation of our cores.

THE GOLDEN CYCLE CORP., URANIUM DIV.
P.O.Box 86, Colorado Springs, Colo.

6. Estimate of costs.

STAGE ONE

(a) Bulldozer, operator and fuel for road building and drill-hole locations: 40 hours @ $11.00/hr	$ 440.00	
Portable compressor for road building: 3 days @ $15.00/day	45.00	
5000 feet of BX drill hole @ $2.60/foot	13,000.00	
		$13,485.00
(b) Labor for road building: 60 hours @ $1.75/hr	$ 105.00	
Supervision and engineering for 1 month	450.00	$ 555.00
(c) Dynamite for road: 250 lbs. @ $20.00/100 lbs	$ 50.00	
Caps and fuse for road:	10.00	
Gasoline for Jeep: 180 gallons @ 32¢/gal.	57.60	
Gasoline for generator: 200 gallons @ 26¢/gal.	52.00	
		$ 169.60
(d) Jeep: 30 days @ $6.00/day	$ 180.00	
Generator: 30 days @ $1.00/day	30.00	
Transit, drafting equipment and calculator: 30 days @ $1.00/day	30.00	
		$ 240.00
(e) None		
(f) House trailer rental for office: 1 month @ $50.00/Mo.	$ 50.00	
Toilet and generator shed:	20.00	
		$ 70.00
(g) Accounting	$ 50.00	
Compensation Insurance, General Liability Insurance and Payroll Taxes	40.98	
		$ 90.98
Sub-Total		$14,610.58
(h) Contingencies - 15%		$ 2,191.59
TOTAL - STAGE ONE		$16,802.17

STAGE TWO

(a) Bulldozer, operator and fuel for road building and drill-hole locations: 30 hours @ $11.00/hr	$ 330.00	
Portable compressor for road building: 3 days @ $15.00/day	45.00	
7350 feet of wagon-drill hole @ $1.75/foot	12,862.50	
		$13,237.50
(b) Labor for road building: 48 hours @ $1.75/hr.	$ 84.00	
Supervision and engineering for one month	450.00	
		$ 534.00

(c) Dynamite for roads: 150 lbs. @ $20.00/100 lbs.	$ 30.00	
Caps and fuse for road:	5.00	
Gasoline for Jeep: 180 gals. @ 32¢/gal.	57.60	
Gasoline for generator: 200 gals. @ 26¢/gal.	52.00	$ 144.60
(d) Jeep: 30 days @ $6.00/day	$ 180.00	
Generator: 30 days @ $1.00/day	30.00	
Transit, drafting equipment and calculator: 30 days @ $1.00/day	30.00	$ 240.00
(e) None		
(f) House trailer for office rental for one month @ $50.00/month	$ 50.00	$ 50.00
(g) Accounting	50.00	
Compensation Insurance, General Liability Insurance and Payroll Taxes	39.71	$ 89.71
Sub-Total		$14,295.81
(h) Contingencies - 15%		2,144.37
TOTAL - STAGE TWO		$16,440.18

TOTAL - STAGE ONE	$16,802.17
TOTAL - STAGE TWO	16,440.18
TOTAL	$33,242.35

7. (b) We will use whatever equipment necessary that we own, such as Jeeps, trucks, etc. If we do not have the equipment necessary we will then hire such equipment such as bulldozers, compressors, etc., that is needed in addition to that furnished by the drilling contractor. As marked in the form we will furnish whatever amount of money is necessary to pay for the work done by the drilling contractor as he completes the work.

THE GOLDEN CYCLE CORP.
URANIUM DIV.
P.O.Box 86
Colorado Springs,Colo.

3. Applicant's Property Rights.--(a) LAE & SMALL GROUP

APRIL CLAIMS (Montrose and San Miguel Counties)

Claim No.	Section	Township	Range	P.M.
1	18	45 N	R 16 W	New Mex.
2	"	"	"	" "
3	"	"	"	" "
4	"	"	"	" "
5	"	"	"	" "
6	"	"	"	" "
7	"	"	"	" "
8	"	"	"	" "
9	"	"	"	" "
10	"	"	"	" "
11	"	"	"	" "
12	"	"	"	" "
13	"	"	"	" "
14	"	"	"	" "
15	"	"	"	" "
16	"	"	"	" "
17	"	"	"	" "
18	"	"	"	" "
19	"	"	"	" "
20	"	"	"	" "

LOBO CLAIMS (Montrose & San Miguel Counties)

1	17, 18 & 19	45 N	R 16 W	New Mex.
2	" " "	"	"	" "
3	" " "	"	"	" "
4	" " "	"	"	" "
5	" " "	"	"	" "
6	" " "	"	"	" "
7	" " "	"	"	" "
8	" " "	"	"	" "
9	" " "	"	"	" "
10	" " "	"	"	" "
11	" " "	"	"	" "
12	" " "	"	"	" "
13	" " "	"	"	" "
14	" " "	"	"	" "
15	" " "	"	"	" "
16	" " "	"	"	" "
17	" " "	"	"	" "
18	" " "	"	"	" "
19	" " "	"	"	" "
20	" " "	"	"	" "
21	" " "	"	"	" "
22	" " "	"	"	" "
23	" " "	"	"	" "
24	" " "	"	"	" "
25	" " "	"	"	" "
26	" " "	"	"	" "
27	" " "	"	"	" "
28	" " "	"	"	" "

THE GOLDEN CYCLE CORP.
URANIUM DIV.
P.O.Box 86
Colorado Springs, Colo.

LEE & SMALL GROUP (CON'T.)

MAY CLAIMS (San Miguel County)

Claim No.	Section	Township	Range	P.M.
1	19	45 N	R 16 W	New Mex.
2	"	"	"	" "
3	"	"	"	" "
4	"	"	"	" "
5	"	"	"	" "
6	"	"	"	" "
7	"	"	"	" "
8	"	"	"	" "
9	"	"	"	" "

LEE CLAIMS (Montrose County)

4	7 & 8	45 N	R 16 W	New Mex.
5	"	"	"	" "
6	"	"	"	" "
7	"	"	"	" "
8	"	"	"	" "
9	"	"	"	" "
10	"	"	"	" "
11	"	"	"	" "
12	"	"	"	" "
13	"	"	"	" "
14	"	"	"	" "
15	"	"	"	" "
16	"	"	"	" "
20	"	"	"	" "
21	"	"	"	" "
22	"	"	"	" "
23	"	"	"	" "
24	"	"	"	" "
25	"	"	"	" "

WEST FORK CLAIMS (San Miguel County)

1	17,18,19 & 20	45 N	R 16 W	New Mex.
2	"	"	"	" "
3	"	"	"	" "
4	"	"	"	" "
5	"	"	"	" "
6	"	"	"	" "
7	"	"	"	" "
8	"	"	"	" "
9	"	"	"	" "
10	"	"	"	" "
11	"	"	"	" "
12	"	"	"	" "
13	"	"	"	" "
14	"	"	"	" "
15	"	"	"	" "

THE GOLDEN CYCLE CORP., URANIUM DIV.
P.O.Box 86
Colorado Springs, Colo.

LEE & SMALL GROUP (CON'T.)

BORDER CLAIMS (Montrose & San Miguel Counties)

Claim No.	Section	Township	Range	P.M.
1	8 & 17	45 N	R 16 W	New Mex.
2	"	"	"	" "
3	"	"	"	" "
4	"	"	"	" "
5	"	"	"	" "
6	"	"	"	" "
7	"	"	"	" "

THE GOLDEN CYCLE CORP.
URANIUM DIV.
P.O.Box 86
Colorado Springs, Colo.

LEE & SMALL GROUP

As filed under Colorado Mining Law:

* Also filed in San Miguel Co.
' Also filed in Montrose Co.
¢ Also filed under Circular 7

					Book	Page
	Recorded in Montrose County					
April #4	"	"	"		376	415
April #5*	"	"	"		376	416
April #6	"	"	"		376	417
April #7*	"	"	"		376	418
April #8	"	"	"		376	419
April #9*	"	"	"		376	420
April #10	"	"	"		376	421
April #11*	"	"	"		376	422
April #12¢	"	"	"		376	423
April #15	"	"	"		375	291
April #19	"	"	"		375	292
	Recorded in San Miguel County					
April #5'	"	"	"	"	237	257
April #7'	"	"	"	"	237	258
April #9'	"	"	"	"	237	259
April #11'	"	"	"	"	237	260
April #13	"	"	"	"	237	261
April #17	"	"	"	"	237	262
Lobo #1	"	"	"	"	237	265
Lobo #2	"	"	"	"	237	266
Lobo #3	"	"	"	"	237	267
Lobo #4	"	"	"	"	237	268
Lobo #5	"	"	"	"	237	269
Lobo #6	"	"	"	"	237	270
Lobo #7	"	"	"	"	237	271
Lobo #8	"	"	"	"	237	272
Lobo #9	"	"	"	"	237	273
West Fork #11	"	"	"	"	237	263
West Fork #12	"	"	"	"	237	264
West Fork #13	"	"	"	"	238	350
West Fork #14	"	"	"	"	238	351
West Fork #15	"	"	"	"	238	352

As filed under Circular 7:

* Also filed in San Miguel Co.
' Also filed in Montrose Co.
¢ Also filed under Colo.Mng.Law

				Book	Page
	Recorded in Montrose County				
April #1	"	"	"	369	400
April #2	"	"	"	369	401
April #3	"	"	"	369	402
April #12¢	"	"	"	369	403
April #14	"	"	"	369	404
April #16	"	"	"	369	405
April #18	"	"	"	369	406
April #20	"	"	"	369	407

15x54

THE GOLDEN CYCLE CORP.
URANIUM DIV.
P.O.Box 86
Colorado Springs, Colo.

LEE & SMALL GROUP (CON'T.)

As filed under Circular 7 (Con't.)

					Book	Page
	Recorded in Montrose County					
Fraction #1*	"	"	"		377	188
Fraction #2*	"	"	"		377	189
Border #1	"	"	"		375	114
Border #2	"	"	"		375	115
Border #3	"	"	"		375	116
Border #4	"	"	"		375	117
Border #5	"	"	"		375	118
Border #6*	"	"	"		375	119
Border #7*	"	"	"		375	190
Lee #4	"	"	"		368	519
Lee #5	"	"	"		369	1
Lee #6	"	"	"		369	2
Lee #7	"	"	"		369	3
Lee #8	"	"	"		369	4
Lee #9	"	"	"		369	5
Lee #10	"	"	"		369	6
Lee #11	"	"	"		369	7
Lee #12	"	"	"		369	8
Lee #13	"	"	"		369	9
Lee #14	"	"	"		369	10
Lee #15	"	"	"		369	11
Lee #16	"	"	"		369	12
Lee #20	"	"	"		369	16
Lee #21	"	"	"		369	17
Lee #22	"	"	"		369	18
Lee #23	"	"	"		369	19
Lee #24	"	"	"		369	20
Lee #25	"	"	"		369	21
Lobo #18	"	"	"		375	79
Lobo #19	"	"	"		375	80
Lobo #20	"	"	"		375	81
Lobo #21	"	"	"		375	82
Lobo #22	"	"	"		375	83
Lobo #23	"	"	"		375	84
Lobo #24	"	"	"		375	85
Lobo #25	"	"	"		375	86
	Recorded in San Miguel County					
Fraction #1'	"	"	"	"	236	1
Fraction #2'	"	"	"	"	236	2
Border #6'	"	"	"	"	234	196
Border #7'	"	"	"	"	236	3

THE GOLDEN CYCLE CORP.
URANIUM DIV.
P.O.Box 86
Colorado Springs, Colo.

LEE & SMALL GROUP (CON'T.)

As filed under Circular 7 (Con't.)

	Recorded in San Miguel County				Book	Page
West Fork #1	"	"	"	"	234	197
West Fork #2	"	"	"	"	234	198
West Fork #3	"	"	"	"	234	199
West Fork #4	"	"	"	"	234	200
West Fork #5	"	"	"	"	234	201
West Fork #6	"	"	"	"	234	202
West Fork #7	"	"	"	"	234	203
West Fork #8	"	"	"	"	234	204
West Fork #9	"	"	"	"	234	205
West Fork #10	"	"	"	"	234	206
May #1	"	"	"	"	235	448
May #2	"	"	"	"	235	449
May #3	"	"	"	"	235	450
May #4	"	"	"	"	235	451
May #5	"	"	"	"	235	452
May #6	"	"	"	"	235	453
May #7	"	"	"	"	235	454
May #8	"	"	"	"	235	455
May #9	"	"	"	"	235	456
Lobo #10	"	"	"	"	234	186
Lobo #11	"	"	"	"	234	187
Lobo #12	"	"	"	"	234	188
Lobo #13	"	"	"	"	234	189
Lobo #14	"	"	"	"	234	190
Lobo #15	"	"	"	"	234	191
Lobo #16	"	"	"	"	234	192
Lobo #17	"	"	"	"	234	193
Lobo #26	"	"	"	"	234	194
Lobo #27	"	"	"	"	234	195
Lobo #28	"	"	"	"	236	4

THE GOLDEN C[illegible]E CORP., URANIUM DIV.
P.O.Box 86[illegible]
Colorado Springs, Colo.

3. Applicant's Property Rights.--(a) (Con't.) HARRISON & BURNETT GROUP

Claim Name	Claim No.	Section	Township	Range	P.M.
Ashback	#1	6 & 7	45 N	R 16 W	New Mex.
Burnett	#1	"	"	"	" "
Harrison	#1	"	"	"	" "
Quincy	#1	"	"	"	" "
Betty	#1	"	"	"	" "
Denny	#1	"	"	"	" "
Jane	#1	"	"	"	" "
Ruby	#1	"	"	"	" "
Boggy	#1	"	"	"	" "
Kraeger	#1	"	"	"	" "
Tug	#1	"	"	"	" "
Bob	#1	"	"	"	" "
Emely	#1	"	"	"	" "
Pat	#1	"	"	"	" "
Elmer	#1	"	"	"	" "
Apex	#1	"	"	"	" "
Gary	#1	"	"	"	" "
Gene	#1	"	"	"	" "
Mary	#1	"	"	"	" "
Rose	#1	"	"	"	" "
Daniels	#1	"	"	"	" "

15x54

THE GOLDEN CYCLE CORP.
URANIUM DIV.
P.O.Box 86
Colorado Springs, Colo.

HARRISON & BURNETT GROUP

As filed under A. E. C. Circular 7:

	Recorded in Montrose County			Book	Page
Ashback #1	"	"	"	368	60
Burnett #1	"	"	"	368	72
Harrison #1	"	"	"	368	74
Quincy #1	"	"	"	368	77
Betty #1	"	"	"	368	70
Denny #1	"	"	"	368	73
Jane #1	"	"	"	368	75
Ruby #1	"	"	"	368	78
Boggy #1	"	"	"	368	71
Kroeger #1	"	"	"	368	76
Tug #1	"	"	"	368	187
Bob #1	"	"	"	368	188
Emely #1	"	"	"	368	189
Pat #1	"	"	"	368	190
Elmer #1	"	"	"	368	191
Apex #1	"	"	"	368	192
Gary #1	"	"	"	368	193
Gene #1	"	"	"	368	194
Mary #1	"	"	"	368	195
Rose #1	"	"	"	368	196
Daniels #1	"	"	"	-	-

Withdrawal of Lease Application #213 covering the above 21 claims and dated Sept. 8, 1954 sent to the A.E.C. at that time. Signed by Walter F. Burnett and D. E. Harrison.

Recorded Montrose County, Book 381, Page 541

As filed under Colorado Mining Law:

	Recorded in Montrose County			Book	Page
Ashback #1	"	"	"	385	132
Burnett #1	"	"	"	385	127
Harrison #1	"	"	"	385	129
Quincy #1	"	"	"	385	137
Betty #1	"	"	"	385	120
Denny #1	"	"	"	385	128
Jane #1	"	"	"	385	130
Ruby #1	"	"	"	385	136
Boggy #1	"	"	"	385	126
Kroeger #1	"	"	"	385	131
Tug #1	"	"	"	385	118
Bob #1	"	"	"	385	124
Emely #1	"	"	"	385	133
Pat #1	"	"	"	385	134
Elmer #1	"	"	"	385	135
Apex #1	"	"	"	385	119
Gary #1	"	"	"	385	123
Gene #1	"	"	"	385	122
Mary #1	"	"	"	385	121
Rose #1	"	"	"	385	125
Daniels #1	"	"	"	385	138

3. (d)

GOLDEN CYCLE CORP.
URANIUM DIV.
P.O.Box 86
Colorado Springs, Colo.

(C O P Y)

POWER OF ATTORNEY

Know all men by these presents that I, W. A. Small, of Montrose County, Colorado, do hereby appoint Stewart C. Lee of Montrose County, Colorado, my attorney in fact with full power to sell, convey, option, assign, lease, or assign uranium leases under Domestic Uranium Program Circular 7, all of my interest in and to the following described mining claims and said lease or leases thereto, said claims being situate in Montrose County and San Miguel County, Colorado, to-wit:

The Franklin claims #1 and #2.
The Maybe claims #1 through #6, inclusive.
The Penion claims #1 through #16, inclusive.
The Pay claims #1 through #9, inclusive.
The May claims #1 through #7, inclusive.
The West Fork claims #1 through #15, inclusive.
The Lobo claims #1 through #28, inclusive.
The April claims #1 through #20, inclusive.
The Border claims #1 through #7, inclusive.
The Lee Claims #4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 20, 21, 22, 23, 24, and 25.
The L. S. Claims #1, 2, and #4 through #11, inclusive.

My attorney is further empowered to obligate me to take all necessary steps to obtain leases under said Circular 7 on said claims and effect assignments thereof including consent of the Atomic Energy Commission to any assignment by my attorney under the general powers above set out.

All of said acts of my attorney to have the same force and effect to all intents and purposes as though I were personally present and acting for myself, hereby ratifying and confirming whatsoever my attorney shall do by authority hereof.

In Witness whereof, I have set my hand and seal this _____ day of June, 1954.

/S/ W. A. SMALL

State of Colorado }
} ss
County of Montrose }

The foregoing instrument was acknowledged before me this 14th day of June, 1954. Witness my hand and official seal. My commission expires Jan. 28, 1947 7(1957)

/S/ THEODORE L. BROOKS
Notary Public

(NOTARY SEAL)

(C O P Y)

AGREEMENT

THIS MEMORANDUM OF AGREEMENT Made and entered into this 18th day of June, A.D. 1954, by and between U. A. SMALL of Paradox, Colorado, and STEWART C. LEE of Montrose, Colorado, parties of the first part, and THE GOLDEN CYCLE CORPORATION, a corporation, party of the second part,

WITNESSETH:

That WHEREAS the first parties are the owners of certain mining claims located in Montrose and San Miguel Counties, Colorado, and have applied for mining leases from the United States Atomic Energy Commission covering certain tracts of land in Montrose and San Miguel Counties, Colorado, and

WHEREAS the second party desires to obtain a lease of such mining claims and to obtain an assignment of such Atomic Energy Commission mining leases from the first parties,

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements herein contained, IT IS AGREED as follows:

1. The first parties agree to lease to the second party the mining claims owned by the first parties set forth in Schedule A attached to this agreement and made a part hereof and the first parties agree to assign to the second party the mining leases issued to the first parties by the United States Atomic Energy Commission covering the tracts of land set forth in Schedule B attached to this agreement and made a part hereof.

2. Such lease and assignment from the first parties to the second party shall be for a term of five (5) years from the date of the leases to the first parties from the United States Atomic Energy Commission and the lease and assignment provided for in this agreement from the first parties to the second party shall at the option of the second party be renewed or extended as to any or all of the claims set forth in Schedule A and as to any or all of the tracts set forth in Schedule B for not more than five (5) additional periods of three (3) years each. Not less than one hundred twenty (120) days prior to the expiration of the initial five (5) year period, the second party shall notify the first parties in writing by ordinary mail addressed to the first parties at their addresses set forth herein, whether or not the second party exercises its option to continue under this agreement and under the leases from the first parties and the assigned leases from the Atomic Energy Commission for an additional three (3) year period. Not less than one hundred twenty (120) days prior to the termination of each th (3) year extension hereunder, the second party shall notify the first partie

in writing in a like manner as at the termination of the original five (5) year period, whether the second party elects to extend such leases for an additional three (3) year period. In the event that the second party fails to notify the first parties of the exercise of its option one hundred twenty (120) days before the termination of the original five (5) year period hereunder or one hundred twenty (120) days prior to the termination of any three (3) year extension hereunder or in the event that the second party notifies the first parties that it does not choose to exercise its option for extension of such leases, then upon termination such lease or leases shall be reassigned to the first parties by the second party and all rights and liabilities hereunder shall immediately cease and terminate. In the event that the second party shall exercise an option for extension covering less than all of the claims or tracts included in this agreement, then the second party shall reassign to the first parties the claims or tracts not included in such extension.

3. In consideration of the agreement of the first parties to lease said mining claims to the second party and to assign such Atomic Energy Commission leases to the second party, the second party shall pay to the first parties the sum of FIVE THOUSAND DOLLARS ($5,000.00) upon the execution of this agreement, the receipt whereof is hereby acknowledged. Within sixty (60) days from the date hereof the second party shall pay the first parties the further sum of FIVE THOUSAND DOLLARS ($5,000.00) and in the event the second party fails to pay the further sum of FIVE THOUSAND DOLLARS ($5,000.00) within sixty (60) days from the date of this agreement, the first parties shall retain the initial FIVE THOUSAND DOLLARS ($5,000.00) herein receipted for in full satisfaction of all claims against the second party and all rights, duties and liabilities under this agreement shall cease and terminate. Upon the granting by the United States Atomic Energy Commission to the first parties of the leases herein specified or ninety (90) days after the date hereof, whichever date is later, the second party shall make final payment to the first parties, which final payment shall be such an additional amount so that the first parties shall receive out of all payments made hereunder, including the two FIVE THOUSAND DOLLARS ($5,000.00) payments, the sum of ONE HUNDRED EIGHTY AND 72/100 DOLLARS ($180.72) per full claim or tract of 20.66 acres. All claims or tracts less than 20.66 acres in area shall be paid for on a pro-rata basis at the rate of EIGHT AND 75/100 DOLLARS ($8.75) per acre. In computing the total price to be paid to the first parties, any of the

mining claims included in this agreement, which are invalid because of prior location, and any of the tracts included in this agreement upon which the Atomic Energy Commission does not grant a lease to the first parties, shall be excluded. In the event that the second party fails to make the final payment as herein required, the first parties shall retain the two FIVE THOUSAND DOLLARS ($5,000.00) payments made hereunder in full satisfaction of all claims or demands against the second party and all rights and liabilities under this agreement shall immediately cease and terminate.

4. Upon final payment by the second party to the first parties as above provided, the first parties will execute and deliver to the second party the lease covering the mining claims and will assign to the second party the leases obtained from the United States Atomic Energy Commission all as above set forth.

5. All areas or fractions within the exterior boundary lines of the claims and tracts included in this agreement, which areas or fractions have not been located or leased, shall be located by the second party or the second party shall apply for leases thereon from the Atomic Energy Commission, which locations or lease applications shall be in the names of the first parties and for the benefit of the first parties, PROVIDED that such leases, when granted, and such locations shall be subject to this agreement and shall be assigned and leased to the second party in the same manner and under the same conditions as the other tracts or claims covered by this agreement.

6. The first parties certify that location certificates have been or will be filed covering the mining claims included in this agreement as set forth in Schedule A and that lease applications have been filed or will be filed with the United States Atomic Energy Commission covering the tracts set forth in Schedule B and that notices of such lease applications have been filed or will be filed in the office of the County Recorder of Montrose and San Miguel Counties. The first parties agree that the leases to be obtained from the United States Atomic Energy Commission shall be procured by them at their own expense and that they will take all required steps to obtain such leases, or take whatever steps are necessary to perfect such claims. The first parties further agree to take all the required steps to perfect the claim locations set forth in Schedule A.

7. The first parties certify that they own the entire interest in the mining claims set forth in Schedule A and that they are the only persons having an interest in the lease applications set forth in Schedule B. The first parties

further agree to warrant title to such mining claims and leases against all persons claiming by, through or under the first parties.

8. In addition to the payments above set forth the second party agrees to pay to the first parties a twelve and one-half percent (12½%) royalty based upon the gross ore receipts, less penalties, from Uranium ore shipped by the second party from any of the claims leased by the first parties to the second party or from any of the tracts covered by this agreement upon which the first parties have obtained a valid lease, which lease has been assigned to the second party. Such royalty shall apply to bonuses, base price and premiums upon the Uranium ore but haulage shall not be included in the computation of the royalty. Development allowance applicable or attributable to property under lease from the Atomic Energy Commission shall not be included in the computation of the royalty but development allowance applicable or attributable to the mining claims set forth in Schedule A only shall be included in the computation of the royalty. The second party shall also pay a twelve and one-half percent (12½%) royalty to the first parties on Vanadium ore shipped from any of the mining claims covered by this agreement or shipped from any of the tracts covered by this agreement upon which the first parties have obtained a valid lease, which lease has been assigned to the second party. The royalty on Vanadium ore shall be computed on the base price less penalties. All royalties to be paid hereunder shall be paid directly by the mill to the first parties and written authorization for such direct payment shall be given to the mill by the first parties and the second party.

9. The second party agrees to proceed with reasonable diligence after the closing of this transaction to develop the property for mining of Uranium and Vanadium ore. The second party further agrees to expend a sum of not less than TWENTY-SEVEN THOUSAND DOLLARS ($27,000.00) each year for prospecting, development upon the property, PROVIDED, HOWEVER, that should the second party in any one year expend in excess of said sum of TWENTY-SEVEN THOUSAND DOLLARS ($27,000.00) for prospecting, development upon the property, then such excess may at the option of the second party be applied and credited to either or both of the following two years of this agreement, PROVIDED, FURTHER, that the application of such excess to one or both of the following years shall not excuse the second party from the performance of the necessary work requirements to meet the conditions of the leases from the United States Atomic Energy Commission and to hold the mining claims included in this transaction as hereinafter set forth. The second party further agrees to perform the necessary work requirements and to file the

necessary statements of work performed and affidavits of labor to meet the conditions of the leases from the Atomic Energy Commission and to hold the mining claims included in this transaction and all such amounts expended to meet such work requirements shall be included in computing the required amount expended by the second party each year for prospecting, development of the property. In the event that the Atomic Energy Commission should drill any of the property or do any other development work on the property, all amounts expended by the Atomic Energy Commission for such drilling or development work shall be included in computing the TWENTY-SEVEN THOUSAND DOLLARS ($27,000.00) annual prospecting, development expenditure to be made by the second party. The second party agrees to pay the annual rental of TEN DOLLARS ($10.00) per year upon each tract leased from the Atomic Energy Commission and such rental shall be included in computing the TWENTY-SEVEN THOUSAND DOLLARS ($27,000.00) annual prospecting, development expenditure to be made by the second party.

10. The second party may at any time reassign any claims or tracts included in this transaction to the first parties and thereupon the second party shall be no longer obligated to perform the annual work requirements or to pay the annual rental on such tracts so reassigned or to file the statements of work performed and affidavits of labor covering such claims or tracts; PROVIDED that such a reassignment of such tracts shall not reduce the cash payments provided for herein or the annual amount to be expended by the second party for prospecting, development upon the remaining claims or tracts.

11. In the event that the second party fails to expend the sum of TWENTY-SEVEN THOUSAND DOLLARS ($27,000.00) per year for prospecting, development of the property, including the excess carry-overs and the amounts expended by the Atomic Energy Commission, all as above set forth, the second party shall upon written demand by the first parties transfer and reassign to them all property included in this transaction. Other than as provided in the following paragraph, such transfer or reassignment shall be the sole remedy of the first parties and they shall have no claim for damages or otherwise against the second party except for wrongful failure to transfer or reassign the property upon demand.

12. Statements of work performed showing compliance with the work requirements of the Atomic Energy Commission leases and affidavits of labor shall be filed by the second party one hundred twenty (120) days before due and in the event the second party fails to file such statements, the first parties may perform such work requirements and the second party shall be liable to the first

parties for the costs incurred by the first parties in performing such work requirements. PROVIDED, HOWEVER, that this paragraph shall not apply to any claims or tracts which have been reassigned to the first parties before said one hundred twenty (120) days and shall not be applicable if this agreement has been cancelled or terminated before said one hundred twenty (120) days.

13. All mining and development work upon the property shall be done under the exclusive control and management of the second party but the second party shall furnish to the first parties quarterly a Record of expenditures made for prospecting, development and mining upon the property.

14. The first parties agree that any additional property acquired by them, located within the exterior boundaries of the property covered by this transaction, shall be leased and assigned to the second party and shall become a part of this agreement.

15. The second party agrees to assume all responsibility for and to save the first parties harmless from any and all accidents to any of its employees, sub-lessees, licensees, agents, associates or visitors upon the property covered by this agreement, a lease covering which has been granted or assigned to the second party and has not been reassigned to the first parties and to forthwith post and at all times keep posted at the main workings upon the premises a conspicuous notice in the name of and on behalf of the first parties with the name of the second party also attached stating in substance that the premises are leased to the second party and that the first parties will not be liable for damages on account of any such accident. The second party further agrees to carry at its own expense Workmen's Compensation Insurance covering all its employees and sub-lessees.

16. The second party agrees that it will post and keep posted in conspicuous places on the premises as many written notices as may be necessary to adequately notify all persons who may come within or upon the demised premises that the same are held by the second party under lease from the first parties and that the second party and not the first parties are liable for all labor performed and supplies and/or materials used by the second party in and upon the premises and that the second party and not the first parties shall be responsible for all debts and expenses incurred in mining operations in or upon the premises.

17. The second party agrees to work and mine the property with diligence and in a workman like manner and to keep the same securely timbered, drained, clear and in safe condition and to allow the first parties to inspect the pre-

mises at reasonable times and to make available to the first parties all geological data obtained by the second party concerning the property, and shall furnish copies of such information on claims reassigned.

18. Upon violation by the second party of any of the covenants or agreements herein contained, this agreement and the leases and assignments made hereunder shall at the option of the first parties terminate and expire and the rights of the second party in the premises shall be forfeited if such default or violation shall continue at the expiration of sixty (60) days after the first parties shall have given to the second party written notice of such violation or default and demand for possession of the premises because thereof, the second party being given said sixty (60) days time to overcome the cause of such forfeiture by full compliance with the violated covenant or agreement and if such cause be not so overcome at the expiration of said sixty (60) days time without further demand or notice, the first parties by themselves, their agents or attorneys may enter upon the premises and dispossess all persons occupying the same. In the event that the second party denies that the violations had occurred or that the default existed, of which notice was so given, it may within ten (10) days from receipt of such notice serve written demand upon the first parties for submission of such question to arbitration. Thereupon, the first parties and the second party shall each, within ten (10) days from the making of such demand, appoint an arbiter and if the two so appointed do not agree within five (5) days such arbiters shall promptly select a third and the decision of any two of such arbiters shall be rendered within fifteen (15) days and shall be conclusive and binding upon the first parties and the second party as to the fact of the occurrence or non-occurrence of such claimed violation or default. Any expense incurred in such arbitration shall be borne by the party found to be at fault by the arbiters.

19. Upon the expiration or termination of this agreement, the second party will deliver to the first parties the said premises with the appurtenances and improvements in good order and condition with all shafts, tunnels, levels and other permanent workings clear of waste and rubbish; PROVIDED, HOWEVER, that the second party shall have thirty (30) days from and after the date of any such expiration or termination in which to remove all broken ore from the property for shipment and the second party shall have the right during such thirty (30) day period to remove from said premises all machinery, tools, equipment, supplies and other property placed on the premises by the second party, which said machinery, tools, equipment, supplies and other property shall at all times remain the property of the second party.

THIS AGREEMENT shall extend to and be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

IN WITNESS WHEREOF the first parties have hereunto set their hands and second party has caused these presents to be executed by its Vice-President, all in duplicate on the day and year first above written.

/S/ Stewart C. Lee

/S/ V. A. Small
By: Stewart C. Lee
Attorney in Fact
Parties of the First Part

THE GOLDEN CYCLE CORPORATION

By: /S/ Max W. Brown
Vice-President

Party of the Second Part

SCHEDULE A
(Claims Located under Colorado Mining Law)

April #4	Located in Section 18, Tp. 45 N. R. 16 W. N.M.P.M.
April #5	" " " " " " " " "
April #6	" " " " " " " " "
April #7	" " " " " " " " "
April #8	" " " " " " " " "
April #9	" " " " " " " " "
April #10	" " " " " " " " "
April #11	" " " " " " " " "
April #13	" " " " " " " " "
April #17	Located in Secs. 17,18, " " " " "
Lobo #1	Located in Section 20, Tp. 45 N. R. 16 W. N.M.P.M.
Lobo #2	" " " " " " " " "
Lobo #3	" " " " " " " " "
Lobo #4	" " " " " " " " "
Lobo #5	" " " " " " " " "
Lobo #6	" " " " " " " " "
Lobo #7	" " " " " " " " "
Lobo #8	" " " " " " " " "
Lobo #9	Located in Sec. 17, 18, Tp. 45 N. R. 16 W. N.M.P.M.
West Fork #11	Located in Section 20, Tp. 45 N. R. 16 W. N.M.P.M.
West Fork #12	" " " " " " " " "
West Fork #13	" " " " " " " " "
West Fork #14	" " " " " " " " "

The following claims are located under
Colorado Mining Law and
were filed under A. E. C. Circular 7

April #12	Notice under C. 7 recorded 4-30-54, Mont. Ct. Loc. in Sec. 18,tp.45N.R.16W
Fraction #1	" " " " " " " " " " " " " " " "
Fraction #2	" " " " " " " " " " " 17,18" " " " "
West Fork #15	" " " " " " " " " " " 17,20" " " " "

SCHEDULE B
Tracts under A.E.C. Circular 7

April #1	Recorded 4-30-54, Montrose Co.,located in Secs. 7,18, Tp. 45 N.R.16W. N.M.P.M.
April #2	" " " " " " " " " " " " " " " "
April #3	" " " " " " " " " " " " " " " "
April #14	" " " " " " " " 18, " " " " " "
April #15	
A.E.C.	" 5-22/54 " " " " " 18, " " " " " "
April #16	" 4-30-54 " " " " " 18, " " " " " "
April #18	" 4-30-54 " " " " " 18, " " " " " "
April #19	
A.E.C.	" 5-22-54 " " " " " 17,18 " " " " " "
April #20	" 4-30-54 " " " " " 17,18 " " " " " "

SCHEDULE B CONTINUED

Lee #4	Recorded	4-12/54,	Montrose	Co.	in	Sec.		7,	Tp.	45 N.	R. 16	N. N.M.P.M.
Lee #5	"	"	"	"	"	"	6 &	7,	"	"	"	"
Lee #6	"	"	"	"	"	"		7,	"	"	"	"
Lee #7	"	"	"	"	"	"	6 &	7,	"	"	"	"
Lee #8	"	"	"	"	"	"		7,	"	"	"	"
Lee #9	"	"	"	"	"	"	6 &	7,	"	"	"	"
Lee #10	"	"	"	"	"	"		7,	"	"	"	"
Lee #11	"	"	"	"	"	"	6 &	7,	"	"	"	"
Lee #12	"	"	"	"	"	"		7,	"	"	"	"
Lee #13	"	"	"	"	"	"		7,	"	"	"	"
Lee #14	"	"	"	"	"	"		7,	"	"	"	"
Lee #15	"	"	"	"	"	"		7,	"	"	"	"
Lee #16	"	"	"	"	"	"		7,	"	"	"	"
Lee #20	"	"	"	"	"	"	7,8,18,17	"	"	"	"	"
Lee #21	"	"	"	"	"	"	7 & 18,	"	"	"	"	"
Lee #22	"	"	"	"	"	"	7 & 18,	"	"	"	"	"
Lee #23	"	"	"	"	"	"	7 & 18,	"	"	"	"	"
Lee #24	"	"	"	"	"	"	7 & 18,	"	"	"	"	"
Lee #25	"	"	"	"	"	"	7 & 18,	"	"	"	"	"

	Recorded	San Miguel	County		Book	Page
West Fork #1	"	"	"	"	234	197
West Fork #2	"	"	"	"	234	198
West Fork #3	"	"	"	"	234	199
West Fork #4	"	"	"	"	234	200
West Fork #5	"	"	"	"	234	201
West Fork #6	"	"	"	"	234	202
West Fork #7	"	"	"	"	234	203
West Fork #8	"	"	"	"	234	204
West Fork #9	"	"	"	"	234	205
West Fork #10	"	"	"	"	234	206
May #1	"	"	"	"	235	448
May #2	"	"	"	"	235	449
May #3	"	"	"	"	235	450
May #4	"	"	"	"	235	451
May #5	"	"	"	"	235	452
May #6	"	"	"	"	235	453
May #7	"	"	"	"	235	454
May #8	"	"	"	"	235	455
May #9	"	"	"	"	235	456
Lobo #10	"	"	"	"	234	186
Lobo #11	"	"	"	"	234	187
Lobo #12	"	"	"	"	234	188
Lobo #13	"	"	"	"	234	189
Lobo #14	"	"	"	"	234	190
Lobo #15	"	"	"	"	234	191
Lobo #16	"	"	"	"	234	192
Lobo #17	"	"	"	"	234	193

Lobo #18	Recorded	5-5-54,	Mont.	Co.	in	Section	17,	Tp.	45 N.	R. 16	N. N.M.P.M.
Lobo #19	"	"	"	"	"	"	"	"	"	"	"
Lobo #20	"	"	"	"	"	"	"	"	"	"	"
Lobo #21	"	"	"	"	"	"	"	"	"	"	"
Lobo #22	"	"	"	"	"	"	"	"	"	"	"
Lobo #23	"	"	"	"	"	"	"	"	"	"	"
Lobo #24	"	"	"	"	"	"	"	"	"	"	"
Lobo #25	"	"	"	"	"	"	"	"	"	"	"

	Recorded in San Miguel County					Book	Page
Lobe #26	"	"	"	"	"	234	194
Lobe #27	"	"	"	"	"	234	195

Lobe #28 Located in Section 17, Tp. 45 N. R. 16 W. M.D.B.&M.

Border #1	Recorded 5-7-54, Mont. Co., located in Sec. 8 & 17, Tp. 45N. R.16W. M.D.B.&M.												
Border #2	"	"	"	"	"	"	"	"	"	"	"	"	"
Border #3	"	"	"	"	"	"	"	"	"	"	"	"	"
Border #4	"	"	"	"	"	"	"	"	"	"	"	"	"
Border #5	"	"	"	"	"	"	"	"	"	"	"	"	"
Border #7	"	"	"	"	"	"	"	"	"	"	"	"	"

Border #6 Recorded in San Miguel County, Book 234, Page 196

3. (d)

(C O P Y)

THE GOLDEN CYCLE CORP.
URANIUM DIV.
P.O.Box 86
Colorado Springs, Colo.

AGREEMENT

THIS MEMORANDUM OF AGREEMENT Made and entered into this 29th day of June, A.D. 1954, by and between DUNCAN E. HARRISON of Durango, Colorado, and WALTER F. DUNNETT of Naturita, Colorado, parties of the first part, and THE GOLDEN CYCLE CORPORATION, a corporation, party of the second part,

WITNESSETH:

That WHEREAS the first parties have applied for mining leases from the United States Atomic Energy Commission covering certain tracts of land in Montrose County, Colorado, and

WHEREAS the second party desires to obtain an assignment of such mining leases from the first parties,

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements herein contained, IT IS AGREED as follows:

1. The first parties agree to assign to the second party the mining leases issued to the first parties by the United States Atomic Energy Commission covering the tracts of land set forth in Schedule A attached to this agreement and made a part hereof.

2. Such assignment from the first parties to the second party shall be for a term of five (5) years from the date of the leases to the first parties from the United States Atomic Energy Commission and such assignment from the first parties to the second party shall at the option of the second party be renewed or extended as to any or all of the tracts set forth in Schedule A for not more that five (5) additional periods of three (3) years each. Not less than one hundred twenty (120) days prior to the expiration of the initial five (5) year period, the second party shall notify the first parties in writing by ordinary mail addressed to the first parties at their addresses set forth herein, whether or not the second party exercises its option to continue under this agreement for an additional three year period. Not less than one hundred twenty (120) days prior to the termination of each three (3) year extension hereunder, the second party shall notify the first parties in writing in a like manner as at the termination of the original five (5) year period, whether the second party elects to have this agreement extended for an additional three (3) year period. In the event that the second party fails to notify the first parties of the exercise of its option one hundred twenty (120) days before the termination of the original five year period hereunder or one hundred twenty (120) days prior to the termination of any three (3) year extension hereunder or in the event that the second party

notifies the first parties that it does not choose to exercise its option to extend this agreement, then upon termination, such lease or leases shall be reassigned to the first parties by the second party and all rights and liabilities hereunder shall immediately cease and terminate. In the event that the second party shall exercise an option for extension covering less than all of the tracts included in this agreement, then the second party shall reassign to the first parties the tracts not included in such extension.

3. In consideration of the agreement of the first parties to assign such leases to the second party, the second party shall pay to the first parties the sum of FIVE THOUSAND DOLLARS ($5,000.00) upon the execution of this agreement, the receipt whereof is hereby acknowledged. Upon the granting by the United States Atomic Energy Commission to the first parties of the leases herein specified or seventy-five (75) days after the date hereof, whichever date is later, the second party shall pay the first parties an additional amount so that the first parties shall receive out of all payments made hereunder, including the FIVE THOUSAND DOLLARS ($5,000.00) payment herein receipted for, the sum of FOUR HUNDRED SEVENTY-SIX AND 19/100 DOLLARS ($476.19) per full tract of 20.66 acres. All tracts less than 20.66 acres in area shall be paid for on a pro-rata basis at the rate of TWENTY-THREE AND 05/100 DOLLARS ($23.05) per acre. In computing the total price to be paid to the first parties, any of the tracts included in this agreement upon which the Atomic Energy Commission does not grant a lease to the first parties, shall be excluded. In the event that the second party fails to make the final payment as herein required, the first parties shall retain the FIVE THOUSAND DOLLARS ($5,000.00) payment made hereunder in full satisfaction of all claims or demands against the second party and all rights and liabilities under this agreement shall immediately cease and terminate.

4. Upon final payment by the second party to the first parties as above provided, the first parties will assign the leases obtained by the first parties from the United States Atomic Energy Commission to the second party as above set forth.

5. The second party shall apply for leases from the Atomic Energy Commission covering all areas or fractions within the exterior boundary lines of the tracts included in this agreement, which areas or fractions have not been located or leased and such lease applications shall be in the names of the first parties and for the benefit of the first parties PROVIDED that such leases when granted shall be subject to this agreement and shall be assigned to the second party in the same manner and under the same conditions as the other tracts covered by this agreement.

6. The first parties certify that lease applications have been filed with the United States Atomic Energy Commission covering the tracts set forth in this agreement and that notices thereof have been filed in the office of the County Recorder of Montrose County. The first parties agree that the leases above specified to be obtained from the United States Atomic Energy Commission shall be procured by them at their own expense and they also agree to take all required steps to obtain such leases. In event multiple use bill now pending before the House and Senate, or similar enactment becomes a Law, then and in such event the party of the first part agrees to comply with relocation of said property in compliance with Federal Acts in such cases made and provided.

7. The first parties certify that they are the only persons having an interest in the lease applications as above set forth and they further agree to warrant title to said leases against all persons claiming by, through or under the first parties.

8. In addition to the payments above set forth, the second party agrees to pay to the first parties a twelve and one-half percent (12½%) royalty based upon the gross ore receipts, less penalties, from Uranium ore shipped by the second party from any of the tracts covered by this agreement upon which the first parties have obtained a valid lease, which lease has been assigned to the second party. Such royalty shall apply to bonuses, base price and premiums upon the Uranium ore but haulage and development allowance shall not be included in the computation of the royalty. The second party shall also pay a twelve and one-half percent (12½) royalty to the first parties on Vanadium ore shipped from any of the tracts covered by this agreement, upon which the first parties have obtained a valid lease, which lease has been assigned to the second party. The royalty on Vanadium ore shall be computed on the base price, less penalties. All royalties to be paid hereunder, shall be paid directly by the mill to the first parties and written authorization for such direct payment shall be given to the mill by the first parties and the second party.

9. The second party agrees to proceed with reasonable diligence after the closing of this transaction to develop the property for mining of Uranium and Vanadium ore. The second party further agrees to expend a sum of not less than SEVEN THOUSAND DOLLARS ($7,000.00) each year for prospecting or development upon the property, PROVIDED, HOWEVER, that should the second party in any one year expend in excess of said sum of SEVEN THOUSAND DOLLARS ($7,000.00) for prospecting

or development upon the property, then such excess may at the option of the second party be applied and credited to either or both of the following two years of this agreement, PROVIDED, FURTHER, that the application of such excess to one or both of the following years shall not excuse the second party from the performance of the annual work requirements contained in the leases from the Atomic Energy Commission as hereinafter set forth. The second party further agrees to perform the necessary work requirements to meet the conditions of the leases from the United States Atomic Energy Commission and all such amounts expended to meet such work requirements shall be included in computing the required amount expended by the second party each year for prospecting or development of the property. In the event that the Atomic Energy Commission should drill any of the property or do any other development work on the property, all amounts expended by the Atomic Energy Commission for such drilling or development work shall be included in computing the SEVEN THOUSAND DOLLARS ($7,000.00) annual prospecting or development expenditure to be made by the second party. The second party agrees to pay the annual rental of TEN DOLLARS ($10.00) per year upon each tract included as a part of this transaction and such rental shall be included in computing the SEVEN THOUSAND DOLLARS ($7,000.00) annual prospecting or development expenditure to be made by the second party.

10. The second party may at any time reassign any tracts included in this transaction to the first parties and thereupon the second party shall be no longer obligated to perform the annual work requirements or to pay the annual rental on such tracts so reassigned to the first parties; PROVIDED that such a reassignment of such tracts shall not reduce the annual amount to be expended by the second party for prospecting or development upon the remaining tracts.

11. In the event that the second party fails to expend the sum of SEVEN THOUSAND DOLLARS ($7,000.00) per year for prospecting or development of the property, including the excess carryovers and the amounts expended by the Atomic Energy Commission, all as above set forth, the second party shall upon written demand by the first parties transfer and reassign to them all property included in this transaction. Other than as provided in the following paragraph, such transfer or reassignment shall be the sole remedy of the first parties and they shall have no claim for damages or otherwise against the second party except for wrongful failure to transfer or reassign the property upon demand.

12. Statements of work performed showing compliance with the work requirements of the Atomic Energy Commission leases shall be filed by the second party one hundred twenty (120) days before due and in the event the second party fails to file such statements, the first parties may perform such work requirements and the second party shall be liable to the first parties for the costs incurred by the first parties in performing such work requirements. PROVIDED, HOWEVER, that this paragraph shall not apply to any tracts which have been reassigned to the first parties before said one hundred twenty (120) days and shall not be applicable if this agreement has been cancelled or terminated before said one hundred twenty (120) days.

13. All mining and development work upon the property shall be done under the exclusive control and management of the second party but the second party shall furnish to the first parties quarterly a record of expenditures made for prospecting, development and mining upon the property.

14. The first parties agree that any additional property acquired by them, located within the exterior boundaries of the property covered by this transaction, shall be leased and assigned to the second party and shall become a part of this agreement.

15. The second party agrees to assume all responsibility for and to save the first parties harmless from any and all accidents to any of its employees, sub-lessees, licensees, agents, associates or visitors upon the property covered by this agreement, a lease covering which has been granted or assigned to the second party and has not been reassigned to the first parties and to forthwith post and at all times keep posted at the main workings upon the premises a conspicuous notice in the name of and on behalf of the first parties with the name of the second party also attached stating in substance that the premises are leased to the second party and that the first parties will not be liable for damages on account of any such accident. The second party further agrees to carry at its own expense Workmen's Compensation Insurance covering all its employees and sub-lessees.

16. The second party agrees that it will post and keep posted in conspicuous places on the premises as many written notices as may be necessary to adequately notify all persons who may come within or upon the demised premises that the same are held by the second party under lease from the first parties and that the

second party and not the first parties are liable for all labor performed and supplies and/or materials used by the second party in and upon the premises and that the second party and not the first parties shall be responsible for all debts and expenses incurred in mining operations in or upon the premises.

17. The second party agrees to work and mine the property with diligence and in a workman like manner and to keep the same securely timbered, drained, clear and in safe condition and to allow the first parties to inspect the premises at reasonable times and to make available to the first parties all geological data obtained by the second party concerning the property.

18. Upon violation by the second party of any of the covenants or agreements herein contained, this agreement and the leases and assignments made hereunder shall at the option of the first parties terminate and expire and the rights of the second party in the premises shall be forfeited if such default or violation shall continue at the expiration of sixty (60) days after the first parties shall have given to the second party written notice of such violation or default and demand for possession of the premises because thereof, the second party being given said sixty (60) days time to overcome the cause of such forfeiture by full compliance with the violated covenant or agreement and if such cause be not so overcome at the expiration of said sixty (60) days time without further demand or notice, the first parties by themselves, their agents or attorneys may enter upon the premises and dispossess all persons occupying the same. In the event that the second party denies that the violations had occurred or that the default existed, of which notice was so given, it may within ten (10) days from receipt of such notice serve written demand upon the first parties for submission of such question to arbitration. Thereupon, the first parties and the second party shall each, within ten (10) days from the making of such demand, appoint an arbiter and if the two so appointed do not agree within five (5) days such arbiters shall promptly select a third and the decision of any two of such arbiters shall be rendered within fifteen (15) days and shall be conclusive and binding upon the first parties and the second party as to the fact of the occurrence or non-occurrence of such claimed violation or default. Any expense incurred in such arbitration shall be borne by the party found to be at fault by the arbiters.

19. Upon the expiration or termination of this agreement, the second party will deliver to the first parties the said premises with the appurtenances and improvements in good order and condition with all shafts, tunnels, levels and other permanent workings clear of waste and rubbish; PROVIDED, HOWEVER, that the second

party shall have thirty (30) days from and after the date of any such expiration or termination in which to remove all broken ore from the property for shipment and the second party shall have the right during such thirty (30) day period to remove from said premises all machinery, tools, equipment, supplies and other property placed on the premises by the second party, which said machinery, tools, equipment, supplies and other property shall at all times remain the property of the second party.

THIS AGREEMENT shall extend to and be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

IN WITNESS WHEREOF the first parties have hereunto set their hands and the second party has caused these presents to be executed by its Vice-President, all in duplicate on the day and year first above written.

Duncan E. Harrison
/S/ D. E. Harrison

Walter F. Burnett

Parties of the First Part

THE GOLDEN CYCLE CORPORATION

By /S/ Max N. Brown
Vice-President

Party of the Second Part

Ira C. Foster
CLERK AND RECORDER
Montrose County

Montrose, Colorado
June 23, 1954

STATE OF COLORADO)
MONTROSE COUNTY) ss

I, Ira C. Foster, County Clerk and Recorder, in and for Montrose County and State of Colorado, do hereby certify that Notice of Lease Application under provisions of the U. S. Atomic Energy Commission Domestic Uranium Program Circular No. 7, was filed in my office on the 24th day of February, 1954, on the following mining claims located by Walter F. Burnett and Duncan E. Harrison.

Ashbeck	# 1	Tag	#1
Burnett	# 1	Deb	#1
Harrison	# 1	Emely	# 1
Quincy	# 1	Pat	# 1
Betty	# 1	Elmer	# 1
Danny	# 1	Apex	# 1
Jane	# 1	Gary	# 1
Ruby	# 1	Gene	# 1
Maggy	# 1	Mary	# 1
Kroenger	# 1	Rose	# 1

The DANIELS NO. 1 mining claim, located in Sec. 6, T45N, R16W, and adjoining the Tag #1 and Apex # 1, is hereby added to the above list of claims, designated as Schedule A in the attached agreement. Per authority of D.E.H. and W.F.B.

Given under my hand and seal this 23rd. day of June, 1954.

/s/ Ira C. Foster
County Clerk and Recorder

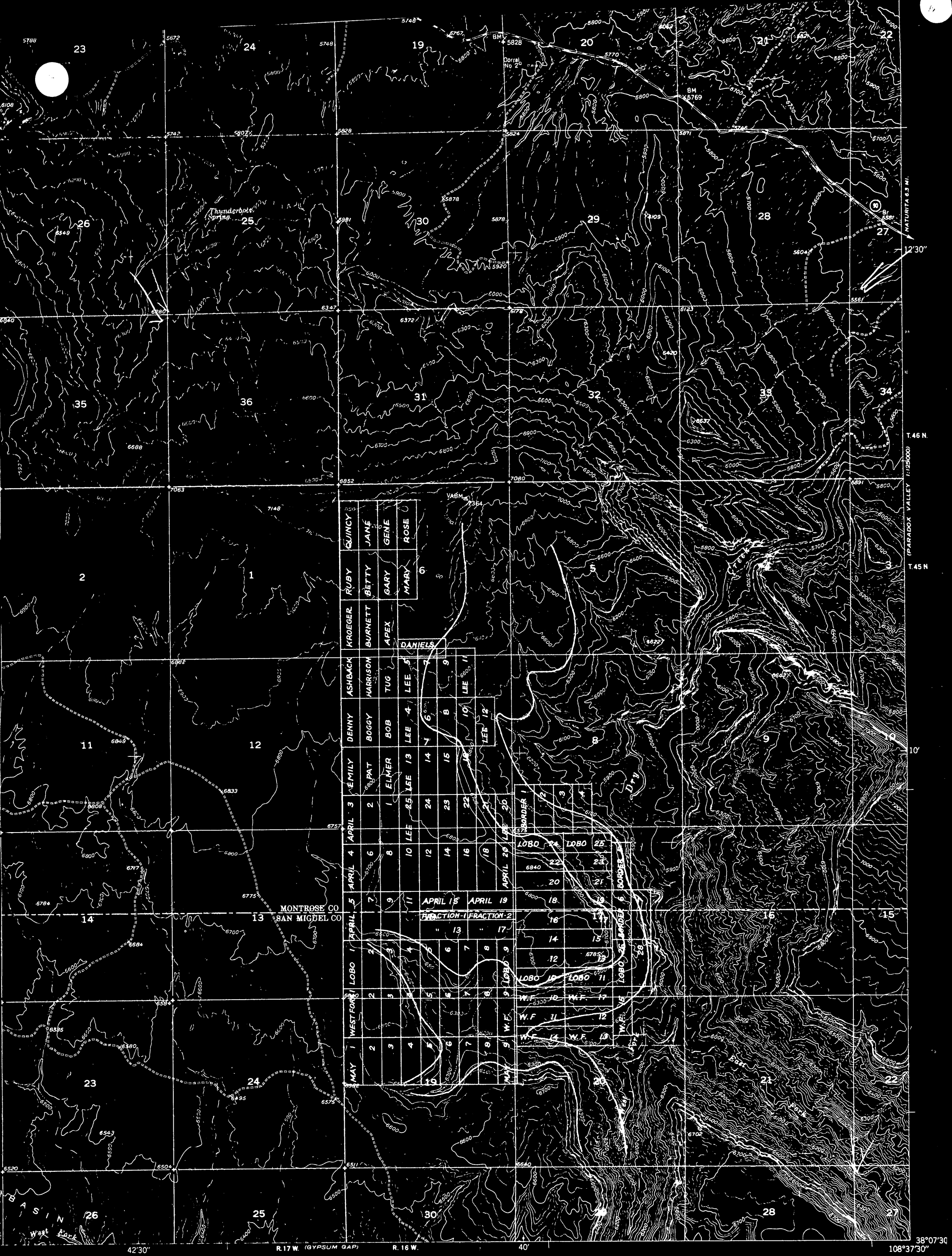
EXPLORATION ADMINISTRATION.
~~WASHINGTON 25, D. C.~~

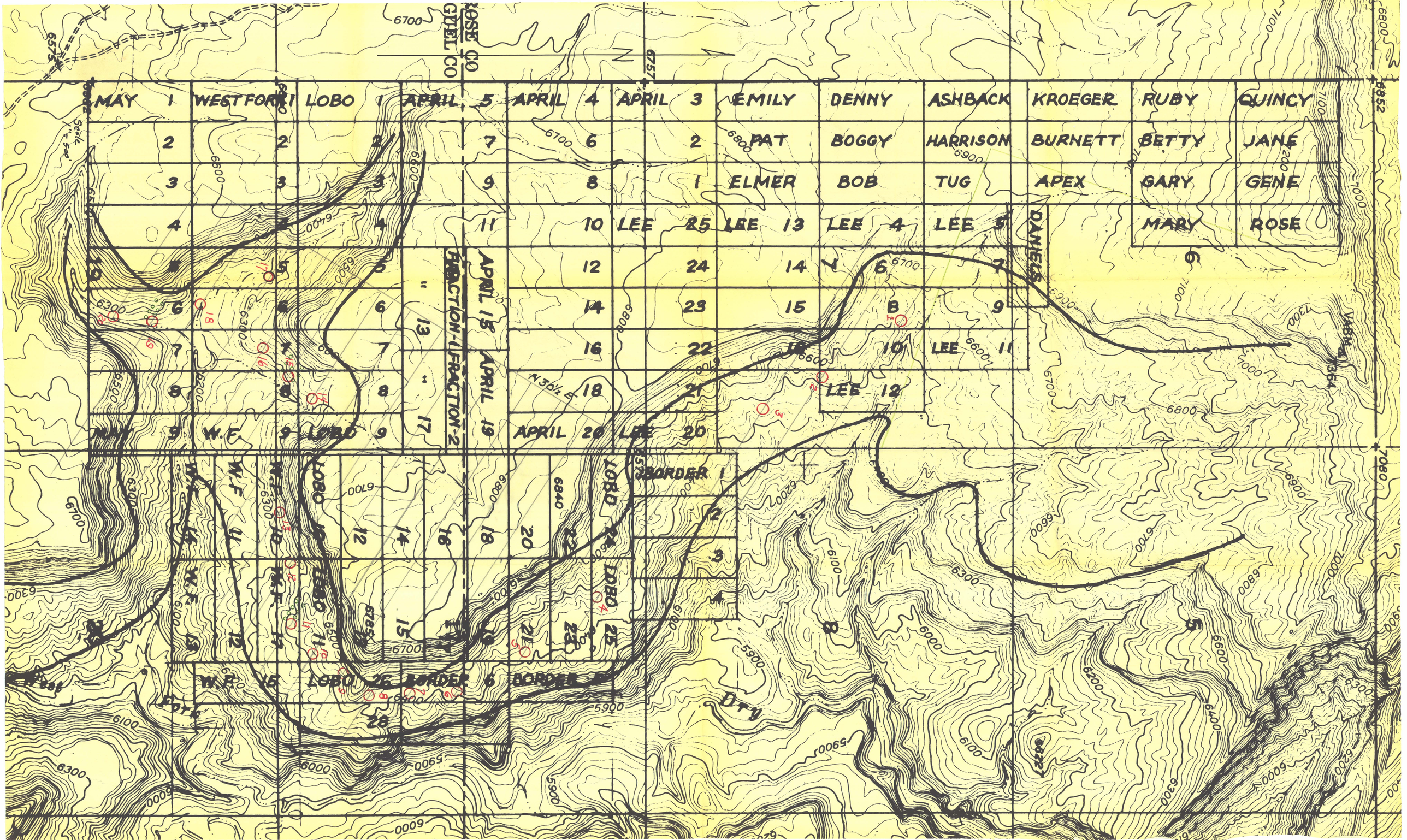
OFFICIAL BUSINESS

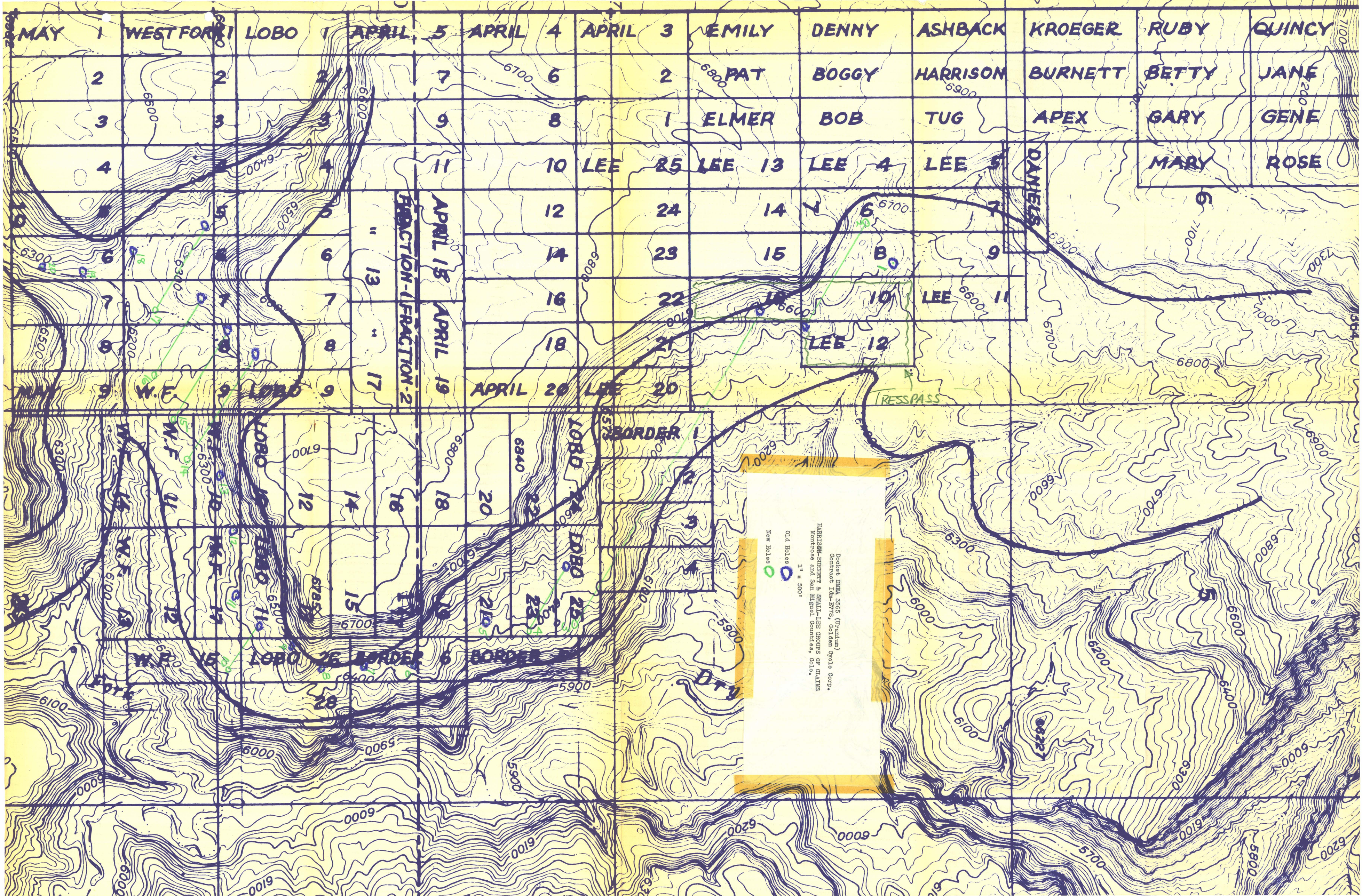
ROOM 13, POST OFFICE BLDG.
KNOXVILLE 2, TENN.

1 CENT 1
5 CENTS 5
4:30PM
1954
TENN.

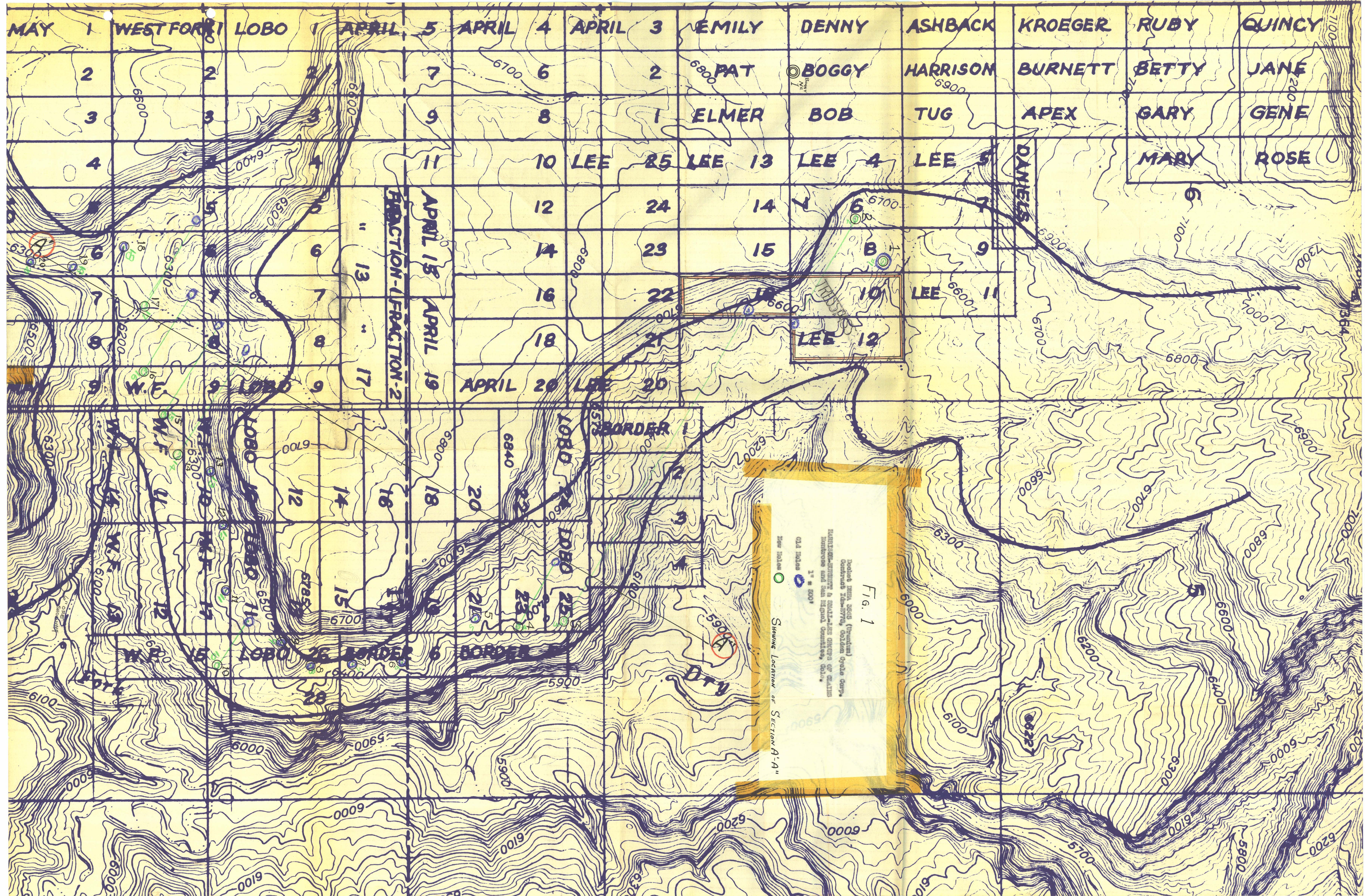
Mr. George C. Selfridge, Chairman
Operating Committee, D.M.E.A.
Dept. of the Interior
Washington 25, D.C.


Thunderbolt Spring
Corral No 2
BM 5828
BM 5769
VABM 7364
Dry
West Fork
East Fork
QUINCY
JANE
GENE
ROSE
RUBY
BETTY
GARY
MARY
KROEGER
BURNETT
APEX
DANIELS
ASHBACK
HARRISON
TUG
LEE
DENNY
BOGGY
BOB
EMILY
PAT
ELMER
APRIL 3
APRIL 4
APRIL 5
APRIL 15
APRIL 19
FRACTION-1
FRACTION-2
WEST FORK
LOBO
W.F.
MAY
BORDER
MONTROSE CO
SAN MIGUEL CO
R. 17 W. (GYPSUM GAP)
R. 16 W.
T. 46 N.
T. 45 N.
(PARADOX VALLEY 1:125000)
NATURITA 6.3 MI.
42'30"
40'
12'30"
10'
38°07'30"
108°37'30"
SCALE 1:24000
1 MILE
7000 FEET
1 KILOMETER
ROAD CLASSIFICATION
HARD-SURFACE ALL WEATHER ROADS
DRY WEATHER ROADS
Heavy-duty
Medium-duty
Loose-surface, graded, or narrow hard-surface
Improved dirt
Unimproved dirt
U. S. Route
State Route


MAY 1
WEST FORK 1
LOBO 1
APRIL 5
APRIL 4
APRIL 3
EMILY
DENNY
ASHBACK
KROEGER
RUBY
QUINCY
PAT
BOGGY
HARRISON
BURNETT
BETTY
JANE
ELMER
BOB
TUG
APEX
GARY
GENE
MARY
ROSE
LEE 25
LEE 13
LEE 4
LEE 5
LEE 11
LEE 12
DANIELS
APRIL 15
APRIL 19
APRIL 20
LEE 20
W.F. 9
W.E. 9
LOBO 9
FRACTION-2
FRACTION-1
BORDER 1
LOBO 26
BORDER 6
BORDER
Dry
ROSE CO
GUEL CO
VASH



Docket DMEA 3565 (Uranium)
Contract Ian-27776, Golden Cycle Corp.
HARRISON-BURNETT & SMALL-LEE GROUPS OF CLAIMS
Montrose and San Miguel Counties, Colo.
1" = 500'
Old Holes
New Holes


MAY 1
WESTFORK 1
LOBO 1
APRIL 5
APRIL 4
APRIL 3
EMILY
DENNY
ASHBACK
KROEGER
RUBY
QUINCY
PAT
BOGGY
HARRISON
BURNETT
BETTY
JANE
ELMER
BOB
TUG
APEX
GARY
GENE
MARY
ROSE
LEE 85
LEE 13
LEE 4
LEE 5
DANIELS
LEE 12
LEE 11
APRIL 15
APRIL 19
APRIL 20
LEE 20
FRACTION-1
FRACTION-2
W.F.
LOBO
BORDER 1
BORDER 2
BORDER 6
Dry
Fig. 1
Showing Location of Section A'-A"

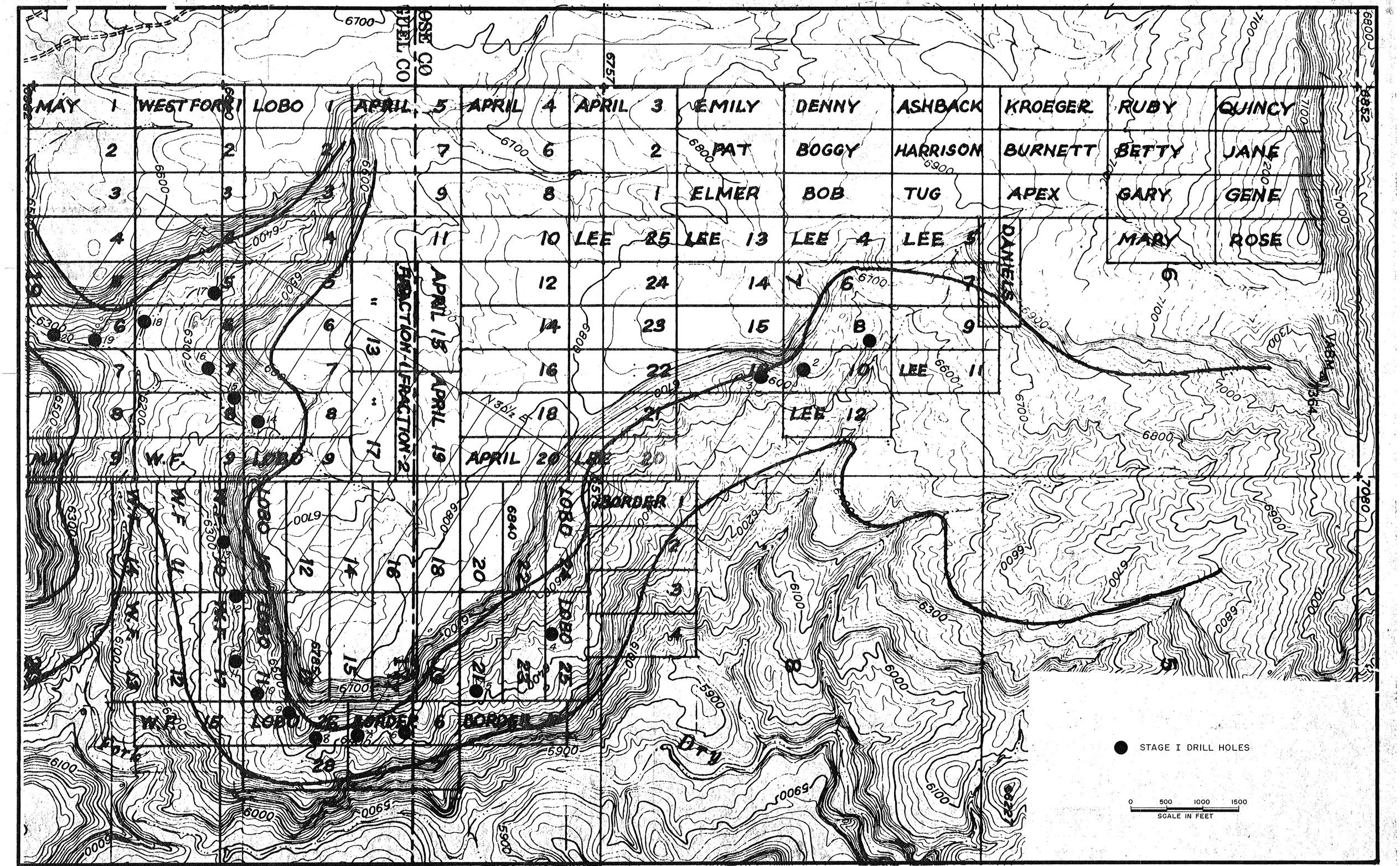
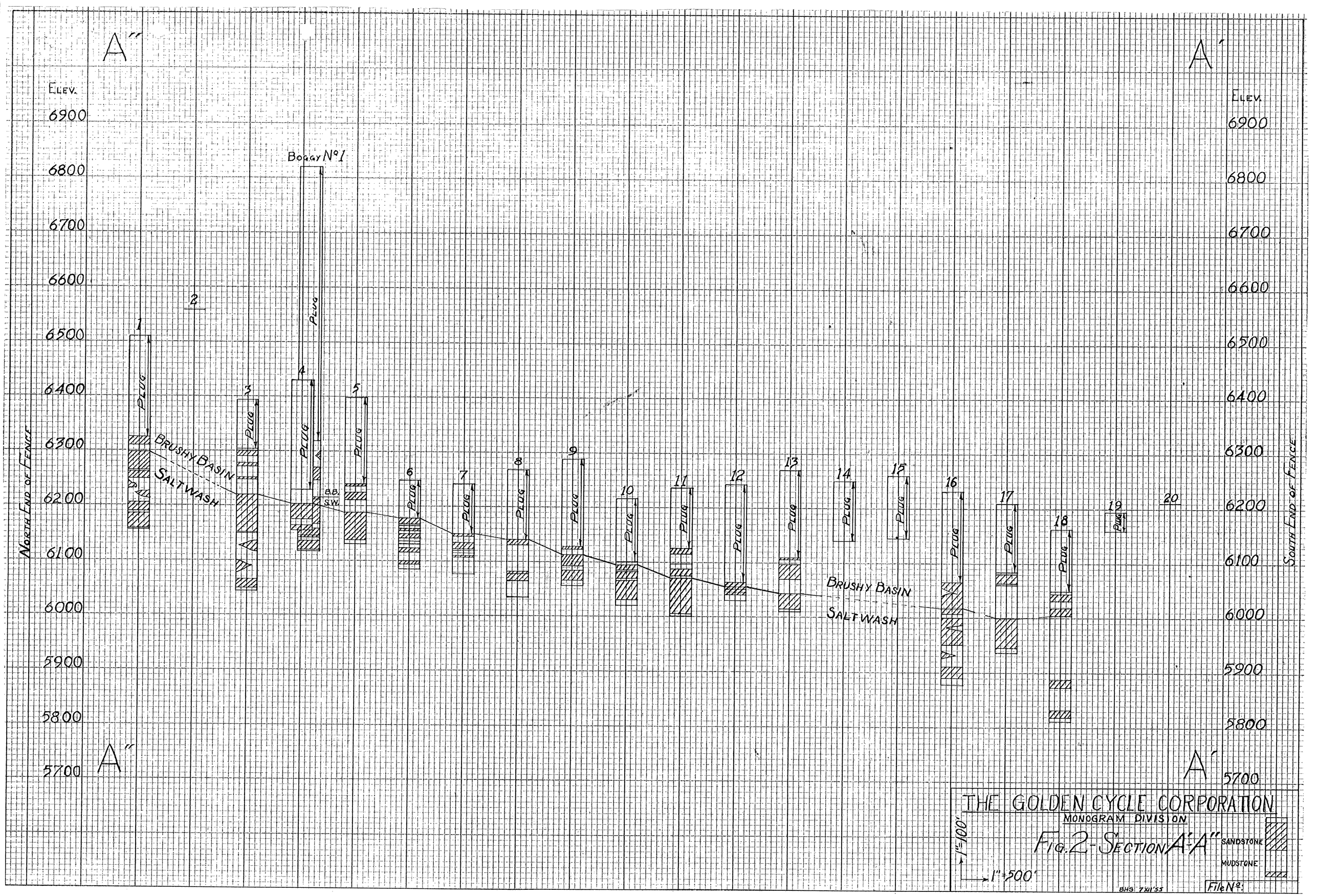


FIGURE 2 - CLAIM MAP, SHOWING PROPOSED STAGE I DRILL HOLES, HARRISON AND BURNETT AND SMALL AND LEE GROUPS OF CLAIMS, GOLDEN CYCLE CORP., MONTROSE AND SAN MIGUEL COUNTIES, COLO. (DMEA 3565)


A''
A'
Elev.
6900
6800
6700
6600
6500
6400
6300
6200
6100
6000
5900
5800
5700
North End of Fence
South End of Fence
Boggy No 1
Plug
B.B.
S.W.
Brushy Basin
Salt Wash
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
THE GOLDEN CYCLE CORPORATION
MONOGRAM DIVISION
Fig. 2 - Section A'-A''
1" = 100'
1" = 500'
Sandstone
Mudstone
BHS 7XII'55
File No.