DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE | Idm-E NO._____ | DMEA NO. 4791

11 SEP 1957 1132

Application
- [ ] Denied
- [ ] Withdrawn

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

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

Folder No. 1:

Left Side

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

Right Side

- [x] Project summary (final)
- [x] Work Completed analysis (final)

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

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

Additional Folders:

Left Side

Folders No. 2 : Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

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

Folders No._____ : Maps (Use pocket folder or envelope)

Folders No._____ : Settlement Sheets

Folders No._____ : Drill Logs

Folders No._____ : Royalty material

DMEA Form 7
(12-56)

Hold until 10/18/58

OFFICIAL FILE COPY

Date	Surname	Code
9/22/58	Knouse	700
	Calhoun	800
10/20	Selfridge	120
		~~110~~
		~~100~~
10/21	C	220
		700

OCT 20 1958

Mr. Caleb V. Haynes, Jr.
Post Office Box 5
Golden, Colorado

Re: Docket No. DMEA-4791 (Uranium)
Contract No. Idm-X1132
Black Knight and Billikin Lodes
Jefferson County, Colorado

Dear Mr. Haynes:

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

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

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

Sincerely yours,

Frank E. Johnson

ACTING Director

FLKnouse/gla
9-22-58
cc to: Director's Reading File
Contract Adm. & Audit Division
Field Team, Region III (2)
Mr. Knouse

Copies to:
Carl L. Kuehster, Star Route, Littleton, Colorado

Louis S. Malach, 2731 Stuart, Denver, Colorado

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/22/58	Knouse	700
		800
10/20	Jeffrey	120
		~~110~~
		~~100~~
		220
		700

Hold until 10/18/58

OCT 20 1958

Mr. Louis S. Malach
2731 Stuart
Denver, Colorado

Re: Docket No. DMEA-4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
Black Knight and Billikin Lodes
Jefferson County, Colorado

Dear Mr. Malach:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the above-cited contract.

This correspondence relates to the Consent to Lien and Subordination Agreement signed by you on May 7, 1957.

Sincerely yours,

Frank E. Johnson

ACTING Director

Enclosure

FLKnouse/gla
9-22-58
cc to: Director's Reading File
Contract Adm. & Audit Division
Field Team, Region III (2)
Mr. Knouse

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/22/58	Knouse	700
	Talbitt	800
10/20	Jeffrdge	120
		~~110~~
		~~100~~
		~~220~~
		700

Hold until 10/18/58

OCT 20 1958

Mr. Carl L. Kuehster
Star Route
Littleton, Colorado

Re: Docket No. DMEA-4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
Black Knight and Billikin Lodes
Jefferson County, Colorado

Dear Mr. Kuehster:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the above-cited contract.

This correspondence relates to the Consent to Lien and Subordination Agreement signed by you on May 15, 1957.

Sincerely yours,

Frank E. Johnson

ACTING Director

Enclosure

FLKnouse/gla
9-22-58
cc to: Director's Reading File
Contract Adm. & Audit Division
Field Team, Region III (2)
Mr. Knouse

8623

DEPARTMENT OF MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Ralph V. Murray, Jr.
P. O. Box 3
Golden, Colorado

pertaining to Exploration Project Contract No. 18a-8112, DMEA No. 4791, including Amendments Nos. 1 and 2, for the months of October, 1957 to March 1958, inclusive, covering a project for the exploration of Uranium on property known as Black Knight and Williams Lodes located in Jefferson County, Colorado.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of work performed by reference to Field Team reports and correspondence, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the reasons given on the attachment to this report.

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

Total cost as billed by Contractor		$11,078.88
Exceptions:		
Prior to this review	$0.00	
Herewith	0.00	0.00
Total Accepted Cost		$11,078.88

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Eight thousand, three hundred nine and 16/100ths Dollars is valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Amount payable to Operator	$ 8,309.16
Amount reimbursed	7,774.16
Balance due Operator	$ 535.00

Final payment to Operator 6/4/58

May 19, 1958

R. D. Brading
R. D. Brading, Auditor

REASONS FOR REPORT OF REVIEW IN LIEU OF FINAL AUDIT

Contract No. 24s-[illegible] Project No. [illegible]

Caleb V. Haynes, Jr.

(a) The Monthly Reports were supported by documentary proof of that portion ($9,363.90) of the costs which covered work performed at unit rates under independent contract, and miscellaneous services in the amount of $80.00 (per summary attached.)

(b) The balance ($1,695.35) of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs of work actually performed; and

(c) The administrative costs to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances thereunder.

SUMMARY OF DOCUMENTED COSTS

Contract No. [illegible] | Project No. [illegible]

Caleb V. Haynes, Jr.

INDEPENDENT CONTRACTS

1,646 feet of core drilling at $5.50 per foot	$9,053.00
8.5 hours T.D. 9 Dozer work at $9.00 per hour	76.50
19.5 hours T.D. 14 Dozer work at $12.00 per hour	234.00
Total Independent Contracts	$9,363.50
4 V_3O_8 samples at $5.00 each	20.00
Total Documented Costs	$9,383.50

CENTRAL FILE COPY
DMEA
RECEIVED FEB 24 1958
DATE | INITIALS | CODE

Government's copy

Long
"Appd. Sol. Off."

EXPLORATION PROJECT CONTRACT
CALEB V. HAYNES, JR.
DOCKET NO. DMEA-4791

AMENDMENT NO. 2

It is agreed this 10th day of February, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Caleb V. Haynes, Jr., that Exploration Project Contract No. Idm-E1132 (Docket No. DMEA-4791), dated September 11, 1957, as amended, is further amended effective September 11, 1957, as follows:

1. In Exhibit "A" under the heading, Description of the Work, General Provisions, the first paragraph on the second page is revised to read as follows:

"Drill sites and access roads shall be prepared with Models TD-9 and TD-14 International Harvester Tractors w/dozers or equivalent sized units of other makes."

2. In Exhibit "A" under the heading, "Estimated Cost of the Project":

(a) Stage I, Actual Costs, Category (1) Independent Contracts, is revised to read as follows:

Category (1) Independent Contracts

1,280 feet of core drilling @ $5.50/ft.	$7,040.00
Actual bulldozer operating time (including operator and all necessary costs whatsoever) rates as follows:	
For a model TD-9 tractor w/dozer - $9.00/hr.)	600.00
For a model TD-14 tractor w/dozer - $12.00/hr.)	

(b) Stage II, Actual Costs, Category (1) Independent Contracts, is revised to read as follows:

Category (1) Independent Contracts

1,600 feet of core drilling @ $5.50/ft.	$8,800.00
Actual bulldozer operating time (including operator and all necessary costs whatsoever) rates as follows:	
For a model TD-9 tractor w/dozer - $9.00/hr.)	600.00
For a model TD-14 tractor w/dozer - $12.00/hr.)	

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

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C O Mitteudorf
Administrator, Defense Minerals
Exploration Administration

Caleb V. Haynes, Jr.
Caleb V. Haynes, Jr.

Knowe
Ellis
Chambers
Selfridge
Johnson

Government's Copy

EXPLORATION PROJECT CONTRACT
CALEB V. HAYNES, JR.
DOCKET NO. DMEA 4791
CONTRACT NO. Idm-E1132

AMENDMENT NO. 1

It is agreed this 27th day of January, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Caleb V. Haynes, Jr., hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E1132, Docket No. DMEA 4791, dated September 11, 1957, hereinafter called the "Contract," that:

1. The date fixed in Article 3, on or before which The Operator shall have completed the work, is extended from February 1, 1958 to April 1, 1958.

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

Executed in quintuplicate the day and year first above written.

CALEB V. HAYNES, JR.

Caleb V. Haynes Jr.

UNITED STATES OF AMERICA

By W. H. King
Executive Officer
DMEA Field Team, Region III

FILE COPY
DMEA
FEB 3 1958
CODE

Government's Copy

RECEIVED
SEP 30 1957
D.M.E.A.

MF-200
(Revised June 1954)

Docket No. DMEA 4791

Commodity Uranium

Contract No. Idm-E 1132

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 11 SEP 1957 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] .....

Caleb V. Haynes, Jr.

whose mailing address is Post Office Box 5, Golden, 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~~ Annex II, 2 maps (Figures 2 and 3)

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 Jefferson, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] lessee of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of ~~a~~ [6] two leases, [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: Royalties as are set forth in the leases.

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: Consents to Lien and Subordination Agreements of Lessors signed by Louis S. Malach and Carl L. Kuehster.

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

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Uranium. The work to be performed is described in Exhibit "A." The Operator on or before October 15, 1957 shall commence the work, and on or before February 1, 1958 (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 an amount not less than the estimated total allowable costs set forth in Exhibit "A", except as otherwise provided in Exhibit "A" with respect to stages of work. (See Annex II.)

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 $20,256.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $15,192.00: *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; ~~[illegible]~~ See Annex II

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. See Annex II.

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.*—

See Annex II

Long
Stenger
Appd. Sol. Off.
Krause
Ellis
Talbot
Selfridge

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

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

Caleb V. Haynes Jr.

CALEB V. HAYNES, JR.
(Operator)

~~By~~ .....

.....

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

.....

[CORPORATE SEAL]

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

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EXPLORATION PROJECT CONTRACT
CALEB V. HAYNES, JR.
DOCKET NO. DMEA-4791

ANNEX I

The land referred to in Article 2 of the Contract consists of the southwest quarter (SW$\frac{1}{4}$) of the southwest quarter (SW$\frac{1}{4}$) of section three (3) T. 7 S., R. 70 W., 6th P.M., Jefferson County, Colorado owned by Carl L. Kuehster; and the southeast quarter (SE$\frac{1}{4}$) of the southwest quarter (SW$\frac{1}{4}$) of section three (3) T. 7 S., R. 70 W., 6th P.M., Jefferson County, Colorado, owned by Louis S. Malach.

The location of the land is shown on the map entitled "Figure 2 - Map Showing Location of Recommended Drill Holes, Black Knight and Billikin Lodes, Caleb V. Haynes, Jr., Jefferson County, Colo DMEA 4791," attached hereto and made a part hereof.

The Operator is in possession of the land by virtue of leases dated June 7, 1957, and June 14, 1957, respectively, from Louis S. Malach and Carl L. Kuehster.

The Consents to Lien and Subordination Agreements signed by Messrs. Malach and Kuehster are attached and made a part hereof.

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E 1132
Contract Date 11 SEP 1957

RECEIVED JUN 14 1957 D.M.E.A.

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Jefferson, State of Colorado, described as follows: 2/

Southwest quarter of the southwest quarter of section three, Township seven south, Range seventy west of the sixth principal meridian (SW¼, SW¼, sec. 3, T. 7 S., R. 70 W., 6th P. M.) 40 acres.

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

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

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

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

none

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

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

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

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

7. Added provision: none (State "None" or "See Annex No.____")

Dated this 15 day of May, 1957.

Carl L. Kuehster [Seal] Star Route, Littleton, Colo [Address]
Carl. L. Kuehster

_____ [Seal] _____ [Address]

_____ [Seal] _____ [Address]

_____ [Seal] _____ [Address]

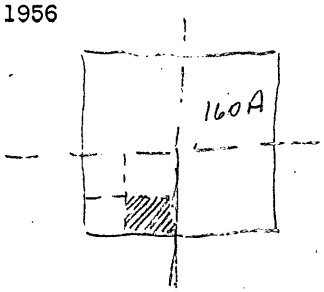
_____ [Seal] _____ [Address]

_____ [Seal] _____ [Address]

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

_____
[Corporate Seal]

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956



For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E 1132
Contract Date 11 SEP 1957

RECEIVED JUL 14 1957 D.M.E.A.

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Jefferson State of Colorado, described as follows: 2/

the southeast quarter of the southwest quarter of section three, Township seven south, Range seventy west, Sixth Principal Meridian (SE¼, SW¼, sec. 3, T. 8 S., R. 70 W., 6th P. M.) 40 acres, approx.

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

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

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

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

none

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

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

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

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

7. Added provision: none (State "None" or "See Annex No.____")

Dated this 7 day of May, 1957.

Louis S. Malach [Seal] 2731 Stuart, Denver, Colo. [Address]
Louis S. Malach

_____ [Seal] _____ [Address]

_____ [Seal] _____ [Address]

_____ [Seal] _____ [Address]

_____ [Seal] _____ [Address]

_____ [Seal] _____ [Address]

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

_____
[Corporate Seal]

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EXPLORATION PROJECT CONTRACT
CALEB V. HAYNES, JR.
DOCKET NO. DMEA-4791

ANNEX II

Article 13--Changes and added provisions--

(a) That part of the last sentence of Article 3 beginning with the word "either" is deleted and replaced by the words "have completed the work, except as otherwise provided in Exhibit 'A' with respect to stages of work."

(b) That part of the last sentence in the first paragraph of Article 6(a) commencing after the semicolon is deleted.

(c) Categories (2) through (6) of Article 6(a) are deleted.

(d) In addition to the costs of work estimated in Exhibit "A" by categories of actual costs, the costs of work requirements specified in Exhibit "A" as "Fixed Unit Costs" are allowable costs of the project. The Government will contribute to the fixed unit costs as work units are performed. A "Fixed Unit Cost" is an agreed price for each unit of work to be performed regardless of costs incurred by the Operator. Costs set forth in Exhibit "A" include all allowable costs of the work to be performed under the Contract.

(e) In the last sentence of Article 6(c), the words "Article 8" are substituted for the words "Article 9."

(f) Notwithstanding any other provision of the Contract, the allowable unit cost per foot of a drilling item is the average unit cost per foot computed on the basis of all the actual unit costs of said drilling item incurred by the Operator: Provided, That the Government will not contribute to any portion of an average unit cost of a drilling item that exceeds the estimated unit cost of said item set forth in the Contract.

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EXPLORATION PROJECT CONTRACT
CALEB V. HAYNES, JR.
DOCKET NO. DMEA-4791

EXHIBIT "A"

Description of the Work

General Provisions

The work consists of exploration by diamond core drilling from the surface for the downward projection of the uranium ore-bearing Black Knight and Billikin breccia zones.

Each hole shall be diamond core drilled the entire length not less than 5 feet nor more than 10 feet through the uranium bearing breccia zones (Black Knight and Billikin lodes). No payment shall be made for any uncompleted drill hole. The minimum collar size of core shall be BX, and no part of any hole shall be less than AX size without prior approval of the Government. All holes shall be reamed and cased as necessary.

All core and cuttings shall be saved by such methods and at such drilling intervals, and shall be checked for radioactivity in such manner, as may be specified by the Government. The sections of the drill core and cuttings that indicate significant radioactivity shall be split into halves. One-half of each of the radioactive drill cores shall be analyzed chemically for uranium, and one-half of each of the radioactive cores and cuttings shall be furnished to the Government upon request. The remaining half of the radioactive cuttings, and all the non-radioactive cores and cuttings, shall be properly boxed, labeled, and stored pending final Government inspection.

All drill holes shall be logged geologically and probed for radioactivity, and copies of each log shall be furnished to the Government with each copy of the Operator's monthly report.

No drill hole shall be drilled closer than 100 feet to the outside boundary of the land, and no Stage II drill hole shall be drilled closer than 75 feet from any Stage I hole from where it intersects the breccia zones.

The method of all sampling is subject to the approval of the Government. Not more than 20 samples for Stage I nor more than 30 samples for Stage II shall be analyzed chemically for U_3O_8.

Drill sites and access roads shall be prepared with a Model D-8 Caterpillar tractor w/dozer or an equivalent size unit of another make.

The location, direction, and extent of all work are subject to the approval of the Government. At the completion of the project, upon Government approval, all stored samples may be disposed of by the Operator.

The project shall be supervised at all times by a qualified geologist or mining engineer, who shall direct or perform the required surveying, mapping, sampling, and drill hole logging, and shall prepare reports required pursuant to this Contract.

The work shall be performed in two stages. The Operator shall perform all the Stage I work, and shall perform as much of the work under Stage II as the Government approves in writing in advance, either after the completion of the Stage I work, or concurrently. In the event the estimated footages are insufficient to reach a specified horizon in any hole in Stage I, additional footage and necessary funds, upon the written approval of the Government, may be transferred and deducted from Stage II.

Stage I

Prepare access roads and drill sites and drill five (5) vertical core-drill holes to intersect the Black Knight breccia zone approximately 150 feet down-dip below the surface and one inclined core drill hole to intersect the Billikin breccia zone about 150 feet down-dip below the surface. The holes are designated as B, C, D, E, F, and G and their locations are shown on the attached map entitled "Figure 3 - Geologic Map Showing Recommended Exploration of Black Knight and Billikin Lodes, Jefferson County, Colorado."

The approximate depths, directions, and inclinations of holes are as follows:

Hole No.	Direction and Inclination	Approximate Depth-Feet
B	Vertical	190
C	Vertical	220
D	Vertical	190
E	Vertical	170
F	Vertical	160
G	N. 70° W at -60° Inclination	350

Stage II

Prepare access roads and drill sites and drill not more than eight (8) holes aggregating not more than 1,600 feet to explore for the extension of favorable mineralization intersected in Stage I drill holes. The location, inclination, and depth of each hole are subject to the prior written approval of the Government.

Estimated Cost of the Project
(In addition to maximum set forth in Article 6, an asterisk indicates maximum)

Stage I

Actual Costs

Category (1) Independent Contracts

1,280 feet of core drilling @ $5.50/ft.	$7,040.00	
40 hrs. of bulldozing (including operator and all necessary costs) @ $15.00/hr.	600.00	
Categories (2) through (6) None	- - -	
Category (7) Miscellaneous None except		
20 chemical sample analyses @ $5.00*/each sample	100.00	$7,740.00

Fixed Unit Costs (See Article 13 and Annex II)

Incidental allowances[1] for each foot of core drilling completed, 1,280 feet @ $1.03/ft.	1,318.40	$1,318.40
Estimated Total Cost of Stage I		$9,058.40

Stage II

Actual Costs

Category (1) Independent Contracts

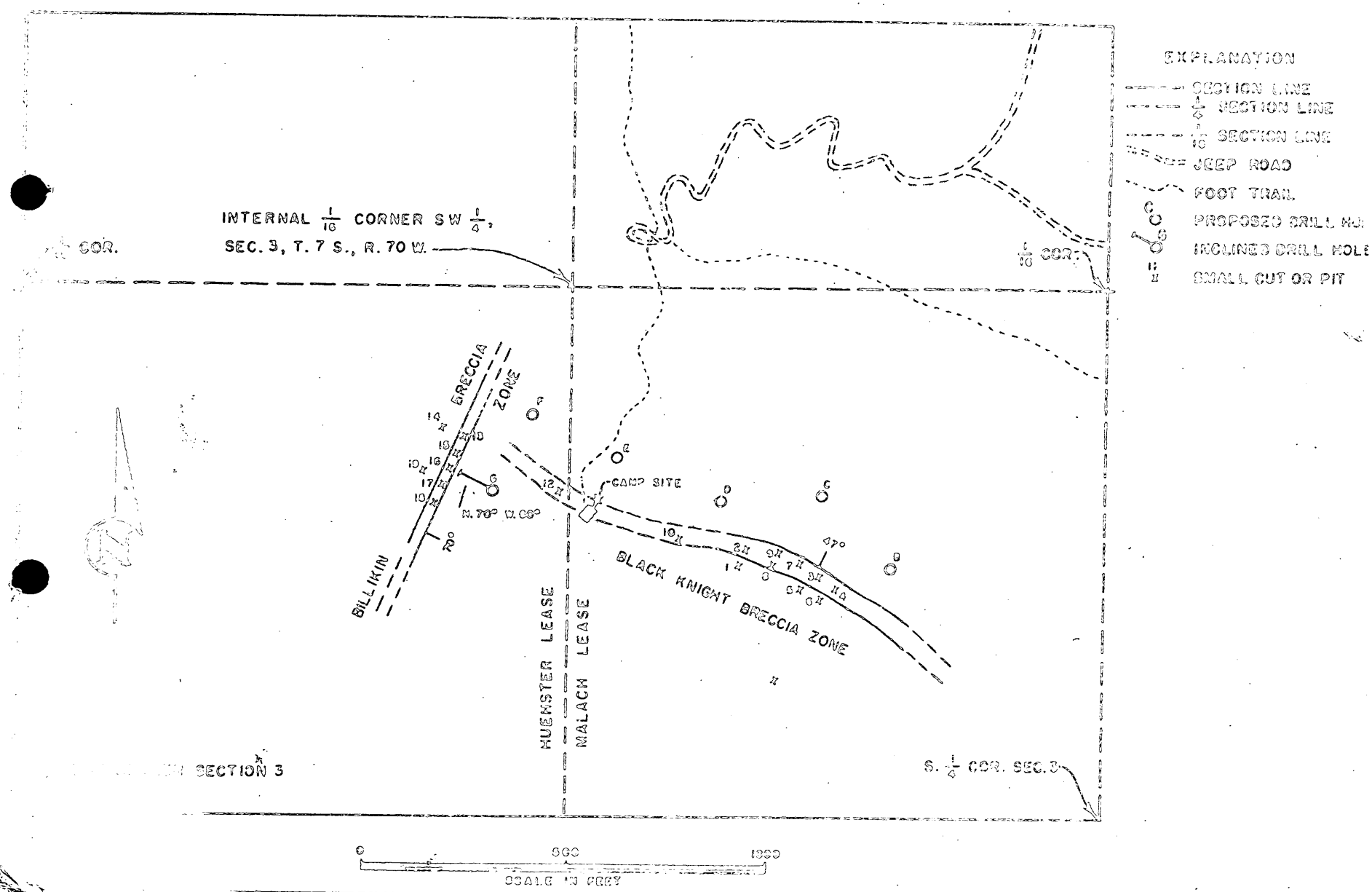
1,600 feet of core drilling @ $5.50/ft.	$8,800.00	
40 hrs. of bulldozing (including operator and all necessary costs) @ $15.00/hr.	600.00	
Categories (2) through (6) None	- - -	

Category (7) Miscellaneous None except		
30 chemical sample analyses @ $5.00*/each sample	150.00	$9,550.00
Fixed Unit Costs (See Article 13 and Annex II)		
Incidental allowances[1] for each foot of core drilling completed, 1,600 feet @ $1.03/ft.	1,648.00	$1,648.00
Estimated Total Cost of Stage II		$11,198.00

S U M M A R Y

Estimated Total Cost of Stage I	$9,058.40
Estimated Total Cost of Stage II	11,198.00
Estimated Total Cost of the Project (rounded)	$20,256.00
Government Participation @ 75%	$15,192.00

1/ Includes all costs that might otherwise be allowable costs of the project under Categories (2) through (7) of Article 6(a).



...NG LOCATION OF RECOMMENDED DRILL HOLES, BLACK KNIGHT AND ... GOES COLLER MAYNARD, ...
AND GLEN A. ... JEFFERSON COUNTY, COLO. ...

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D M E A
RECEIVED AUG 15 1957

DATE	INITIALS	CODE

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

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DATE	INITIALS	CODE

July 17, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Caleb V. Haynes, Jr., (Black Knight and Billikin Lodes) Jefferson County, Colorado - Old DMEA No. 4104

This has further reference to your letter dated June 26, 1957, regarding the new application on the subject docket.

Enclosed are two copies of the new application, one copy of which contains two mining leases.

Two copies of the application are being retained in this office and a field examination will be scheduled.

Please advise us of the new number assigned to this application.

WH King

W. H. King

W

Form MF-103
Revised Feb. 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1035.3
Approval expires June 30, 1958

APPLICATION FOR AID IN AN EXPLORATION PROJECT

PURSUANT TO DMEA ORDER I, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

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

Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

DMEA
PARTMENT OF THE INTERIOR
JUL 17 1957
REGION III
DENVER, COLORADO

RECEIVED JUL 19 1957 D.M.E.A.

APPLICANT NOT TO USE THIS BLOCK

Docket Number	4791
Date Received	7/19/57
Government Participation %	
Region	III
Division Code	700

BUSINESS ORGANIZATION (Check one)

- Individual [X]
- Corporation [ ]
- Partnership [ ]
- Other (Specify) [ ]

State in which firm is organized

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

Name	Address	Title

Mineral(s) for which you wish to explore: Uranium minerals

Estimated Cost of Project: $ $20,208.00

LOCATION OF PROPERTY

Name	County	State
Black Knight and Billikin Lodes,	Jefferson County,	Colorado.

GENERAL INSTRUCTIONS

Before filling out this application, please read DMEA Order-I, Amended, "Government Aid in Defense Exploration Projects." To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit four copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 1, existing mine workings and geology in item 2, and the proposed exploration project in item 4. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 2(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest DMEA Field Office.*

CERTIFICATION

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

6 July 1957
Dated

Caleb V. Haynes Jr.
BY *(Signature)*

Geologist
Title

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

INFORMATION REQUIRED WITH THIS APPLICATION

1. *Applicant's Property Rights:*

(a) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all land adjacent to the proposed project area which you own or control. Describe any part of the project land or workings which should not be subject to Government lien for royalty payments. If the land consists of unpatented claims, state the book and page number for each recorded location notice, including amended locations, and the place where recorded (courthouse, recorder's office, county, and state).

(b) State all the names by which you know the property.

(c) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise. If you are not the owner, submit with this application one exact copy of the lease, contract, or other document (with address of owner) under which you control the property.

(d) Describe all liens, mortgages, or other encumbrances on the property.

2. *Physical Description:*

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

(b) State your interest, if any, in operations stated in 2*(a)*.

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

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

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

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

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

3. *Accessibility of Project:*

(a) To aid DMEA representatives who may be required to examine the property, state the name and address of the person who will meet the DMEA representative; give directions for reaching the property; and describe accessibility of the property including the mine workings.

(b) Name the shipping and supply points and places where employees reside and state the distances between them and the property.

4. *The Exploration Project:*

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

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

(c) In the event that an exploration contract with DMEA is executed, how soon will the work start and how many months will be required to complete it? State your anticipated average daily or monthly rate of progress for each type of work.

5. *Experience:*

State your operating experience and background with relation to your ability to carry out this exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of Costs:*

Furnish detailed estimates of the costs *for each item of the work proposed in 4(a)* under the headings listed below with a total for each heading and the estimated total cost of the project. Costs for any work to be performed by an independent contractor should be shown separately under category *(a)* below. Costs for any work that is not to be performed by an independent contractor should be given in detail under categories *(b)* through *(g)*.

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

(b) Personal services. For necessary supervision, engineering and geological services, and labor, include an itemized schedule of numbers, classes, rates of wages, salaries or fees, and periods of employment. State whether these technicians and employees are available.

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

(d) Operating equipment. List items of operating equipment to be used giving specifications and indicating how each item is to be acquired – i.e., rented, purchased, or provided by the applicant. If it is rented or purchased, state the estimated rental or purchase price. If it is to be furnished by the applicant, give its present fair market value.

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

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

(g) Miscellaneous. For the operating equipment listed in 6*(d)*, describe the type and estimate the cost of repairs and maintenance expected during project operations. Do not repeat initial repairs listed in 6*(e)*. Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories.

Note – 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)* State whether you are prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation stated in Sec. 7 of DMEA Order–1, Amended.

(b) Explain to what extent you propose to furnish your share of the costs by providing money, by use of equipment owned by you, or otherwise.

* * * * *

INT.-DUP. SEC. WASH. D.C. 15539

INFORMATION REQUIRED WITH FORM MF-103

1. Applicant's property rights:

   (a) Kuehster Lease: W½, SW¼, sec. 3, T. 7 S., R. 70 W., 6th P. M. (80 acres more or less).

   Malach Lease: E½, SW¼, sec. 3, T. 7 S., R. 70 W., 6th P. M. (80 acres more or less).

   (b) Kuehster Lease - Billikin Lode.
   Malach Lease - Black Knight Lode.

   (c) Ten-year mining lease from Carl L. Kuehster, Star Route, Littleton, Colorado.

   Ten-year mining lease from Louis S. Malach of 2731 Stuart Street, Denver, Colorado

   (See Appendix I)

   (d) None

2. Physical description:

   (a) Re: Docket No. DMEA-4104 (Uranium) Application Report

   In addition 55 ft of inclined shafting, 20 ft of drifting, and 20 ft of cross-cutting have been completed at Site 3. (Also see Cross Section C, Figure 2, this report.) Over one half mile of access road for 4-wheel-drive vehicles has been completed to Sites 2 and 3 on the Black Knight fault. (See Plan Map, Figure 1, this report.)

   (b) Above additional work performed under 6-month option to Thurmon Mineral Development Company from 1 May to 1 November 1956. Option officially dropped 7 November 1956 (letter).

   (c) None

   (d) No ore reserves have been calculated, however, approximately 10 tons of probable ore grade material have been stockpiled on the property.

   (e) Re: Docket No. DMEA-4104 Application Report. An academic paper on the mineralogy of the Black Knight vein is in preparation by the applicant.

   (f) Re: Docket No. DMEA-4104 Application Report. In addition, the additional work (see 2a above) at Site 3 indicated an ore shoot raking approximately 30° to the SE.

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(g) Re: Docket No. DMEA-4104 Application Report

In addition see Figures 1 and 2 of this report.

3. Accessibility of project:

(a) Contact Vance Haynes at 49 Prospector Park, Golden, Colorado. Phone CRestview 9-3559.

(b) Re: Docket No. DMEA-4104 Application Report.

4. The exploration project:

(a) It is requested that the original exploration project (DMEA-4104) be reserved as a possible secondary project and that the initial project be a two-phase drilling program. It is proposed that Phase I consist of approximately 1280 ft of AX or BX diamond core-drilling in six holes spaced as shown on Figures 1 and 2 of this report and that 1600 ft of additional core-drilling be reserved for Phase II, and be contingent upon Phase I.

(b) The present access road is believed to be sufficient for the initial program, however, additional bull-dozer work will be required for the preparation of drilling sites for both phases.

(c) It is estimated that both phases will require a total of 4 months to complete. The suggested starting date is 20 September 1957. It is estimated that the preparation of drilling sites will require a total of 10 days and that drilling will require 86 days total. This would constitute a drilling rate of approximately 33.5 ft per working-day.

5. Experience:

(a) Employed in silver mining during summer of 1950; Degree of Geological Engineer, Colorado School of Mines 1956; graduate school at CSM at present time; self employed as geological consultant and research consultant for the American Institute of Research.

6. Estimate of costs:

(a) Bulldozer operations - 10 8-hour days at $15.00 per hour. . . . . $ 1,200.00

Diamond core-drilling, AX or BX, 2,880 ft at $5.50 per foot. 15,840.00

Incidental allowance including 20 assays for Phase I and 30 assays for Phase II at $1.10. . . 3,168.00

$20,208.00

(b, c, d, e, f, g) Included under incidental allowance in 6. (a) above.

7. (a) The applicant is prepared to furnish 25% of the cost of the proposed project in accordance with the regulations on Government participation stated in Sec. 7 of DMEA Order-1 Amended.

(b) By providing money and by personal participation as geological consultant and superviser.

Vance Haynes
P. O. Box 5
Golden, Colorado

JOY MANUFACTURING COMPANY

1626 WAZEE STREET

DENVER 2, COLORADO

TELEPHONE KEYSTONE 6-2211

EXECUTIVE OFFICES
HENRY W. OLIVER BUILDING
PITTSBURGH 22, PA.

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November 23, 1956

Haynes and Boyd
P. O. Box 5
Golden, Colorado

Gentlemen:

This will acknowledge your request for prices for some core drilling to be done near Deermont, Colorado.

On the condition that you will guaranteed us a minimum of 1200 ft. of drilling, we will undertake this work at a price of $6.00 per ft. for drilling with BX fittings, and at a price of $5.50 per ft. for drilling with AX fittings in holes not to exceed a depth of 400 ft.

In addition to the above prices, it would be necessary that you furnish water for drilling purposes at the location of each hole and furnish suitable roads for movement of the equipment between holes. If it is your desire to save cores of the drilling, then it will be necessary that proper containers be furnished for same.

In the event it becomes necessary to resort to reaming, casing or cementing of the drill holes, then such work will be performed at the rate of $60.00 per 8-hour shift plus cost of materis used up. If we are delayed for water roads, or for any other reason, there will be a charge made for such delays at the rate of $60.00 per 8-hour shift.

We will furnish for this proposed drilling one of our 12-B gasoline driven core drills complete with operating equipment, and will conduct the drilling operations on the basis of one 8-hour shift per day and six days per week. We can start this work within the next 2 or 3 weeks.

If the proposition as set forth above is acceptable to you, please advise and we will then forward our formal agreement to cover.

In order to carry out this work on an open account basis, it would be necessary that you furnish us with satisfactory credit references. If satisfactory credit references cannot be furnished, when we would expect you to deposit with us $3,500.00 and after this amount has been exhausted against invoices we would then expect a further cash deposit. In other words, the initial deposit would cover approximately 600 ft. of drilling, and after this has been drilled, we would expect a further cash deposit to cover drilling in excess of 600 ft.

Very truly yours,

JOY MANUFACTURING COMPANY

J. M. Flanagan

J. M. Flanagan

JMF/jb

GEORGE MARSHALL

DIAMOND DRILL CONTRACTOR

SURFACE AND UNDERGROUND WORK

MAXIMUM CORE RECOVERY

PHONE 40

IDAHO SPRINGS, COLORADO

December 15, 1956

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Mr. Vance Haynes
Box 5
Golden, Colorado

Dear Mr. Haynes:

I wish to submit a bid for core drilling in the vicinity of Foxton, Colorado, of $5.50 per foot.

Very truly yours,

George G. Marshall

George G. Marshall

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MINING LEASE

THIS AGREEMENT OF LEASE, made and entered into this 14 day of June, A. D. 1957, between CARL L. KUEHSTER of the County of Jefferson, State of Colorado, hereinafter referred to as Lessor, and CALEB V. HAYNES, JR., of the County of Jefferson, State of Colorado, hereinafter referred to as Lessee,

OCL dated [illegible]

W I T N E S S E T H :

NOW, THEREFOR, in consideration of the premises, the rents, royalties, covenants and agreements hereinafter expressed to be paid, kept and performed by the Lessee, the Lessor leased, let and demised, and by these presents leases, lets and demises unto the Lessee, the following described mining property and premises, situate in the County of Jefferson, State of Colorado, to-wit:

> The West one-half ($\frac{1}{2}$) of the Southwest one-quarter ($\frac{1}{4}$) of Section 3, Township Seven (7) South, Range 70 West of the Sixth P. M. (80 acres more or less).

To have and to hold the above described premises and privileges for the purpose of mining all ores, from this date and a period of ten years thereafter, and as much longer thereafter as minerals are found in paying quantities thereon, and are continually mined, unless sooner terminated or forfeited through the violation of any of the covenants and conditions herein contained, and provided that during said period Lessor receive as a minimum annual rent or royalty a sum equivalent to ONE DOLLAR ($1.00) for each acre of said described land, payable in advance to such annual period, which sum shall be credited to any excess payments, if any, at the end of the annual period.

The Lessee, in consideration of the premises, has covenanted, contracted and agreed and by these presents do covenant, contract and agree to and with the Lessor, his executors, administrators and assigns as follows:

1. To conduct prospecting and mining operations in such a manner as not to create hazards to persons or livestock and with a minimum of resulting permanent injury to the surface of said lands, and all such operations at their own risk and expense.

2. To allow the Lessor the right at all times to inspect the premises and all ores, assays and samples obtained during and through the exploration or prospecting or mining operations, and to make available unto Lessor all reports obtained therewith for his inspection or reproduction.

3. To comply with Colorado Workman's Compensation Acts and the Occupational Disease Act, saving Lessor harmless from any liability resulting from injury or illness of lessee, his agents or employees.

4. To pay unto Lessor during the period of commercial mining operations the equivalent of the following sums based upon net mill receipts from the uranium ores:

Percentages of Proceeds	Quantity of Uranium Oxide (U_3O_8) Present in Mined Ore
5%	0.20% or less
6%	Commencing at 0.21% up to 0.30%
7%	Commencing at 0.31% up to 0.40%
8%	Commencing at 0.41% up to 0.50%
9%	Commencing at 0.51% up to 0.60%
10%	Commencing at 0.61% or more.

said payments to be due and payable as the ores are paid for upon delivery.

5. To pay unto the Lessor 25% of any bonus that may be allowed under the rules and regulations of the United States Atomic Energy Commission or other federal or state agencies for the discovery of uranium ores, or laws relating thereto, and to pay for current taxes that may be assessed against any improvements placed on such property by Lessee, and current taxes assessed against the mineral rights during the term thereof.

6. That should minerals other than uranium be exploitedor taken hereunder, Lessor shall receive and Lessee shall pay 12½% of the net proceeds that may be received from the purchases thereof, without including any allowances received for transportation, but less milling costs and/or charges.

7. That the term "net mill receipts" shall mean the payments received at the mill for all ores including bonuses and freight allowance after deduction of actual costs of milling, smelting, treatment, frieght, less penalties imposed by virtue of existing impurities of the ore, or the imposition of other penalties.

8. That any payments to be received or to be paid as herein provided shall in no event exceed those permitted or allowed by Federal or state regulation, or law, if any.

9. To conduct all operations, whether for exploration, prospecting or mining or otherwise, in a prudent, energetic, workmanlike and efficient manner, and with reasonable diligence carry on said operations, and in all events with a minimum of resulting injury to the surface of said lands, and with safeguards to persons and livestock by erection of barriers, fences or othermeans, providing at all times proper gates or cattle guards for the containment of livestock upon the premises; to work the same in mine fashion in manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development andpreservation of the mining premises, and to the special covenents therein contained.

10. To prospect for, explore, uncover, and to work and mine discovered minerals on said premises as aforesaid in as diligent and continuous a manner as reasonably possible,

unless prevented by conditions of weather, federal or state regulations or laws, or acts of God.

11. All ores mined which are too low grade for present shipment shall remain the property of and subject to the control and disposition of the lessor unless such ores are shipped from premises by the Lessee.

12. That Lessee is not by this agreement invested with any property in any uranium or other minerals unless and until the same are severed from the ground, and all property taxes assessed upon or against said demised premises for ores mined and shipped under this lease shall be paid by the Lessee, except income taxes.

13. All bills and expenses incurred by the Lessee or those in privity with Lessee shall be promptly paid by the Lessee, and by such prompt payment said Lessee shall prevent the filing of any and all liens of miners, mechanics, or materialmen, against said demised premises; and, if by reasonof the failure of Lessee to pay such bills or expenses, Lessor may forthwith pay off and discharge the same, and the Lessor may hold Lessee bound to pay to Lessor all sums so advanced or paid to clear said premises from liens which may be filed as aforesaid, and the Lessor may also at his election declare a forfeiture of this lease. Lessor may upon demand insepct the books of Lessee to determine if all bills for labor, material and subcontractors have been paid and also shall be entitled to full information as to the names and addresses of all laborers, suppliers, subcontractors and principal contractors.

14. Lessee further covenants that no person not in privity with the parties hereto shall be allowed to hold possession of said premises or any part thereof under any pretext whatever.

15. That uponthe termination of this agreement, however occurring, to surrender back the premises and Lessee's rights hereunder to Lessor, with such written releases, quit claim deeds or other instruments as necessary to effectively show the same.

16. To make the payments unto Lessor in the form and manner herein specified.

It is mutually agreed that:

1. The periods of time herein granted and provided wherein the Lessee shall do and perform anything or take certain action, shall be extended by any delay occasioned or incurred by any official act of federal or state agency or department.

2. As between the parties hereto all improvements placed on the premises by Lessee shall be deemed personal property, to be removed by the said Lessee within sixty (60) days of the expiration hereof, however occurring.

3. That sub-leases or assignments, total or partial, shall be made only after the receipt of prior written permission of the Lessor.

4. The Lessor shall receive 10% of any cash payment resulting from assignment of this mining lease by the Lessee.

5. The Lessee has the prior right to obtain from the Lessor a mining lease similar to this one on additional acreage, to wit:

> The Southwest one-quarter (¼) of the Northwest one-quarter (¼) of Section Three (3), and the Northest one-quarter (¼) of the Southeast one-quarter (¼) of Section Four (4), Township Seven (7) South, Range 70 West of the Sixth P. M. (80 acres more or less.)

6. Upon the violation of any covenant or condition herein contained, this lease shall at the option of the Lessor expire, and terminate, and the said premises shall revert to the Lessor, and the Lessor or his agent may thereupon, after demand in writing, for possession, enter upon said premises and dispossess all persons found occupying said premises or any part thereof, and such persons may be proceeded against as guilty of unlawful detainer, subject to the conditions of the preceeding paragraphs.

This agreement shall extend to, inure to the benefit of, and be binding upon the heirs, lawful assigns and legal representatives of the parties hereto.

IN WITNESS WHEREOF, The parties hereto have hereunto set their hands and seals the day and year first above written.

Frank B. Page - Notary
Pueblo Co. - Colorado
JUN 1 1 1957

LESSOR:

Earl L. Kuchster (SEAL)

LESSEE:

Robert P. Haynes Jr. (SEAL)

Dorothy W. Osborn, Notary
Jefferson County, Colorado
June 14, 1957
My Commission expires September 27, 1960

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MINING LEASE

THIS AGREEMENT OF LEASE, made and entered into this [redacted] 7th day of June, A. D. 1957, between LOUIS S. MALACH, of the City and County of Denver, State of Colorado, hereinafter referred to as Lessor, and CALEB V. HAYNES, JR. of the County of Jefferson, State of Colorado, hereinafter referred to as Lessee;

W I T N E S S E T H :

NOW, THEREFOR, In consideration of the premises, the rents, royalties, covenants and agreements hereinafter expressed to be paid, kept and performed by the Lessee, the Lessor leased, let and demised, and by these presents leases lets and demises unto the Lessee, the following described mining property and premises, situate in the County of Jefferson, State of Colorado, to-wit:

> The East one-half (½) of the Southwest one-quarter (¼) of Section Three (3), Township Seven (7), South, Range 70 West of the Sixth P. M. (being 80 acres more or less).

To have and to hold the above described premises and privileges for the purpose of mining all ores, from this date and a period of ten years thereafter, and as much longer thereafter as minerals are found in paying quantities therep, and are continually mined, unless sooner terminated or forfeited through the violation of any of the covenants and conditions herein contained, and provided that during said period Lessor receive as a minimum annual rent or royalty a sum equivalent to ONE DOLLAR ($1.00) for each acre of said described land, payable in advance to such annual period, which sum shall be credited to any excess payments, if any, at the end of the annual period.

The Lessee, in consideration of the premises, has covenanted, contracted and agreed and by these presents do covenant, contract and agree to and with the Lessor, his executors, administrators and assigns as follows:

1. To conduct prospecting and mining operations in such a manner as not to create hazards to persons or livestock and with a minimum of resulting permanent injury to the surface of said lands, and all such operations at their own risk and expense.

2. To allow the Lessor the right at all times to inspect the premises and all ores, assays and samples obtained during and through the exploration or prospecting or mining operations, and to make available unto Lessor all reports obtained therewith for his inspection or reporduction.

3. To comply with Colorado Workman's Compensation Acts and the Occupational Disease Act, saving Lessor harmless from any liability resulting from injury or illness of Lessee, his agents or employees.

4. To pay unto Lessor during the period of commercial mining operations the equivalent of the following sums based upon net mill receipts from the uranium ores:

Percentages of Proceeds	Quantity of Uranium Oxide (U_3O_8) Present in Mined Ore
5%	0.20% or less
6%	commencing at 0.21% up to 0.30%
7%	commencing at 0.31% up to 0.40%
8%	commencing at 0.41% up to 0.50%
9%	commencing at 0.51% up to 0.60%
10%	commencing at 0.61% or more.

said payments to be due and payable as the ores are paid for upon delivery.

5. To pay unto the Lessor 25% of any bonus that may be allowed under the rules and regulations of the United States Atomic Energy Commission or other federal or state agencies for the discovery of uranium ores, or laws relating thereto, and to pay for current taxes that may be assessed against any improvements placed on such property by Lessee, and current taxes assessed against the mineral rights during the term thereof.

6. That should minerals other than uranium be exploited or taken hereunder, Lessor shall receive and Lessee shall pay 12½% of the net proceeds that may be received from the purchases thereof, without including any allowances received for transportation, but less milling costs and/or charges.

7. That the term "net mill receipts" shall mean the payments received at the mill for all ores including bonuses and freight allowance after deduction of actual costs of milling, smelting, treatment, frieght, less penalties imposed by virtue of existing impurities of the ore, or the imposition of other penalties.

8. That any payments to be reveived or to be paid as herein provided shall in no event exceed those permitted or allowed by Federal or state regulation, or law, if any.

9. To conduct all operations, whether for exploration, prospecting or mining or otherwise, in a prudent, energetic, workmanlike and efficient manner, and with reasonable diligence carry on said operations, and in all events with a minimum of resulting injury to the surface of said lands, and with safeguards to persons and livestock by erection of barriers, fences or other means, providing at all times proper gates or cattle guards for the containment of livestock upon the premises; to work the same in mine fashion in manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard tothe development and preservation of the mining premises, and to the special covenants therein contained.

10. To prospect for, explore, uncover, and to work and mine discovered minerals on said premises as aforesaid in as diligent and continuous a manner as reasonably possible,

unless prevented by conditions of weather, federal or state regulations or laws, or acts of God.

11. All ores mined which are too low grade for present shipment shall remain the property of and subject to the control and disposition of the Lessor unless such ores are shipped from premises by the Lessee.

12. That Lessee is not by this agreement invested with any property in any uranium or other minerals unless and until the same are severed from the ground, and all property taxes assessed upon or against said demised premises for ores mined and shipped under this lease shall be paid by the Lessee, except income taxes.

13. All bills and expenses incurred by the Lessee or those in privity with Lessee shall be promptly paid by the Lessee, and by such prompt payment said Lessee shall prevent the filing of any and all liens of miners, mechanics, or materialmen, against said demised premises; and, if by reason of the failure of Lessee to pay such bills or expenses, Lessor may forthwith pay off and discharge the same, and the Lessor may hold Lessee bound to pay to Lessor all sums so advanced or paid to clear said premises from liens which may be filed as aforesaid, and the Lessor may also at his election declare a forfeiture of this lease. Lessor may upon demand inspect the books of Lessee to determine if all bills for labor, material and subcontractors have been paid and also shall be entitled to full information as to the names and addresses of all laborers, suppliers, subcontractors and principal contractors.

14. Lessee further covenants that no person not in privity with the parties hereto shall be allowed to hold possession of said premises or any part thereof under any pretext whatever.

15. That upon the termination of this agreement, however occurring, to surrender back the premises and Lessee's rights hereunder to Lessor, with s ch written releases, quit claim deeds or other instruments as necessary to effectively show the same.

16. To make the payments unto Lessor inthe form and manner herein specified.

It is mutually agreed that:

1. The periods of time herein granted and provided wherein the Lessee shall do and perform anything or take certain action, shall be extended by any delay occasioned or incurred by any official act of federal or state agency or department.

2. As between the parties hereto all improvements placed on the premises by Lessee shall be deemed personal property, to be removed by the said Lessee within sixty (60) days of the expiration hereof, however occurring.

3. That sub-leases or assignments, total or partial, shall be made only after the receipt of prior written permission of the Lessor.

4. The Lessor shall receive 10% of any cash payment resulting from assignment of this mining lease by the Lessee.

5. The Lessee has the prior right to obtain from the Lessor a mining lease similar to this one on additional acreage, to wit:

> The Southeast one-quarter (¼) of the Northwest one-quarter (¼) of Section Three (3), Township Seven (7) South, Range 70 West of the Sixth P.M. (being 40 acres more or less).

6. Upon the violation of any covenant or condition herein contained, this lease shall at the option of the Lessor expire, and terminate, and the said premises shall revert to the Lessor, and the Lessor or his agent may thereupon, after demand in writing, for possession, enter upon said premises and dispossess all persons found occupying said premises or any part thereof, and such persons may be proceeded against as guilty of unlawful detainer, subject to the conditions of the preceeding paragraphs.

This agreement shall extend to , inure to the benefit of, and be binding upon the heirs, lawful assigns and legal representatives of the parties hereto.

IN WITNESS WHEREOF, The parties hereto have hereunto set their hands and seals the day and year first above written.

LESSOR:

Louis S Walach (SEAL)

LESSEE:

Caleb V. Haynes Jr. (SEAL)

Subscribed to and sworn before me this 7th day of June, 1957.

Marion E. Schneberg
Marion E. Schneberg,
Notary Public

My Commission expires March 13, 1961

U. S. Government Messenger Envelope

Standard Form No. 65 (Rev. 1/46)

1. Use blocks consecutively, one at a time.
2. Void previous block.
3. Write clearly.

NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM		NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM	
~~Phyllis Boyne~~ ~~5222 Int.~~	RUN / STOP		RUN / STOP
Mail & Files DMEA 4450, Int.	RUN / STOP		RUN / STOP
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Use other side first

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Project Summary Report

By: F. L. Knouse September 22, 1958

1. Docket No. DMEA-4791 (Uranium)
Contract No. Idm-E1132

Operator - Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Property - Consists of the SW¼ of the SW¼ of Sec. 3, and the SE¼ of the SW¼ of Sec. 3, T. 7 S., R. 70 W., 6th P.M.& B., Jefferson County, Colorado

Property Rights -

The SW¼ of the SW¼ is owned by Carl L. Keuhster, and the SE¼ of the SW¼ is owned by Louis S. Malach. The Operator is in possession of the land by virtue of leases, dated June 7 and 14, 1957, respectively, from the owners. Consent to Lien and Subordination Agreements signed by the owners are attached to the contract.

2. Contract date - September 11, 1957.

The project work was started October 15, 1957, and was considered completed on February 19, 1958, when Stage I work was finished. However, sample assay results were not submitted until April 30, 1958.

Work Authorized -

Consisted of a 2-stage diamond core drilling program from the surface to explore the downward projection of the Black Knight and Billikin uranium-bearing breccia.

Stage I - Consisted of preparing access roads and drill sites and drilling five vertical holes to intersect the Black Knight breccia about 150 feet down dip and one-60° hole to intersect the Billikin breccia about 150 feet down dip.

Stage II - Consisted of preparing access roads and drill sites and drilling not more than eight holes aggre-- gating not more than 1,600 feet to explore for extensions of mineralization intersected in Stage I holes.

Estimated and Completed Cost of the Project Work

Stage I

Actual Cost	Est. Cost	Work Completed Units	Work Completed Cost
1,280 ft. core drilling @ $5.50/ft.	$7,040.00	1,646	$9,053.00
40 hrs. bulldozing @ $15.00/hr.	600.00	28*	310.50
20 chemical analyses @ $5.00/sample	100.00	4	20.00
Fixed Unit Cost (Incidental Allowance)			
1,280 ft. drilling @ $1.03/ft.	1,318.40	1,646	1,695.38
Total - Stage I	$9,058.40		$11,078.88

Stage II

Actual Cost			
1,600 ft. core drilling @ $5.50/ft.	$8,800.00		
40 hrs. bulldozing @ $15.00/hr.	600.00		
30 chemical analyses @ $5.00/sample	150.00		
Fixed Unit Cost (Incidental Allowance)			
1,600 ft. drilling @ $1.03/ft.	$1,648.00		
Total - Stage II	$11,198.00		
Est. Cost of the Project (rounded)	$20,256.00		$11,078.88
Goverment Participation @ 75%	$15,192.00		$8,309.16

* see explanation at top of page 3

Footnote explanation from page 2:

* Amendment No. 2 allowed the use of a Model TD-9 International tractor w/dozer @ $9.00/hr., or a Model TD-14 International tractor w/dozer @ $12.00/hr., in lieu of a Model D-8 Caterpillar tractor w/dozer @ $15.00/hr.

NOTE: Only 6 holes were completed, ranging from 202 to 295 feet deep, aggregating 1,646 feet, at an average cost of $6.53/ft.

- - -

Amendments -

No. 1 - dated January 27, 1958, extended the completion date of the contract work until April 1, 1958.

No. 2 - dated February 10, 1958. Allowed the use of a Model TD-9, International Harvester tractor w/dozer @ $9.00/hr., of a Model TD-14 International Harvester tractor w/dozer @ $12.00/hr., in lieu of a Model D-8 Caterpillar tractor w/dozer @ $15.00/hr.

Since no work was approved by the Government for Stage II as was required by the contract, the work was automatically terminated when Stage I work was completed.

Final Reports -

Operator's - dated April 18, 1958, received in Washington May 9, 1958.

Field Team's - dated August 25, 1958, received in Division September 19, 1958.

3. Audit Report of Review, dated May 19, 1958.

Total cost as billed by Contractor	$11,078.88
Exceptions:	-0-
Total Accepted Cost	$11,078.88
Government Participation @ 75%	$8,309.16

4. Certification - none.

The Field Team recommends that no certification should be issued. The writer concurs with the Field Team's recommendation.

Production

None - some prospecting for gold, silver, and copper was done before 1900. Prospecting for uranium was done by Operator and former partner during 1954 and 1955, when some pits were dug that exposed secondary uranium minerals.

Ore Reserves

None reported of commercial value.

Comments -

The Field Team reports that the contract work was efficiently performed. Some delay was encountered due to severe winter storms and the rough terrain of the drilling area. Also, all of the holes drilled encountered the fault zone at a greater depth than originally estimated, which required the transfer of drilling footage from Stage II to Stage I, and, also, an extension of time to complete the work. The Operator furnished a satisfactory final report and other progress reports. Six holes were completed under Stage I, aggregating 1,646 feet of core drilling. The major part of the drilling was AX core. However, 20 feet of EX core was drilled in Hole "C".

The project was established to explore in depth the extension of the uranium-bearing Black Knight and Billikin breccia zones.

The country rocks in the vicinity are of Precambrian age. They consist of schists and gneisses of the Idaho Springs formation, the Swandyke hornblende gneiss, and granite gneiss-pegmatite. The two faults (Black Knight and Billikin) are thought to be related to the Laramide-breccia-reef fault system of the Front Royal system, cut the Precambrian rocks on the property. The Black Knight fault strikes N. 70° W. and dips 50-60° NE. Where exposed by trenches, 3 prospect pits, and a 55-foot shaft, it consists of 3 to 5 feet of iron-stained crushed rock, gouge streaks, and thin seams of calcite and pitchblende. Secondary uranium minerals, probably autunite and torbernite, are present in limited amounts near the surface. Drilling disclosed pitchblende, pyrite, chalcopyrite, and bornite at depth. The Billikin fault strikes northeast and dips 70° southeast on the surface, but drilling shows the dip to be about 50°. This fault is a rather strong breccia zone several feet wide which contains secondary copper and uranium minerals.

The Black Knight fault zone at 150 feet down dip proved to be a rather tight fracture zone with minor amounts of pitchblende associated with gneiss bands in a gneiss host rock. Radioactive probing did not indicate uranium minerals in significant quantities.

One drill hole cut the Billikin fault 268 to 269.5 feet and the structure at that point contained 0.019% uranium.

The completed drilling indicates that any ore-grade material is small and insignificant. Therefore, additional exploration of the property is not believed warranted.

F. L. Knouse

F. L. Knouse

DMEA Form 17
Feb. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

WORK COMPLETED ANALYSIS

After final audit or review report is received, prepare original only and file in official docket

Operator: Caleb V. Haynes, Jr.		Actual Cost	X
State: Colorado		Agreed Unit Cost	X
Final Report of Audit		Commodity: Uranium	Docket No. DMEA-4791
Final Report of Review	x		Contract No. Idm-E1132

Operation	Authorized by Contract and Amendments		Completed		Net cost after sale of Government Property
	Units	Cost	Units	Cost	
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) AX & *EX core	2880'	$18,806.40	1646'	$10,748.38	$10,748.58
Surface Excavation					
Underground Excavation					
Roads and Trails		1,200.00		310.50	310.50
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) 50 chem. analyses		250.00		20.00	20.00
Totals (Rounded)		20,256.00		$11,078.88	* $11,078.88

* Net cost total must agree with final report of audit or review.

Prepared by [illegible] Date 9-18-58

*20 ft. of EX footholes "C"

31398

OFFICIAL FILE COPY DMEA RECEIVED SEP 11 1958		
DATE	INITIALS	CODE
9/11	C	220
		700

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

Date September 11, 1958

DMEA Docket No. 4791
DMEA Contract No. Idm-E1132
Commodity Uranium
Name of Applicant Caleb V. Haynes, Jr.
Name of Property Black Knight & Billikin Lodes
Location of property Jefferson County, Colorado
Estimated cost of project $11,079.88

Memorandum

To: Frederick L. Knouse, Acting Director
Rare and Misc. Minerals Div., DMEA

From: James Paone, Bureau of Mines Member
Uranium Commodity Committee

Subject: Review of Final Report
(Application, Field Team Report, etc.)

1. Date of subject document: 9/4/58 2. Date received by reviewer: 9/10/58

3. Prior reports on this property known to reviewer: Yes ☐ No ☐

4. Prior reports on nearby properties known to reviewer: Yes ☐ No ☐

5. Information available on past production: Yes ☐ No ☐

6. Other pertinent factors known to reviewer: Yes ☐ No ☐

7. Explain items marked 'yes' above:

8. Factors meeting special consideration:

a. Location ☐
b. Ownership ☐
c. Evidence of mineralization ☐
d. Geology ☐
e. Proposed exploration method ☐
f. Alternate exploration method ☐
g. Costs
h. ☐

9. Action advised:

a. Obtain information from applicant ☐
b. Refer to Field Team ☐
c. Denial ☐
d. Agree with Field Team ☒
e. Disagree with Field Team ☐
f. Suggest alternate plan ☐
g. Request another examination ☐
h. Approval ☐
i. Consult with Mr. _____ at _____ Abc Office

10. Remarks: (Use back of page if necessary) Certification not recommended.

DMEA FORM 6 REFERENCE SLIP

REV. 12-56 DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO:	INITIALS	DATE
1. ~~100~~		
2. ~~110~~		
3. ~~800~~		
4. 700 Kunze		9/19
5.		
FROM:		

FOR: Check items for action desired

____ Action ____ Reply for signature of _____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

INT.-DUP. SEC., WASH., D.C. M25803

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
September 4, 1958

DMEA
RECEIVED SEP 8 1958

DATE	INITIALS	CODE
9/9	C	220
9/9	es	130
"	[illegible]	110
9/12	[illegible]	130
9/15	C	220
9/16	[illegible]	700

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA 4791 (Uranium), Contract No. ~~Idm-4132~~, Caleb V. Haynes, Jr. (Black Knight and Billikin Lodes), Jefferson County, Colorado - FINAL SUMMARY REPORT

Enclosed are the original and two copies of a Joint Final Engineering and Geologic Report, dated August 25, 1958, by F. B. Moore, Geologist, Geological Survey, and W. W. Winkel, Mining Engineer, Bureau of Mines. The original and one copy of the Operator's final report were forwarded by memorandum of May 7, 1958.

The contract was considered completed on completion of the work provided for under Stage I and the Operator was so notified by letter of March 28, 1958.

Final payment to the Operator was processed by this office June 2, 1958, in conformance with the Report of Review of reported project costs, by the Contract Administration and Audit Division, DMEA, dated May 19, 1958.

Exploration work completed consisted of the drilling of six holes, aggregating 1,646 feet of core drilling. Additional work or service or service incident to the drilling consisted of 28 hours of bulldozer work, chemical analysis of four samples for U_3O_8 content, and incidental allowance for 1,646 feet of drilling; all at a total acceptable cost of $11,078.88, toward which the Government contributed 75 percent, or $8,309.16.

The exploration work did not result in the discovery or development of a significant quantity of uranium ore; therefore, Certification of Discovery or Development is not recommended.

J. W. Townsend

E. N. Harshman

Reviewed by
DMEA OPERATING COMMITTEE

9-12-58
(date)

FINAL
F.T. Report

Hmc-Amc 9-3-58

9/12 130 220

DMEA
DEPARTMENT OF THE INTERIOR
SEP 3 - 1958
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT FINAL REPORT BY EXAMINING TEAM
REGION III

DMEA 4791

Contract Idm-E 1132

Caleb V. Haynes, Jr.

Black Knight and Billikin Lodes

Jefferson County, Colorado

Uranium

Joint Final Engineering and Geologic Report

by

F. B. Moore, Geologist
Geological Survey

W. W. Winkel, Mining Engineer
Bureau of Mines

August 25, 1958

Reviewed by
DMEA OPERATING COMMITTEE
9-12-58
(date)

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ILLUSTRATIONS

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2.	Property map, Black Knight and Billikin Lodes, Caleb V. Haynes, Jr., Jefferson County, Colorado. DMEA 4791	4
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DMEA 4791

CONTRACT Idm-E 1132

CALEB V. HAYNES, JR.
BLACK KNIGHT AND BILLIKIN LODES
JEFFERSON COUNTY, COLORADO

INTRODUCTION AND SUMMARY

Caleb V. Haynes, Jr., and Glen A. Boyd, Jr., P. O. Box 5, Golden, Colorado, on December 20, 1955, applied for aid to explore for uranium ore on the Black Knight and Billikin lodes. The application was given Docket No. DMEA 4104. The applicants proposed to build a difficult access road to the workings and to drive 300 feet of crosscut and 400 feet of drift at a total estimated cost of $34,581.42.

The property was examined on February 24, 1955, by R. U. King, Geological Survey, and Carl Belser, Bureau of Mines, in company with Caleb V. Haynes, Jr., and Glen A. Boyd, Jr., the applicants. A drilling program was designed to explore two breccia zones, the Black Knight and the Billikin, which contain secondary copper and uranium minerals near the surface. A joint engineering and geologic report recommending the drilling program was submitted by the examiners under Docket DMEA 4104.

An exploration program was approved under the original application and a contract prepared. Owing to the applicants' inability to obtain consents to lien, the contract was not signed, and the applicants withdrew the application. The application was resubmitted on July 6, 1957,

by Haynes and assigned Docket No. DMEA 4791. Because exploration on the property was done by lessees subsequent to the field examination, a second examination was requested. This examination was made on August 8, 1957, by F. B. Moore, Geological Survey, and W. W. Winkel, Bureau of Mines, but no new data were produced which would affect the original program as planned. It was therefore recommended that the exploration program as previously recommended in Examination Report DMEA 4104 of May 15, 1956, be approved. Contract Idm-E 1132, dated September 11, 1957, was signed by the applicant. It authorized 2,880 feet of core drilling, 80 hours bulldozer time, 50 chemical assays, and 2,880 feet of incidental allowance at a total estimated cost of $20,256.00. Government participation at 75 percent was estimated at $15,192.00.

Exploration work under the contract was started on October 15, 1957, and Stage I completed on February 19, 1958, except for results of assays on core splits. The results of these assays were submitted on April 30, 1958.

Stage I drilling failed to show significant amounts of uranium in the fault zones of the Billikin and Black Knight lodes. In a joint report dated March 28, 1958, it was recommended that the contract be terminated without prosecution of Stage II work, as requested by the operator.

LOCATION AND ACCESSIBILITY

The uranium claims containing the Black Knight and Billikin lodes consist of approximately 80 acres described as the SW 1/4 of SW 1/4 and the SE 1/4 of SW 1/4 sec. 3, T. 7 S., R. 70 W., 6th P. M., Jefferson County, Colorado. It is on a steep hillside on the northeast side and 850 feet above Kennedy Gulch at an altitude of about 8,100 feet, and is about 44 miles southwest of Denver, Colorado. The property is reached by driving southwest from Morrison, Colorado, on U. S. Highway 285 to about 2 miles past Tinytown, Colorado, and thence via the Grouse Creek road to Critchell, Colorado. The property is about 3 miles southwest of Critchell over a good dirt road (fig. 1).

PROPERTY

The SW 1/4 of the SW 1/4 of sec. 3 is owned by Carl Kuehster and was leased to the applicant on September 21, 1955. The SE 1/4 of SW 1/4 of sec. 3 is owned by Louis S. Malach and leased to the applicant on September 20, 1955. Both leases are for a period of three years with the right of extension "as much longer thereafter as minerals are found in paying quantities thereon".

A small tract for a house was excluded from the Malach tract, the description of which follows: Beginning on the north line of the SE 1/4 of sec. 3 at a point 58 feet east of the northwest corner, thence

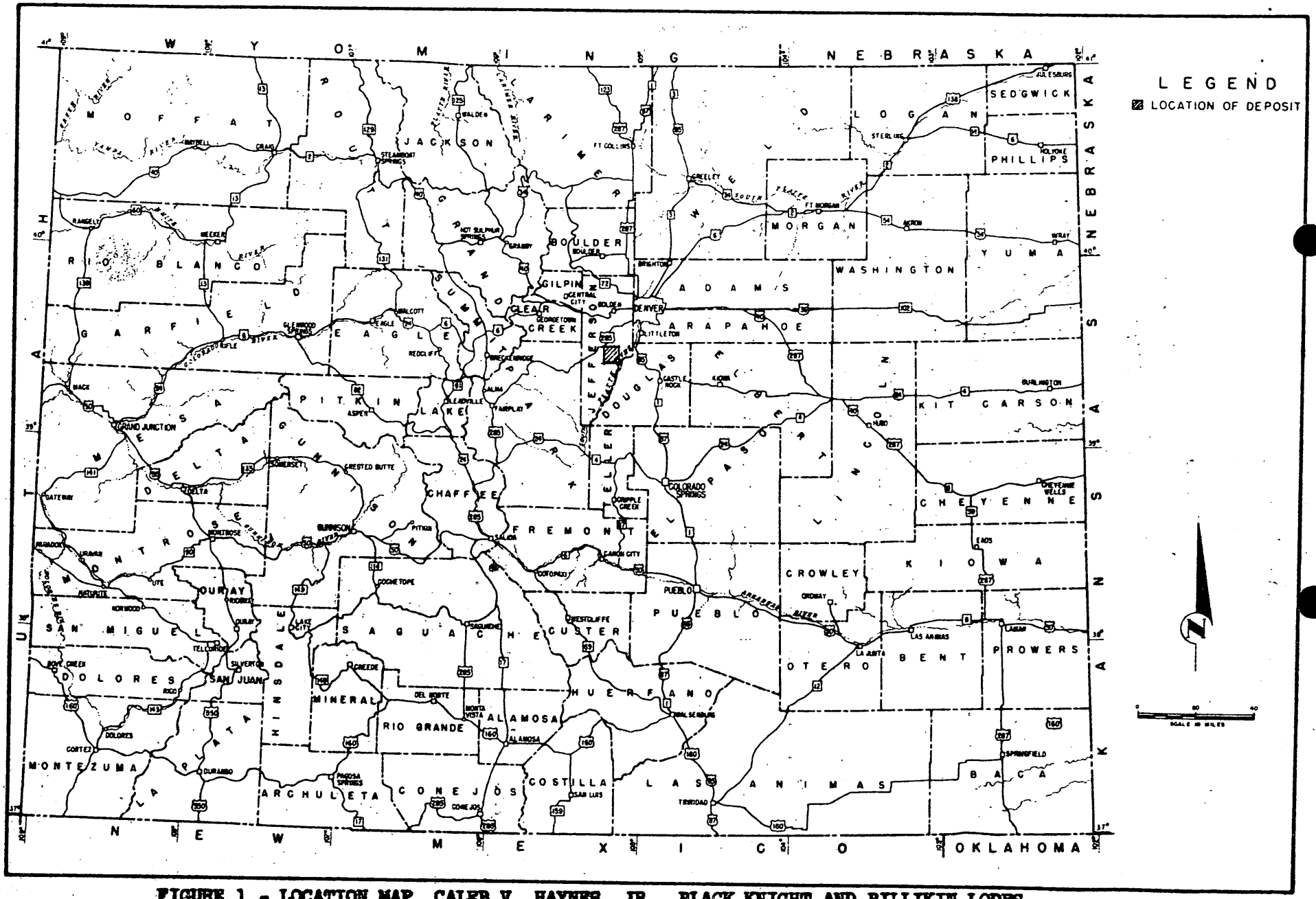

FIGURE 1 - LOCATION MAP, CALEB V. HAYNES, JR., BLACK KNIGHT AND BILLIKIN LODES
JEFFERSON COUNTY, COLORADO. DMRA 4791

165 feet west, thence 660 feet south, thence 165 feet east, thence 660 feet north to the point of beginning, comprising 2-1/2 acres. This transfer did not reserve the mineral rights. The portion of the tract that falls within the subject property contains 1.6 acres; however, it does not interfere with the area explored under this contract (fig. 2).

HISTORY AND PRODUCTION

Some prospecting for gold, silver, and copper was done before 1900, and several of the old workings on the Black Knight and Billikin lodes were driven during this period. In 1954 Boyd and Haynes began to prospect the area. Several small pits which were dug in 1955 contained showings of secondary uranium minerals.

Prior to the second field examination, made on August 8, 1957, lessees sank a 55-foot shaft on the Black Knight fault zone at Pit 3 location. The shaft followed the foliation of the gneiss, which dips about 70 degrees north, rather than the fault, which is about 10° flatter at this point. A short crosscut at the bottom of the shaft and a doghole about 20 feet below the collar intersected the fault on the hanging wall side.

GEOLOGY

The country rocks in the vicinity of the applicant's property are of Precambrian age; they consist of schists and gneisses of the Idaho

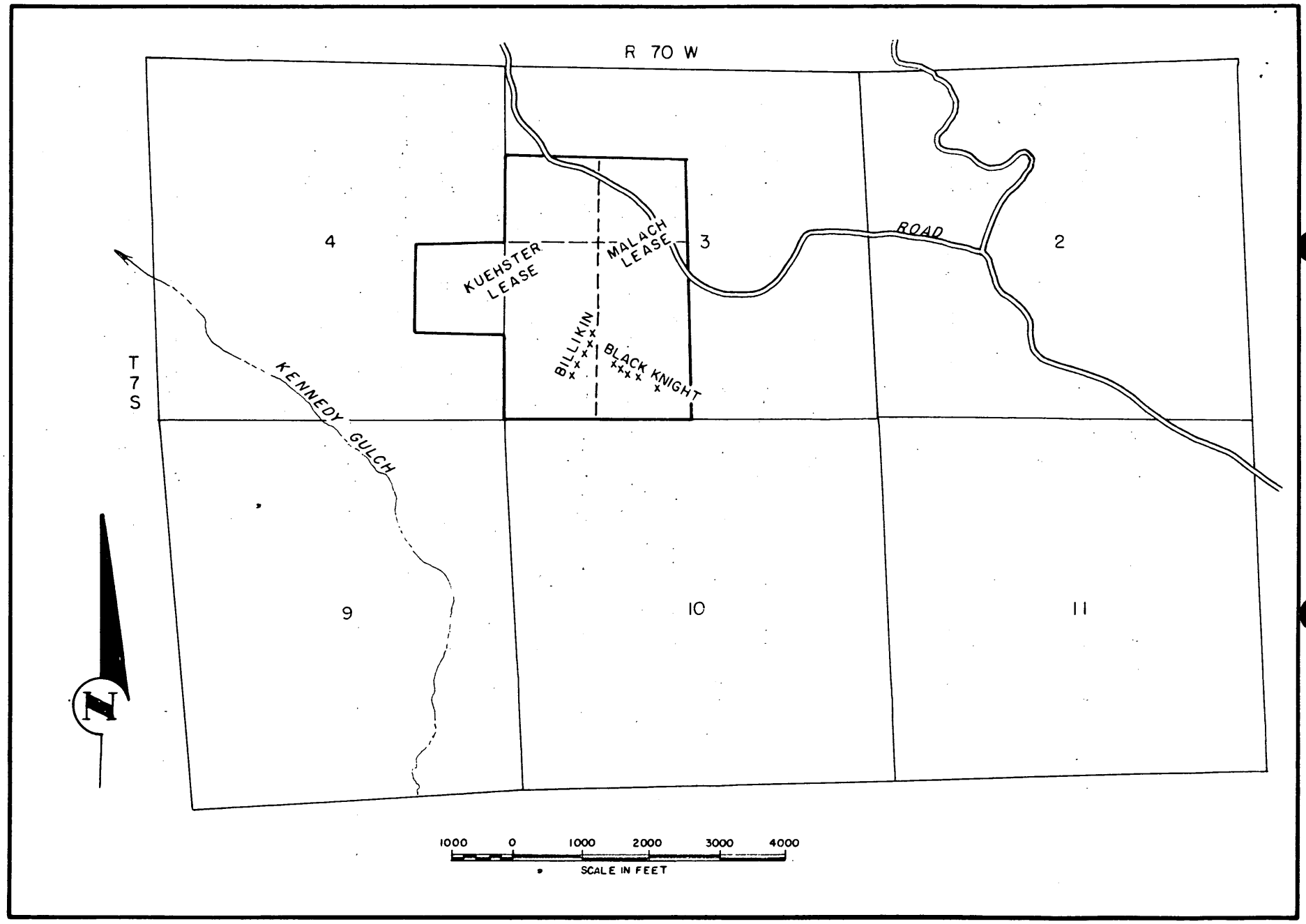

FIGURE 2 - PROPERTY MAP, BLACK KNIGHT AND BILLIKIN LODES, CALEB V. HAYNES, JR., JEFFERSON COUNTY, COLO. DMEA 4791

Springs formation, the Swandyke hornblende gneiss, and granite gneiss-pegmatite. The granite gneiss-pegmatite unit, although fairly common throughout the area, makes up only a small part of the country rock. A band of magnetite-garnet gneiss 5 to 50 feet wide occurs in the schist within the exploration area.

For the most part, the Precambrian rocks are foliated and banded; the foliation in the immediate area strikes N 70° W and dips 50° to 60° N.

Two faults (fig. 3) that are thought to be related to the Laramide breccia-reef fault system of the Front Range region [1/] cut the Precambrian rocks on the applicant's property. The Black Knight fault strikes N 70° W and dips 50-60° NE. Where exposed by trenches, prospects, and a shaft in the eastern part of the exploration area, it consists of 3 to 5 feet of iron-stained crushed rock, gouge streaks, and thin seams of calcite and pitchblende. Secondary uranium minerals, probably autunite and torbernite are present in limited amounts near the surface; drilling disclosed pitchblende, pyrite, chalcopyrite and bornite at depth. The limited surface exposures and prospects indicated that the fault extended for at least 900 feet and that the dip was about 47°; drilling shows that the dip is close to 55° and that the fault weakens to the west. The two westernmost holes on the structure (E and F) cut weak fault zones which could be correlated to the stronger eastern structure only by their position. The fault,

---

1/ Lovering, T. S., and Goddard, E. N., 1950, Geology and ore deposits of the Front Range, Colorado: U. S. Geol. Survey Prof. Paper 223, p. 61, 79, and fig. 21.

in general, is parallel to the foliation and cuts the nearby band of magnetite-garnet gneiss at several places. The magnetite-garnet gneiss, being a competent rock, should be favorable for ore deposition and at numerous localities in the Front Range it is known to be a favorable host for uranium minerals. Essentially all the occurrences of uranium along the Black Knight fault were at places where the fault cut the magnetite-garnet gneiss (fig. 4).

The Billikin fault strikes northeast and appears to dip 70° southeast at the surface. Data from drill hole G shows that the dip is about 50° at this place. The Billikin fault is a rather strong breccia zone several feet wide which contains secondary copper and uranium minerals. As the Billikin fault contained no primary uranium minerals and as polished section studies by the operator showed that the pitchblende from the Black Knight was earlier than the chalcopyrite and bornite, the operator's theory that the Billikin may be post-uranium in age appears probable. A second explanation for the absence of primary uranium minerals along the Billikin fault could be the absence of the favorable magnetite-garnet gneiss band which may be intersected by but is not coextensive with the Billikin fault.

Along the Black Knight fault uranium mineralization occurs in two holes (B and C) as relatively thin fracture fillings of pitchblende within the magnetite-garnet gneiss. Anomalous radioactivity in hole C

indicates uranium of marginal commercial value. Because no core was recovered from the radioactive zone, its true grade is not known.

ORE RESERVES

Although minor uranium mineralization occurs on the surface and in two of the drill holes in the Black Knight fault zone, there is no indication of ore reserves of commercial value.

Core recovery was poor in the faulted and highly altered zones which showed minor radioactivity. However, representative split core samples from four holes were taken for chemical assays; comparative results of assays and radiometric probing follow:

Drill hole	Sample from	Assay U_3O_8	Probe results	Fault zone	Remarks
"E"	182'-182.7'	0.011%	Nil	182'-192'	Magnetite gneiss zone, probable Black Knight fault.
"B"	172'-174.5'	0.038%	At 172'--0.15%	171'-190' (?)	Black Knight fault.
"C"	167'-168'	0.121%	At 167'--0.50%	200'-250'	Black Knight fault.
"G"	268'-269.5'	0.019%	Nil	258'-279'	Billikin fault zone.
"D"	None	None	Nil	273-278	Black Knight fault.
"F"	None	None	Nil	339-353	Black Knight fault.

In holes "C" and "B" very minor amounts of pitchblende are associated with fractures in the magnetite-garnet gneiss. Probing by the operator indicated 0.15 percent eU_3O_8 across a width of 0.2 feet at a depth of 172 feet in hole "B" and 10.0 percent of eU_3O_8 across a width of 1 inch at a depth of 249 feet in hole "C". Other holes drilled through the Black Knight fault zone were barren.

APPLICANT'S PROGRAM AND MODIFICATIONS

The original program submitted to DMEA proposed to explore the property with a single stage program in two parts. The first part consisted of building a 3,000-foot access road, the lower 1,500 feet over difficult terrain. The second part consisted of about 300 feet of crosscutting and 400 feet of drifting on the Black Knight lode. The total estimated cost was $34,581.42.

The examining team concluded that the Black Knight-Billikin lodes could be explored more economically by core drilling than by either crosscutting and drifting, or by sinking, and recommended that the drilling be done in two stages as follows:

Stage I to consist of five vertical holes to intersect the Black Knight lode approximately 150 feet downdip from the surface, and one inclined hole to intersect the Billikin lode at the same depth. Stage II to consist of eight offset holes to explore favorable ground discovered

as the result of Stage I drilling. The applicants approved the revised program of diamond drilling in lieu of the requested exploration by crosscutting and drifting.

THE PROJECT

DMEA program and modifications

The project was designed to explore the Black Knight and Billikin breccia zones at a depth of about 200 feet below the surface outcrops. Stage I of the project included five vertical and one inclined drill holes to intersect the breccia zones 150 feet downdip below the surface. Stage II of the project included not more than eight holes to explore for the extension of favorable mineralization intersected in Stage I drill holes. The location, inclination, and depths to be subject to the prior written approval of the Government.

The contract stipulated that work was to start on or before October 15, 1957, and be terminated by February 1, 1958. Actual work under the contract was started on October 15 with initial construction on the access road and the drill sites. The drilling equipment was moved to the property on October 16, and actual drilling started on October 21, 1957.

The operator, on December 8, 1957, requested additional drilling footage be transferred from Stage II to Stage I as required. The

objectives of Stage I holes were found to be deeper than originally estimated. The transfer of footage and applicable funds from Stage II to Stage I was approved by letter to the operator dated December 18, 1957.

The operator, on December 8, 1957, also requested permission to complete the bottom 10 to 20 feet of hole "C" by drilling EX size in lieu of reaming and casing the hole to a depth of 232 feet. It was impossible to drill AX size deeper due to sticky ground at 212 to 220 feet in depth. The inspecting engineer concurred with the operator's request, and a letter of approval dated December 18, 1957, was sent to the operator.

Amendment No. 1, dated January 27, 1958, authorized: "The date fixed in Article 3, on or before which the Operator shall have completed the work, is extended from February 1, 1958, to April 1, 1958."

Amendment No. 2, dated February 10, 1958, further amended effective September 11, 1957, as follows:

"In Exhibit 'A' under, Description of the Work, General Provisions, the first paragraph on the second page is revised to read as follows:

'Drill sites and access roads shall be prepared with Models TD-9 and TD-14 International Harvester Tractors w/dozers or equivalent sized units of other makes.'"

In exhibit "A" under the heading, "Estimated Cost of the Project," Independent Contracts, the actual bulldozer rates per hour are revised as follows:

For a model TD-9 tractor w/dozer, $9.00 hr.)	
)	$600.00
For a model TD-14 tractor w/dozer, $12.00 hr.)	

Stage II, Actual Costs, is revised to read as follows:

For a model TD-9 tractor w/dozer - $9.00 hr.)	
)	$600.00
For a model TD-14 tractor w/dozer - $12.00 hr.)	

Description of work completed

Exploration under Stage I of the contract started October 15, 1957, and actual drilling was completed February 19, 1958. During this period six core drill holes were completed for a total footage of 1,646 feet. The bulldozer work involved 1.5 miles of access roads and preparation of six drill sites. The access roads and drill sites had to be cleared of snow several times during the drilling period. Four chemical assays were made to check the results of radiometric probing.

The drill holes completed and their total depths follow:

Hole	Depth (feet)	Hole	Depth (feet)
"B"	202	"E"	213
"C"	269	"F"	376
"D"	295	"G"	291

The results of four chemical assays on core splits from four drill holes follow:

Hole	Interval	Thickness (feet)	U_3O_8 (percent)
"B"	172.0-174.5	2.5	0.038
"C"	167.0-168.0	1.0	0.121
"E"	182.0-182.7	0.7	0.011
"G"	268.0-269.5	1.5	0.019

Summary of accepted project costs

(1) Independent Contracts

(a) Drilling

	Units (ft.)	Amount
Core drilling	1,646	$ 9,053.00
Average cost per foot (core drilling) $5.50		

(b) Bulldozing

Roads and drill sites, 28 hrs., total	310.50
Average $11.09 per hour	

(2) Fixed unit cost

1,646 feet at $1.03 per ft.	1,695.38

(7) Miscellaneous

Chemical assays, 4 at $5.00 ea.	20.00
Total accepted cost of project	$11,078.88
Government participation at 75 percent	$ 8,309.16

SUMMARY OF FACTUAL DATA

Work under Stage I of the contract was accomplished between October 15, 1957, and February 19, 1958. During the active period of the contract a total of 1,646 feet of core drilling and 28 hours of bulldozer time were completed. On March 26, 1958, assays on four core splits were completed. These four chemical assays were for the purpose of checking the results of radiometric probing.

On May 28, 1958, an audit report on the contract was submitted by T. H. Brading, Auditor, which recommended that payment to the operator by the Government in the amount of $8,309.16 was valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official accepts the project as having otherwise met the terms of the contract.

CONCLUSIONS

The contract work was efficiently performed and supervised by the operator. Some delays were encountered due to severe winter storms and the rough terrain of the drilling area. Also, all of the holes drilled under Stage I encountered the fault zone at a greater depth than originally estimated. These conditions required authorization of drilling footage being transferred from Stage II to Stage I, and also an extension of time for the completion of the project.

The Black Knight fault zone, at 150 feet downdip from the surface, proved to be a rather tight fracture zone with minor amounts of pitchblende associated with the magnetite-garnet gneiss band in the gneissic host rock. Radiometric probing did not indicate uranium minerals in significant quantities.

Hole "G", drilled to explore the Billikin fault zone, cut a well brecciated zone at a depth of 268 to 269.5 feet. The structure at this point contained 0.019 percent uranium; no magnetite-garnet gneiss was encountered in the hole. The minor secondary mineralization found in the Billikin fault is considered to be the result of leaching from the Black Knight fault, and is economically unimportant.

The drilling, completed under Stage I, indicates that any ore-grade material is small and insignificant. Additional drilling did not appear warranted, and the operator requested that the contract be terminated without starting Stage II work. The Government considered that the contract was completed upon the completion of the work provided for under Stage I.

Certification of discovery is not recommended, due to the poor results obtained by drilling all of the authorized Stage I holes.

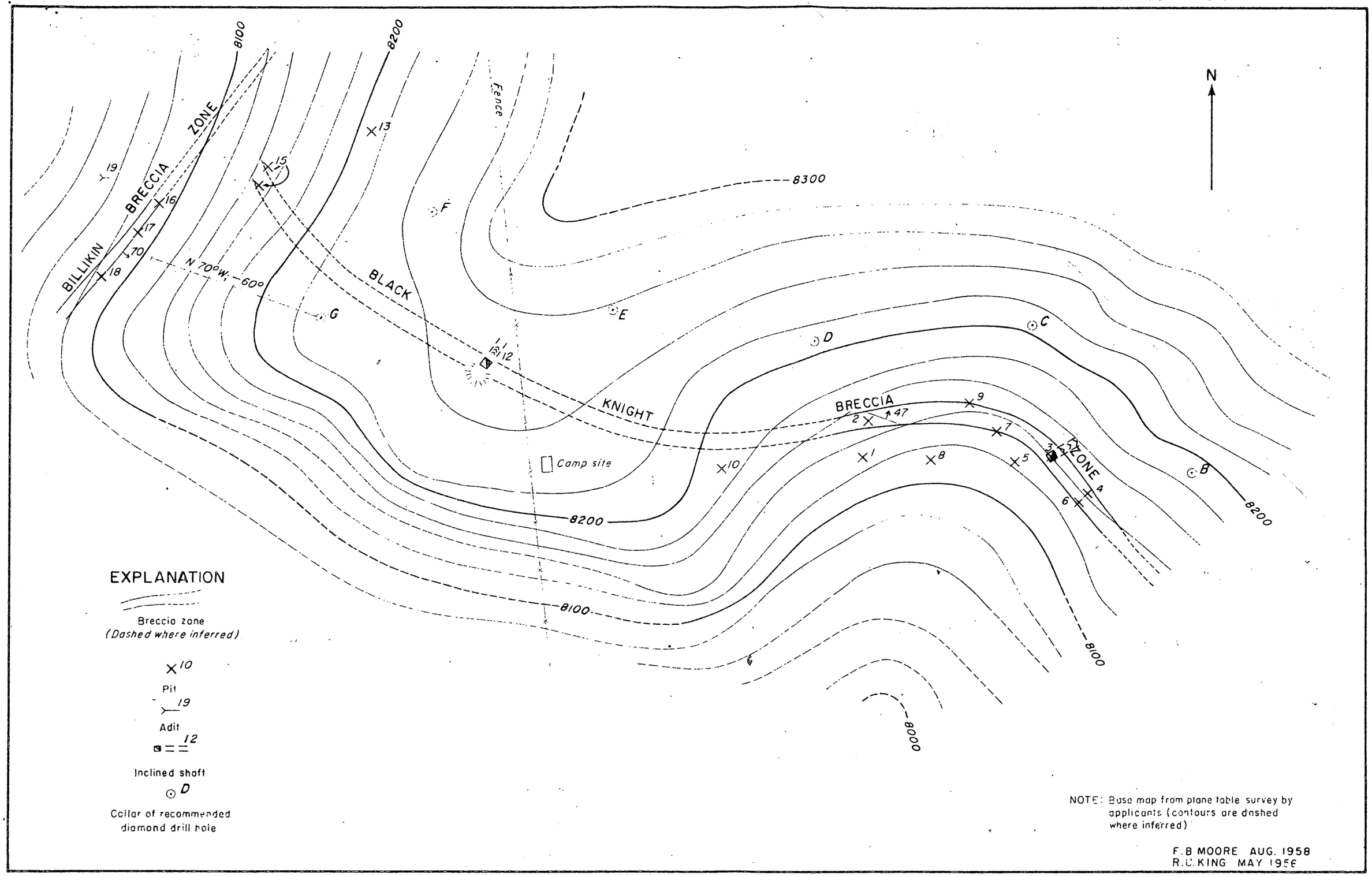

FIGURE 3.—GEOLOGIC MAP SHOWING LOCATIONS OF DRILL HOLES, BLACK KNIGHT AND BILLIKIN LODES, JEFFERSON COUNTY, COLORADO

100 50 0 200 Feet

Contour interval 20 feet
Datum is approximately mean sea level

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DMEA
RECEIVED SEP 8 1958

DATE	INITIALS	CODE

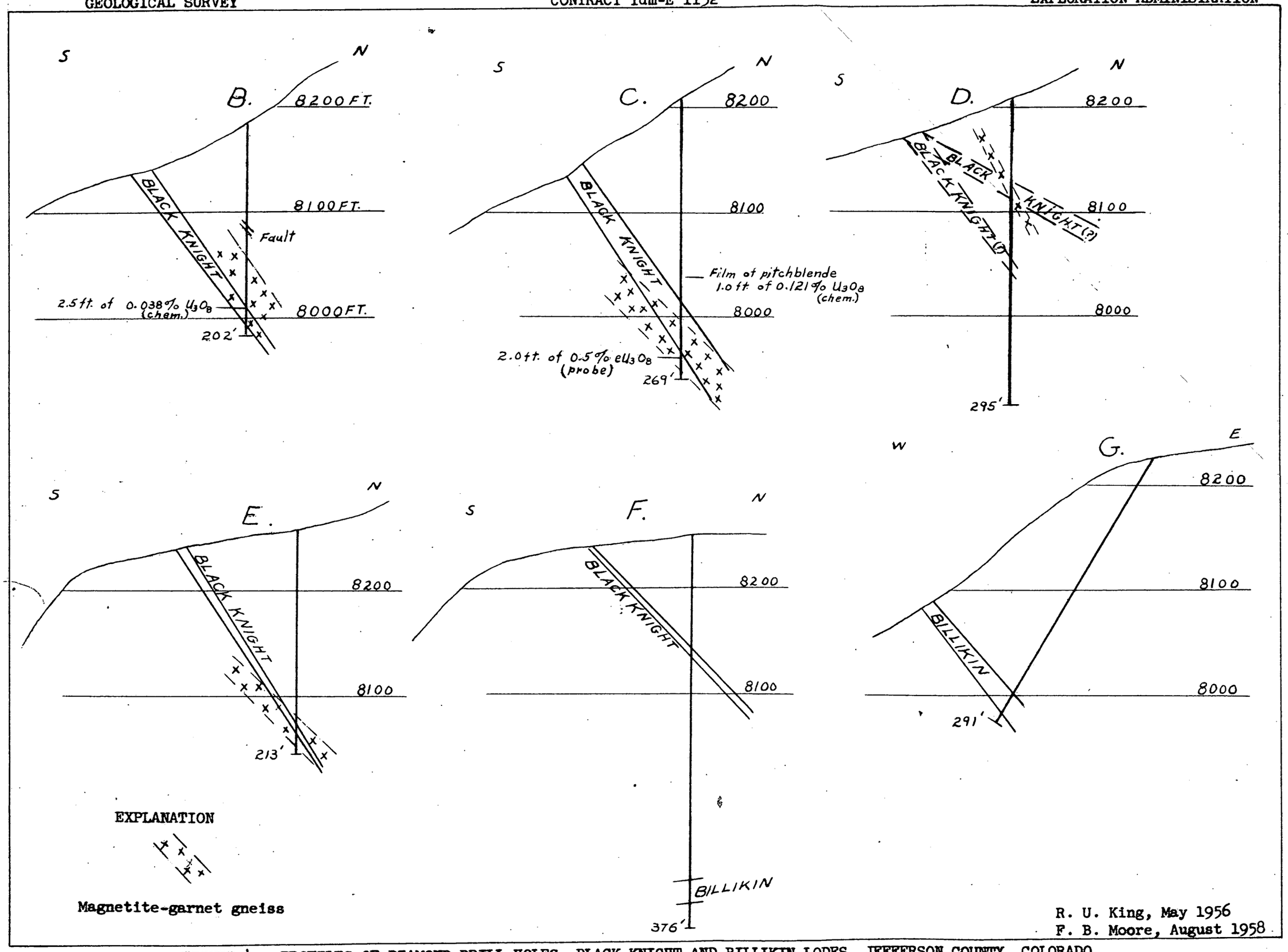

FIGURE 4.--PROFILES OF DIAMOND DRILL HOLES, BLACK KNIGHT AND BILLIKIN LODES, JEFFERSON COUNTY, COLORADO.
Scale: 1 inch = 100 feet

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RECEIVED SEP 8 1958

DATE	INITIALS	CODE

DMEA Form 7
(12-56)

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Date	Surname	Code
5/26	Talbert	800
5/26	C	220
		700

MAY 26 1958

Mr. Thomas H. Brading
DMEA Auditor
224 New Customhouse
Denver 2, Colorado

Re: Idn-E1132, DMEA-4791 (Uranium)
Caleb V. Haynes, Jr.

Dear Mr. Brading:

Your Report of Review on the referenced project is acceptable and normal distribution is authorized after correction in the first paragraph of the period covered by the MF-104s to read "for the months of October, 1957 to March, 1958, inclusive".

This change has been made on the Washington copies.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

EDTalbert/ama
May 26, 1958

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

OFFICIAL FILE COPY
DMEA
RECEIVED 9 58
5/9 C 220
~~Print~~ 700

204 New Customhouse
Denver 2, Colorado
May 7, 1958

Memorandum

To: T. H. Breding, DMEA Auditor, Region III

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

Subject: Docket No. DMEA 4791 (Uranium), Contract No. IDm-R1132, Caleb V. Haynes, Jr. (Black Knight and Billiken Lodes), Jefferson County, Colorado

The subject contract was considered completed upon completion of the work provided for under Stage I and the Operator was so advised of Government concurrence therein by letter dated April 3, 1958, a copy of which is enclosed for your records.

The Operator has rendered a final engineering and geologic report and a final accounting as required by the contract. Therefore, final payment of the Operator's account is in order, contingent on release to this office of a Certificate and Report of Audit, or Report of Review of reported project costs, whichever the case indicates.

Acceptable units of work or service completed on a Fixed Unit Cost basis consist of incidental allowance on 1,646 feet of drilling.

The sum of $515.00 was withheld from reimbursement to the Operator in processing his accounting reports for the months of February and March, 1958.

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosure

JWT:prl

cc: Chem. Op. Comm. (2)
Harshman
Corres. file
Townsend
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado
May 7, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 9 58

5/9	C	220
5/9	600	800
"	7 mm	700

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4791 (Uranium), Contract No. Idm-E1132, Caleb V. Haynes, Jr. (Black Knight and Billiken lodes), Jefferson County, Colorado

Enclosed are the original and one copy of a final report submitted by the Operator pertaining to work completed under the subject contract.

The contract was considered completed upon completion of the work provided for under Stage I.

E. N. Harshman

E. N. Harshman

Enclosures

DMEA
DEPARTMENT OF THE INTERIOR

APR 22 1958
REGION III
DENVER, COLORADO

P. O. Box 5
Golden, Colorado
April 21, 1958

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4791
Contract Idm-E1132

Dear Mr. Harshman:

Enclosed are five copies of the final report on the Black Knight and Billikin properties.

Please forgive my delay in preparing these. I have been engaged in Comprehensive Examinations.

Caleb V. Haynes, Jr.
Caleb V. Haynes, Jr.
Operator

CBS Final Report

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 9 1958
DATE | INITIALS | CODE

DMEA
DEPARTMENT OF THE INTERIOR
APR 22 1958
REGION III
DENVER, COLORADO

Final Report, DMEA Contract No. Idm-E1132

April 18, 1958

Geology

Surface and subsurface information reveals that the Black Knight fault is undulatory but that it approximately parallels the regional strike and dip of the metamorphic foliation. It is not a strong fault, and breccia and open spaces favorable for ore deposition are only locally developed where the fault penetrates lenses and layers of more brittle, less foliated rocks. Another favorability factor for uranium mineralization is the proximity of magnetite-garnet gneiss to open spaces in the fault. The magnetite-garnet gneiss zone varies in apparent thickness from 10 ft in Hole D to 67 ft in Hole B. In Holes F and G it was not apparent.

Uranium mineralization occurs in two holes (C and B) as relatively small fracture fillings of pitchblende within the magnetite-garnet gneiss zone. Anomalous radioactivity in Hole C indicates uranium of marginal commercial value. Because no core was recovered from the most radioactive zone its true grade cannot be ascertained. Chemical analyses for U_3O_8 are given for four holes in Table 1.

Table 1

Hole	Interval	Thickness(ft)	% U_3O_8
B	172.0-174.5	2.5	0.038
C	167.0-168.0	1.0	0.121
E	182.0-182.7	0.7	0.011
G	268.0-269.5	1.5	0.019

Chemical analyses by C. O. Parker, Denver, Folio 7144, March 1958

The Billikin fault appears to be a stronger and more brecciated fault than the Black Knight, however, the drill cores and radioactivity logs revealed no uranium mineralization. The absence of uranium may be explained as due to the meagerness of magnetite-garnet gneiss in proximity to the Billikin fault where penetrated. Another possibility is that the Billikin is post pitchblende mineralization.

There is evidence in support of this last mentioned possibility. Copper mineralization occurs in both faults. Primary uranium mineralization occurs only in the Black Knight. Polished section examination

reveals that pitchblende in the Black Knight is early and that chalcopyrite and bornite are late, having followed a period of slight movement that brecciated and displaced some of the colliform pitchblende. All radioactivity in samples from the Billikin fault has been traced by autoradiographs to secondary minerals.

Engineering

During the project approximately 1.5 miles of access roads and drilling sites were prepared by bulldozer. These had to be cleared of snow several times during the winter.

Water for drilling was obtained on the properties from underground workings for most of the project, however, water for the last hole was obtained from the well of a local landowner as water on the properties was depleted.

Approximately 1,646 ft of mostly AX-size drilling was completed during the project. All holes are believed to have reached their objectives, and only minor difficulties were encountered during the actual drilling. Poor drilling conditions in one hole (C) prevented the recovery of core from a critical zone (radioactive).

All drill holes were probed for radioactivity by the operator and by the Cotter Corporation, and some were probed by Mr. Schlottman of the U. S. Atomic Energy Commission. These data have been reported previously.

Drill hole depths and costs are given in Table 2.

Table 2

Road and drill site preparation- approx. 1.5 mi		$ 310.50
Hole B	202 ft depth	1,319.06
Hole C	269 ft depth	1,756.57
Hole D	295 ft depth	1,926.35
Hole E	213 ft depth	1,390.89
Hole F	376 ft depth	2,455.28
Hole G	291 ft depth	1,900.23
Chemical assays - 5 @ $5.00 ea.		20.00
Total depth 1,646 ft	Total cost	$11,078.88
	Government participation	8,309.16
	Amount received	7,794.16
	Amount due	$ 515.00

Conclusions

The small size and tightness of the Black Knight fault as revealed by drilling make it unlikely that uranium will be found in profitable quantities within the depths tested. The Billikin fault probably came after the period of primary uranium mineralization. There is, therefore, no reason for the intersection with the Black Knight fault to constitute a favorable zone for the development of an ore body. Secondary uranium mineralization in the Billikin fault has resulted from leaching from the Black Knight and is economically unimportant.

In the absence of any proved ore it is unnecessary to weigh assays and calculate tonnages on the basis of the low assays.

Caleb V. Haynes, Jr.
Operator

FILE COPY
DMEA
RECEIVED 9 1958

224 New Customhouse
Denver 2, Colorado
May 7, 1958

Mr. Caleb V. Haynes, Jr.
P.O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Contract Ida-K1182
Caleb V. Haynes, Jr.
(Black Knight and Billikin Lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

Form MP-104, Operator's Monthly Report and Voucher, for March 1958, has been received in this office.

Reimbursement for the Government's share of the March 1958, costs is withheld pending release to this office of a Certificate of Audit and Audit Report or Report of Review of the reported project costs by the Contract Administration and Audit Division, DMEA. The total amount withheld from reimbursement to date is as follows:

Amount withheld from February, 1958 voucher	$500.00
Amount withheld from March, 1958 voucher	15.00
Total withheld	$515.00

Yours very truly,

Original signed by
E. N. HARSHMAN

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

JDC:hmh

cc: Comm. Op. Comm. (2)
DMEA/DPC
Harshman
Townsend
Corres.file, Reg. III
Chron

DMEA
RECEIVED 14 1958
DATE
4/16 N.S. 225

224 New Customhouse
Denver 2, Colorado
April 10, 1958

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
(Black Knight and Billiken lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

Reference is made to your letter of March 14, 1958, regarding disposal of core obtained from the holes drilled under the DMEA Contract.

Excepting the core from hole "G", you may dispose of the remainder of the drill core as you see fit.

The core from hole "G" will be picked up by a Government engineer or geologist for inclusion in the Bureau of Mines core library. Therefore, please advise Mr. Winkel when and where the core from drill hole "G" will be available.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

JWT:prl

cc: John F. Shaw, DFC
Chmn.Op.Comm.-2) w/copy of joint memorandum
Harshman) dated April 9, from E. N.
DMEA/DFC-Winkel) Harshman and W. W. Winkel
Corres. file)
Townsend
Chron.

W.O.

DMEA

DEPARTMENT OF THE INTERIOR

REGION III

APR 9 - 1958
REGION III
DENVER, COLORADO

Building 20
Denver Federal Center
Denver 2, Colorado
April 9, 1958

Memorandum

OFFICIAL FILE COPY
DMEA
RECEIVED APR 14 1958
DATE | INITIAL | CODE

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

From: E. N. Harshman
W. W. Winkel

Subject: Docket DMEA 4791 (Uranium) Contract Idm-E1132, Caleb V. Haynes, Jr. (Black Knight and Billikin lodes) Jefferson County, Colorado -- Disposal of recovered core from Stage 1 drilling

DMEA drilling, under Stage 1 of the subject contract, disclosed little or no mineralization of consequence. Core recovery was very poor in the faulted and highly altered zones that showed some minor radioactivity.

Representative split-core samples were taken for chemical assays from four representative drill holes. The assays of samples from drill holes "B" and "C" were considerably below the indicated radiometric logging results. On samples from drill holes "E" and "G" the assays showed minor U_3O_8 whereas the logging indicated no radioactivity above background count. Comparisons of results are listed as follows:

Drill Hole	Sample From	Assay U_3O_8	Probe Results	Fault Zone	Remarks
"E"	182'-182.7'	0.011%	nil	182'-192'	Magnetite gneiss zone, probable Black Knight fault
"B"	172'-174.5'	0.038%	at 172' 0.15%	171'	Black Knight fault
"C"	167'-168'	0.121%	at 167' 0.50%	200'-250'	Black Knight fault
"G"	268'-269.5'	0.019%	nil	258'-279'	Billikin fault zone

It is recommended that the core from DMEA drill hole "G" be retained for reference, and stored in the Bureau of Mines core library at the Denver Federal Center. The remaining core resulting from Stage 1 drilling is to be released to the operator and made available to the petrography laboratory of the Colorado School of Mines for petrographic research.

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

W. W. Winkel
W. W. Winkel, Mining Engineer

WWW/mw cc: 9 Idm-E1132 chron

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DMEA
RECEIVED APR 10 1958

DATE	INITIALS	CODE
4/10	C	320
4/10	[illegible]	700

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado
April 8, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4791 (Uranium), Contract No. Idm-E1132, Caleb V. Haynes, Jr. (Black Knight and Billiken lodes), Jefferson County, Colorado

Enclosed are three copies of a letter from this office to the Operator, dated March 28, 1958, advising that the contract is to be considered completed upon completion of the work provided for under Stage I of the contract.

Also enclosed are three copies of a joint memorandum, dated March 28, 1958, from W. W. Winkel, Mining Engineer, Bureau of Mines, and F. B. Moore, Geologist, Geological Survey, pertaining to the matter.

The Operator has submitted results of analysis of mineralized core taken from four drill holes, which was a contingency in the memorandum from the field examiners dated March 28 containing their recommendations relative to terminating the contract at the end of Stage I work.

A Certification of Discovery or Development as a result of the exploration work performed will not be recommended.

E. N. Harshman

E. N. Harshman

Enclosures

OFFICIAL FILE COPY
DMEA
RECEIVED APR 10 1958

DATE	INITIALS	CODE

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

APR 8 - 1958

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 479 (Uranium)
Contract No. Ida-11132
Caleb V. Haynes, Jr.
(Black Knight and Billiken Lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

Reference is made to your letter of March 14, 1958, wherein you enclosed copies of an evaluation report pertaining to work completed under Stage I, and stated, since the results of the work completed have been more negative than positive, that you feel no further expenditure under the contract is warranted.

The matter has been reviewed by this office and, as a result of which, we agree with you that further work under the contract does not appear to be warranted. Therefore, since the Government's approval for the performance of work under Stage II will not be forthcoming, the contract is to be considered completed in its present status, or upon completion of the work provided for under Stage I.

In conjunction with the completion of the contract work, your attention is directed to the provisions under Article 7 (c) of the contract form concerning the rendering by you of a final accounting and a final engineering and geologic report pertaining to the work completed under the contract.

We are desirous of closing the account at an early date. Therefore, we will appreciate advice by return mail as to the date on or before which we can expect to receive the required final report.

Very truly yours,

DMEA Field Team, Region III

E. N. Harshman

E. N. Harshman

J. W. Townsend

J. W. Townsend
Acting Member

JWT:prl
cc: Chmn. Op. Comm. (3)
DMEA Auditor, Reg. III
Finance Office, Reg. III
Amendment file, Reg. III
Harshman
DMEA/DFC (Winkel)
Corres. file
Townsend
Chron

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

DMEA
DEPARTMENT OF THE INTERIOR
MAR 31 1958
REGION III
DENVER, COLORADO
OFFICIAL FILE COPY
DMEA
RECEIVED APR 10 1958

DATE	INITIALS	COPY

W. O.

March 28, 1958

Memorandum

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

From: W. W. Winkel
F. B. Moore

Subject: DMEA Docket 4791 (Uranium), Contract No. Idm-T 1132, Caleb V. Haynes, Jr. (Black Knight and Billikin Lodes), Jefferson County, Colorado

In a letter dated March 14, 1958, the operator summarizes the results of the Stage I work completed under the subject contract and concludes that Stage II work is not warranted.

Stage I work consisted of 6 drill holes; 5 (B to F inclusive) explored the Black Knight fault zone and 1 (G) explored the Billikin fault zone. The target was reached in all holes.

The Black Knight, at 150 feet down dip from the surface, proved to be a rather tight fracture zone with some mineralization apparently associated with a magnetite-garnet gneiss band in the gneissic host rock. In holes C and B very minor amounts of pitchblende are associated with fractures in the magnetite-garnet gneiss. Probing by the applicant indicates 0.15 percent of eU_3O_8 across a width of 0.2 feet at a depth of about 172 feet in hole B and 10.0 percent eU_3O_8 across a width of 1 inch at a depth of about 249 feet in hole C. Results

of probing hole C by J. Schlottman of the Atomic Energy Commission also indicate that the uranium occurs in one or possibly several thin seams of rather high grade material but not in mineable quantity. No core was recovered in this hole in the critical zone. Other holes drilled through the Black Knight fault zone were barren.

Hole G, drilled to explore the Billikin fault zone cut a well brecciated zone at a depth of 258 to 279 feet. The structure at this point contained no uranium nor was any magnetite-garnet gneiss encountered in the hole.

Stage I exploration suggests that if ore-grade material is present along either the Billikin or Black Knight fault zones it will occur in small insignificant ore bodies. Additional exploration to find such ore bodies is not believed warranted and it is recommended that the contract be terminated without prosecution of Stage II work as requested by the operator. This recommendation is contingent on the completion of several assays on mineralized core considered necessary to complete Stage I work. Recommendations regarding these assays will be the subject of a separate memorandum.

Certification of a Discovery will not be recommended.

W. W. Winkel

W. W. Winkel
Mining Engineer

F. B. Moore

F. B. Moore
Geologist

FBMoore:mp

OFFICIAL FILE COPY
DMEA
RECEIVED APR 10 1958
DATE | INI. | CODE

224 New Customhouse
Denver 2, Colorado
April 8, 1958

Memorandum

To: E. N. Harshman - w/enclosure
DMEA/DFC (Winkel) - " "

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

Subject: Docket No. DMEA 4791 (Uranium), Contract No. Idm-E1132, Caleb V. Haynes, Jr. (Black Knight and Billiken lodes), Jefferson County, Colorado

Enclosed is a copy of the Operator's letter of April 4, 1958, listing the results of analyses of four samples, which is in conjunction with the Operator's request of March 14, 1958 to terminate the contract without performing any work under Stage II.

The furnishing of analysis of mineralized core taken from the drill holes was a contingency to recommendations in the memorandum dated March 28, 1958 from the field examiners.

Original signed by
E. N. HARSHMAN

E. N. Harshman

JET:prl

cc: Chmn. Op. Comm.-2) w/copy of
Corres. file 0) enclosure
Townsend)
Chron.

W.O.

DMEA
DEPARTMENT OF THE INTERIOR

P. O. Box 5
Golden, Colorado
April 4, 1958

APR 8 - 1958
REGION III
DENVER, COLORADO

Mr. C. H. Harshman
Acting Executive Officer
DMEA Field Team, Region III
204 New Customhouse
Denver 2, Colorado

Re: Docket No. DMA 6291
Contract 1dm-21132

Dear Mr. Harshman:

At the request of Mr. Hinkle, USGS, and in order to substantiate the conclusions arrived at in the final report on Stage 1 exploration, four core samples were analysed chemically for U_3O_8.

The results in tabular form are as follows:

Samp. 1	Hole C	122.0-122.7 ft	0.011% U_3O_8
Samp. 2	Hole B	170.0-174.5 ft	0.038% U_3O_8
Samp. 3	Hole C	167.0-168.0 ft	0.121% U_3O_8
Samp. 4	Hole G	263.0-269.5 ft	0.019% U_3O_8

These analyses were made by C. O. Parker, 2114 Curtis Street, Denver 5, Colorado. Mr. Parker has them recorded in folio 7144 dated March 26, 1958.

Sincerely yours,

Vance Haynes Jr.

Vance Haynes
Operator

DOCUMENT NO. 10

224 New Customhouse
Denver 2, Colorado
March 27, 1958

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Contract Idm-E1132
Caleb V. Haynes, Jr.
(Black Knight and Billikin Lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

Form MF-104, Operator's Monthly Report and Voucher, for the month of February 1958, has been received in this office and is being processed for payment. The following deduction has been made.

All authorized drilling under Stage I has been completed and you have indicated that you do not wish to undertake any of the work outlined under Stage II; therefore, an amount of $500.00 is withheld from reimbursement to you, pending resolution of matters prerequisite to closing the account which include the following:

1. Action by the Government on your request by letter of March 14, 1958, that Stage II work not be entered into.

2. Rendering to the Government a final engineering and geologic report as required under Article 7(c) of the contract form.

3. Release to this office of an Audit Certificate and Audit Report or Report of Review of the reported project costs by the Contract Administration and Audit Division, DMEA.

Yours very truly,

Original signed by
E. N. HARSHMAN

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

JDC:hmh

cc: Chmn. Op. Comm. (2)
DMEA/DFC
Harshman
Townsend
Corres.file, Reg. III
Chron

RECEIVED MAR 19 1958		
DATE	INITIALS	CODE
3/19	C	220
3/21	[illegible]	800
3/21	FLK	700

224 New Customhouse
Denver 2, Colorado

March 17, 1958

Memorandum

To: E. N. Harshman - w/enclosure
DMEA/DPC (Winkel) - " "

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4791 (Uranium), Contract No. Idm-E1132, Caleb V. Haynes, Jr. (Black Knight and Billikin lodes), Jefferson County, Colorado

Enclosed is a copy of the Operator's letter of March 14, 1958 requesting the Government's approval to donate the cores from the drill holes to the Colorado School of Mines for use in petrographic research.

Please submit a joint memorandum report containing your recommendations in the matter, also your recommendations relative to chemical analysis of any of the cores.

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

JWT:prl

cc: Chmn. Op. Comm. (2)) w/copy of
Corres. File) enclosure.
Townsend
Chron.

WHK
T

VANCE HAYNES

GEOLOGICAL CONSULTANT

P. O. BOX 5, GOLDEN, COLORADO

March 14, 1958

Mr. W. H. King
Executive Officer, DMEA
224 New Customhouse
Denver 2, Colorado

Re: Docket No. 4791 (Uranium)
Contract No. Idm-E1132

Dear Mr. King:

In view of the fact that so little mineralization occurs in the drill cores I have not considered it worth while to have any of the core analyzed.

The core does present a cross section of a portion of the Idaho Springs formation that is of academic interest. There are some interesting metamorphic mineral assemblages present that are diagnostic of some of the metamorphic facies. With the Government's permission I would like to make the cores available to the petrography laboratory of the Colorado School of Mines (Dr. Robert M. Hutchinson in charge) for petrographic research.

Sincerely yours,

Caleb V. Haynes, Jr.

Caleb V. Haynes, Jr.

DMEA
DEPARTMENT OF THE INTER
MAR 17 1958
REGION III
DENVER, COLORADO

OFFICE OF ... DMEA
RECEIVED MAR 19 1958

DATE	INITIALS	CODE
3/19	C	220
3/21	[illegible]	800
"	FLK	700

224 New Customhouse
Denver 2, Colorado

March 17, 1958

Memorandum

To: E. N. Harshman - w/enclosure
DMEA/DFC (Winkel) - " "

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4791 (Uranium), Contract No. Idm-X1132, Caleb V. Haynes, Jr. (Black Knight and Billikin Lodes), Jefferson County, Colorado

Enclosed is a copy of the Operator's letter of March 14, 1958, with attached Evaluation Report on Stage I work.

The Operator, in the enclosed material, indicates that further expenditure in exploring the property is not warranted and requests that Stage II not be entered into.

Please submit a joint memorandum report containing your recommendations relative to terminating the contract in its present status without performing work under Stage II. Also include your recommendations relative to the issuing of a Certification of Discovery or Development.

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

JWT:prl

cc: Chmn. Op. Comm. (2)) w/copy of
Corres. file) enclosure
Townsend
Chron.

VANCE HAYNES

GEOLOGICAL CONSULTANT

P. O. BOX 5, GOLDEN, COLORADO

WHK

March 14, 1958

Mr. W. H. King
Executive Officer, DMEA
224 New Customhouse
Denver 2, Colorado

Re: Docket No. 4791 (Uranium)
Contract No. Idm-E1132
(Black Knight and Billikin lodes,
Jefferson, County, Colorado)

Dear Mr. King:

Enclosed are the copies of the evaluation report on Stage I. As you know, the results have been more negative than positive, so much so that I feel that no further expenditure is warranted.

I hope this meets with your approval.

Sincerely yours,

Caleb V. Haynes, Jr.

Caleb V. Haynes, Jr.

DMEA
DEPARTMENT OF THE INTERIOR
MAR 17 1958
REGION III
DENVER, COLORADO

Evaluation of Stage I Exploration, DMEA Contract No. Idm-E1132,

15 October, 1957 to 19 February, 1958.

Review of the geology

Surface and subsurface information reveals that the Black Knight fault undulatory but that it approximately parallels the regional strike and dip of the metamorphic foliation. It is not a strong fault, and breccia and open spaces favorable for ore deposition are only locally developed where the fault penetrates lenses and layers of more brittle, less foliated rocks. A necessary condition for uranium mineralization is the proximity of magnetite-garnet gneiss to open spaces in the fault. The magnetite-garnet gneiss zone varies in apparent thickness from 10 ft in Hole D to 67 ft in Hole B. In Holes F and G it was not apparent.

Uranium mineralization occurs in two holes (C and B) as relatively small fracture fillings of pitchblende within the magnetite-garnet gneiss zone. Anomalous radioactivity in Hole C indicates uranium mineralization of marginal commercial value.

The Billikin fault appears to be a stronger and more brecciated fault than the Black Knight, however, the drill cores revealed no uranium mineralization. The absence of uranium may be explained as due to the meagerness of magnetite-garnet mineralization in proximity to the Billikin fault. Another possibility is that the Billikin fault came after the primary uranium mineralization.

There is evidence in support of this last mentioned possibility. Copper mineralization occurs in both faults. Primary uranium mineralization occurs only in the Black Knight. Polished section examinations reveal thatpitchblende in the Black Knight is early and that chalcopyrite and bornite are late having followed a period of movement that brecciated some of the pitchblende. All radioactivity in samples from the Billikin fault hasbeen traced by autoradiographs to secondary minerals.

Conclusions

The small size and tightness of the Black Knight fault as revealed by drilling make it unlikely that uranium will be found in profitable quantities within the depths tested.

The Billikin fault came after the period of primary uranium mineralization. There is, therefore, no reason for the intersection with the Black Knight fault to constitute a favorable zone forthe development of an ore body. Secondary uranium mineralization in the Billikin fault has resulted from leaching from the Black Knight fault and is economically unimportant.

The exploration has not revealed any information that would preclude the possibility of there being an ore deposit at greater depths or elsewhere latterally in the leased area, however, the possibilities of finding such a deposit, if one exists, without considerable expense and effort are remote.

Recommendation

No further expenditures for exploration of the Black Knight and Billikin fault zones are recommended. It is, therefore, advised that Stage II of DMEA Contract No. Idm-E1132 not be entered.

Caleb V. Haynes Jr.
Caleb V. Haynes, Jr.
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 24 1958

DATE	INITIALS	CODE
2/24	C	220
2/24	PLK	700

February 20, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4791 (Uranium), Contract No. Idm-E1132, Caleb V. Haynes, Jr. (Black Knight and Billikin lodes), Jefferson County, Colorado

Enclosed are the Government's and Audit copies of Amendment No. 2 to Contract No. Idm-E1132, which was forwarded by your letter of February 10, 1958 for signature by the Operator.

Copies of the Amendment have been distributed to the Operator, the Finance Office, Region III, and to others concerned.

W H King

W. H. King

Enclosures

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2-7	Kuppel	700
2-7	Ellis	700
"	Chandler	800
2/10	GCS	138
"	Johnson	116
"	Cantrell	100
2/11	C	2/B
		220
		700

FEB 10 1958

Mr. W. H. King
Executive Officer
DMEA Field Team, Region III
224 NewCustomhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
Black Knight and Billikin Lodes
Jefferson County, Colorado

Dear Mr. King:

As recommended in your memorandum, dated January 27, 1958, we are enclosing, for the signature of the Operator, the original and four copies of Amendment No. 2 to the subject contract with two extra copies signed by the Administrator. The amendment consists of two pages.

When the amendment is signed, please make the usual distribution of the document.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (2/B)

Enclosures

APPROVED:

Frank D. Lamb (2/B)
Member, Bureau of Mines

Thor H. Kiilsgaard (2/B)
Member, Geological Survey

FLKnouse/izm 2-7-58
cc: Mr. Knouse
Operating Committee
Admr.'s Reading File
THKiilsgaard, 5224

8623

February 4, 1958

Memorandum

To: Hazel Berry, Operating Committee

From: Irene Z. Mainster, Div. of Rare & Misc. Metals

Subject: Amendment Clearance

Docket No. DMEA-4791
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
Jefferson County, Colorado

Mr. Knouse has reviewed and approved Amendment No. I, dated January 27, 1958, and has indicated that no further review of the amendment is required by the Legal Division.

Irene Z. Mainster

Irene Z. Mainster

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

January 29, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4791 (Uranium), Contract No. Idm-E1132
Caleb V. Haynes, Jr. (Black Knight and Billikin lodes)
Jefferson County, Colorado

Enclosed are the Government's and Audit copies of Amendment No. 1 to the subject contract, which has been executed under authority delegated to this office to extend the completion date from February 1, 1958 to April 1, 1958.

Copies of the amendment have been distributed to the Operator, Finance Office, Region III, and to others concerned.

W. H. King

Enc.

NATIONAL FILE COPY
DMEA
RECEIVED FEB 3 1958

DATE	INITIALS	CODE
2/3	C	220
2/3	eof	130
	FCK	700

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/30/58	Knouse	700
"	Ellis	700
		140

INTERIOR DEPT.
JAN 30 1958
SOLICITOR

January 30, 1958

Memorandum

To: Associate Solicitor
Division of Mineral Resources

From: Ernest Wm. Ellis, Director
Division of Rare and Miscellaneous Metals

Subject: Docket No. DMEA-4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes
Black Knight and Billikin Lodes
Jefferson County, Colorado
Amendment No. 2

Please prepare Amendment No. 2 to the above contract, for the signature of the Administrator, with an effective date of September 11, 1957, which provides for the following:

1. On lines 2 and 3, paragraph 1, page 2, of Exhibit "A," delete "Model D-8 Caterpillar tractor w/dozer or equivalent size unit of another make" and add "Models TD-9 and TD-14 International Harvester tractors w/dozers or equivalent sized units of another make."

2. Under Stages I and II, Category (1) Independent Contracts, line 2, page 3, Exhibit "A," delete (in two places) "40 hrs. of bulldozing (including operator and all necessary costs) @ $15.00/hr. $600.00" and add (in two places) "Actual bulldozer operating time (including operator and all necessary costs whatsoever) rates as follows:

For a Model TD-9 tractor $9.00/hr.
For a Model TD-14 tractor $12.00/hr. } $600.00"

/s/ Ernest Wm. Ellis

Ernest Wm. Ellis

FLKnouse/gla
cc to: Mr. Knouse

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY DMEA RECEIVED JAN 29 1958		
DATE	INITIALS	CODE
1/29	C	220
		130
"	F-4K	700

January 27, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4791 (Uranium), Contract No. Idm-E1132, Caleb V. Haynes, Jr. (Black Knight and Billikin lodes), Jefferson County, Colorado

Enclosed are the original and two copies of the Operator's letter of January 24, 1958, requesting an amendment to the contract to substitute a TD-9 tractor bulldozer at $9.00 an hour and a TD-14 tractor bulldozer at $12.00 an hour in lieu of the D-8 tractor bulldozer or an equivalent size unit of another make at $15.00 an hour, as presently provided for in the contract.

Preparation of an amendment of the nature involved is not within the authority delegated to this office. Therefore, the matter is forwarded for your consideration and appropriate action, with the recommendation that a suitable amendment be prepared, effective as of the date of the contract, to substitute the two different size tractor bulldozers at the rates requested by the Operator.

Amendment No. 1 to the contract is in process, under authority delegated to this office, to extend the completion date from February 1, 1958 to April 1, 1958.

W. H. King

W. H. King

Enclosures

DMEA
DEPARTMENT OF THE INTERIOR

JAN 27 1958
REGION III
DENVER, COLORADO

P. O. Box 5
Golden, Colo.
January 24, 1958

Mr. W. H. King
Executive Officer, DMEA
224 New Customhouse
Denver 2, Colorado

Re: Docket DMEA-4791
Contract Idm-E1132

Dear Mr. King:

Herewith, I am submitting to your office for consideration by the Government, the original and five copies of a request that the contract be amended, effective September 11, 1957 (the date of the contract), to provide for the use of smaller size tractor-dozers at lower hourly rates.

The following information is pertinent:

OFFICE MAIL & FILE SECTION
DMEA
RECEIVED JAN 29 1958

DATE		CODE

1. Estimated bulldozing time:

Stage I	TD-9	20½hrs
Stage II	TD-14	19½hrs
Stage II	TD-14	24 hrs

2. Estimated hourly rate:

TD-9	$ 9.00 per hour
TD-14	12.00 per hour

3. Total estimated bulldozing ~~time~~ cost:

Stage I	TD-9	$184.50
	TD-14	234.00
		418.50
Stage II	TD-14	288.00
Total for contract		$706.50

Sincerely yours,

Caleb V. Haynes Jr.

Caleb V. Haynes, Jr.
Operator

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 29 1958

DATE	INITIALS	CODE
1/29	C	220
1/29	[illegible]	800
11	[illegible]	700

224 New Customhouse
Denver 2, Colorado

January 27, 1958

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
(Black Knight and Billikin lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

Enclosed are the Government's, Audit, Operator's, Finance Office, and Field Team copies of proposed Amendment No. 1 to Contract No. Idm-E1132, which has been prepared in reference to your request of January 24, 1958, to extend the date presently fixed on or before which the work shall be completed from February 1, 1958 to April 1, 1958.

If the proposed Amendment is satisfactory, all copies are to be signed by you as indicated and all copies promptly returned to this office; upon receipt of which, and after signature by the Executive Officer, DMEA Field Team, Region III, for the Government, the "Operator's Copy" will be returned to you.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer
DMEA Field Team, Region III

JWT:prl

cc: Chmn.Op.Comm.-2)
Harshman)
DMEA/DFC-Winkel)
Corres. file)
Townsend)
Chron.

w/copy of Operator's letter of January 24.

DMEA
DEPARTMENT OF THE INTERIOR

JAN 27 1958
REGION III
DENVER, COLORADO

P. O. Box 5
Golden, Colo.
January 24, 1958

Mr. W. H. King
Executive Officer, DMEA
224 New Customhouse
Denver 2, Colorado

Re: Docket DMEA-4791
Contract Idm-E1132

Dear Mr. King:

Inclement weather, drilling difficulties, and water problems will prevent completion of all the work provided for in the contract by the date stipulated (February 1, 1958).

I hereby request an extension of two months in order to complete the work, thus making the completion date April 1, 1958.

Sincerely yours,

Caleb V. Haynes Jr.

Caleb V. Haynes, Jr.
Operator

224 New Customhouse
Denver 2, Colorado

January 27, 1958

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
(Black Knight and Billikin lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

Reference is made to your letter of January 24, 1958, wherein you request an amendment to the Contract to provide for the use of a TD-9 and/or TD-14 tractor dozer at $9.00 and $12.00 per hour respectively, in lieu of a model D-8 tractor or unit of equivalent size at $15.00 an hour.

Preparation of an amendment of the nature involved is not within the authority delegated to this office. Therefore, the matter has been forwarded to the Washington Office, DMEA, for their consideration and appropriate action, on which you will be advised at an early date.

Enclosed is the original of the Administrative Audit Difference Statement which was attached to your letter of January 24. It is suggested that you retain the statement for possible later use in reclaiming the amounts disallowed if and when an amendment is prepared to authorize the change in size of tractor dozers.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer
DMEA Field Team, Region III

JWT:prl

cc: Chmn. Op. Comm. (2)
Harshman
DMEA/DFC (Winkel)
Corres. file
Townsend
Chron.

DMEA

1/24	C	220
1/24	[illegible]	800
1/24	[illegible]	700

224 New Customhouse
Denver 2, Colorado

January 22, 1958

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
(Black Knight and Billiken
lodes) Jefferson County, Colo.

Dear Mr. Haynes:

Under the provision of Article 3 of the contract form the date of February 1, 1958, is established as the date on or before which the Operator shall have completed the work provided for in the contract.

If conditions beyond your control will prevent completion of all work provided for in the contract by the date stipulated, you should immediately forward for the Government's consideration the original and five copies of a letter wherein you request an extension of the completion date for such additional time as you consider will be necessary to enable you to complete the work.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

JWT:bh
cc: Chairman, Op. Comm.(2)
Harshman
DMEA/DFC (Winkel)
Townsend
Corres. File
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	CODE
1/24	C	220
1/24	[illegible]	800
1/24	[illegible]	900

224 New Customhouse
Denver 2, Colorado

January 21, 1958

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
(Black Knight and Billiken
lodes) Jefferson County, Colo.

Dear Mr. Haynes:

Reference is made to the letter from this office, dated December 18, 1957, wherein you were advised of the procedure to be followed if you desire to have the contract provide for the use of a tractor other than a "Model D-8 Caterpillar or tractor with dozer, or unit of another make of equivalent size," as presently provided for in the contract.

Since considerable time has elapsed since our letter of December 18, and we have heard nothing further from you in the matter, we assume that you are not interested in having the change effected. If we are not correct in this assumption, please advise by return mail, furnishing the information requested in our letter of December 18.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

JWT:bh
cc-Chairman, Op. Comm.(2)
Harshman
DMEA/DFC (Winkel)
Townsend
Corres. File
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

DEC 20 1957

RECEIVED DEC 23 1957		
DATE	INITIALS	CODE
12/23	C	220
12/23	FLC	700

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4791 (Uranium), Contract No. Idm-E1132, Caleb V. Haynes, Jr. (Black Knight and Billikin Lodes), Jefferson County, Colorado

Enclosed are the following copies of approval for modification of the description pertaining to work under the subject contract:

1. Three copies of Field Team approval to transfer drill footage and applicable funds from Stage II to Stage I.

2. Three copies of Field Team approval for the reduction in size of Hole C below the 232-foot depth.

Also enclosed are three sets of data pertaining to each of the matters under items 1 and 2, consisting of the Operator's request and memorandum of recommendations from the examining engineer.

Copies of the approvals have been distributed to the Operator, the Finance Office, Region III, and to others concerned.

W H King

W. H. King

Enclosures

official

DMEA
RECEIVED DEC 23 1957

DATE	INITIALS	CODE
12/23	JTK	700

224 New Customhouse
Denver 2, Colorado

December 18, 1957

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
(Black Knight and Billikin Lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

In reference to your letter of December 8, 1957, and consistent with provisions in the Contract, this confirms verbal approval by the Government issued on December 9, 1957, to reduce the size of Stage I Hole C below the depth of 232 feet to EX size.

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

Very truly yours,

DMEA Field Team, Region III

By W. H. King
W. H. King

By E. M. Harshman
E. M. Harshman

JWT:prl

cc: Chmn. Op. Comm. (3)
Finance Office, Region III
Amendment file, Region III
Harshman
DMEA/DFC (Winkel)
Corres. file
Townsend
Chron.

DMEA
RECEIVED DEC 23 1957
CODE
12-23 JWK 700

224 New Customhouse
Denver 2, Colorado

December 18, 1957

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Contract No. Idm-E1132
Caleb V. Haynes, Jr.
(Black Knight and Billikin Lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

In reference to your letter of December 8, 1957, and consistent with provisions in the contract, the Government hereby approves transfer of sufficient footage and applicable funds from Stage II to Stage I to permit completion of the six Stage I holes to their stated objectives.

Appropriate deductions will be made from Stage II footage and funds consistent with necessary amounts transferred to Stage I.

The transfer of drilling footage and applicable funds from Stage II to Stage I is necessitated because the objectives of Stage I holes have been found to be deeper than originally estimated.

Nothing in this approval for transfer of footage and funds from Stage II to Stage I shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Very truly yours,

DMEA Field Team, Region III

By W. E. King
W. E. King

By E. N. Harshman
E. N. Harshman

JWT:prl

cc: Chmn. Op. Comm. (3)
Finance Office, Region III
Amendment File, Region III
Harshman
DMEA/DFC (Winkel)
Corres. File
Townsend
Chron.

DMEA
DEPARTMENT OF THE INTERIOR

REGION III

DEC 17 1957
REGION III
DENVER, COLORADO

Building 20
Denver Federal Center
Denver 2, Colorado
Dec. 17, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: W. W. Winkel

Subject: Docket DMEA 4791 (Uranium) Contract Idm-E1132, Caleb Haynes (Black Knight and Billikin Lodes) Jefferson County, Colorado -- Justification for transfer of drilling footage from Stage II to Stage 1 drilling

After completing drill holes "E" and "C", under Stage I of the subject contract, it appears necessary to have additional footage transferred from Stage II to Stage I to complete the remaining 4 drill holes in Stage I to the stated objective.

Drill hole "E" was estimated to be drilled to 170 feet, and drill hole "C" was estimated for a depth of 220 feet. Hole "E" was drilled to 213 feet and "C" was stated to be completed at 269 feet. This excess footage to reach the stated objective is about 34 percent over the approximate original estimate. It now appears that the Billikin breccia zone pitches more steeply than initial surface and shaft observations indicated.

It is recommended that an unspecified amount of drilling footage be transferred from Stage II to Stage I with the stipulation that any unused footage from Stage I will revert back to Stage II in the event that Stage II drilling receives Government approval. The amount of footage to be transferred should not be less than 25 percent of the estimated total for Stage I drilling.

W. W. Winkel
W. W. Winkel
Mining Engineer

WWW/mm
cc: 9
Idm-E1132
chron

DEC 1957
CODE

DMEA
DEPARTMENT OF THE INTERIOR

DEC 10 1957
REGION III
DENVER, COLORADO

P. O. Box 5
Golden, Colorado

8 December 1957

Mr. J. W. Townsend
DMEA Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4791
Contract No. Idm-71132

Dear Mr. Townsend:

Two (B & E) of the proposed six diamond drill holes of Stage I have been completed and another hole (C) is near completion. All of these holes to date have exceeded the original estimated footage for each hole by a total of 67 ft and hole C is not yet completed. It is unlikely that the other holes D, F, & G will be bottomed short of the proposed depths. Therefore, the need for additional footage of approximately 25 ft per hole is anticipated.

It is hereby requested that additional footages totaling approximately 150 ft be deducted from Stage II and transferred to Stage I.

Sincerely yours,

Caleb V. Haynes, Jr.

Caleb V. Haynes, Jr.
Operator and Geologist

DMEA
CODE
25 711 700

DMEA
DEPARTMENT OF THE INTERIOR

ON III

DEC 17 1957
REGION III
DENVER, COLORADO

Building 20
Denver Federal Center
Denver 2, Colorado
Dec. 16, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: W. W. Winkel

Subject: Docket DMEA 4791 (Uranium) Contract Idm-E1132, Caleb Haynes (Black Knight and Billikin Lodes) Jefferson County, Colorado -- Justification for completing drill hole "C" using EX size diamond coring bit

During inspection of the subject property hole "C" was being drilled at a depth of 232 feet. At this depth the drill had penetrated fault material from 212 to 232 feet and became stuck. It was impossible to continue drilling AX size below this zone prior to the added expense of reaming and casing to the 232 foot depth. Because of the extra cost of reaming and casing it was not considered advisable because of the low percentage of hole still estimated as being necessary to reach the stated objective, the Billikin breccia zone. This zone was estimated to be not more than 12 to 18 feet below the 232 foot depth. The more feasible plan is to case the existing part of the hole to a smaller size, without reaming, and complete the remaining part with EX size core bit. The operator was advised to request approval to bottom this hole by casing and drilling the remaining portion using EX size core bit.

It is recommended that approval be granted the operator to bottom the remaining part of hole "C" by casing the existing section and drilling EX size to its stated objective.

W. W. Winkel
W. W. Winkel
Mining Engineer

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 23 1957

DATE	NOTES	CODE

WWW/mw
cc: 9
Idm-E1132
chron

DMEA
DEPARTMENT OF THE INTERIOR

DEC 10 1957
REGION III
DENVER, COLORADO

P. O. Box 5
Golden, Colorado

8 December 1957

Mr. J. W. Townsend
DMEA Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4791
Contract No. Idm-E1132

Dear Mr. Townsend:

As of noon Saturday, December 7, drilling at Site C had reached a total depth of 232 ft. Due to very"bad2 ground between 212 ft and 220 ft drilling had to be terminated. Drill rods were sticking to such a degree that the hole was in danger of being lost if the rods could not be removed.

The "sticky" zone at 212 ft is interpreted as fault gouge or highly altered schist. Below the gouge zone circulation of drilling fluid was completely lost. Magnetite gneiss appears only in the bottom 5 ft of the hole and fracturing is still in evidence at this depth.

In view of these things I feel that it is adviseable to recover additional core from further down in order to properly test the fault zone and favorable magnetite gneiss zone. In order to drill deeper at Site C Boyles Brothers must do one of two things. Either the hole must be completely reamed and cased with AX casing to permit AX coring or the hole can be cased as it is without reaming and coring continued with EX bit and rods. Boyles assures me that the EX drilling would be by far the cheaper way. Reaming at $2.30 per foot would amount to $533.60 for the 232 ft whereas there would be no additional charge for the agreed upon cost per foot of $4.90 for the additional 10 to 20 ft required.

Because probably not more than 20 ft af additional drilling would be required to complete the testing of the fault zone I request approval for completion of Hole C with EX bit and rod.

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 23 1957
CODE

Sincerely yours,

Caleb V. Haynes, Jr.

Caleb V. Haynes, Jr.
Operator and Geologist

DATE	INITIALS	CODE
12/20	gb	220
12/20	[illegible]	800
12/23	[illegible]	700

224 New Customhouse
Denver 2, Colorado

December 18, 1957

Mr. Caleb V. Haynes, Jr.
P. O. Box [illegible]
Golden, Colorado

Re: Docket DMEA-4791 (Uranium)
Contract Idm-E1132
Caleb V. Haynes, Jr.
(Black Knight and Billikin lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

Form MF-104, Operator's Monthly Report and Voucher, has been received in this office and is being processed for payment.

The contract stipulates that all bulldozing be performed with a Model D-8 Caterpillar tractor with dozer, or equivalent size unit of another make. The bulldozing completed during October 1957 was performed by International Harvester TD-9 and TD-14 tractors, neither of which is equivalent in size to the D-8 Caterpillar. The reported bulldozing costs for October 1957 are disallowed, subject to possible reinstatement at a later date in the event the contract is subsequently amended, upon request from you, to provide for the use of smaller tractor-dozers at lower hourly rates.

You should immediately submit to this office for consideration by the Government, the original and five copies of a request that the contract be amended, effective the date of the contract, to provide for the use of the smaller size tractor-dozers at lower hourly rates. The following information is required in conjunction with the request.

1. The estimated bulldozing time for TD-9 and TD-14 tractor-dozers, which will be required to complete all of the work under each stage.
2. The established hourly rate in the DMEA project area for the TD-9 and TD-14 tractor-dozers.
3. Total estimated bulldozing cost for each stage of work (not to exceed the maximum allowable bulldozing cost presently established for each stage).

Very truly yours,

Original signed by
W. H. KING
W. H. King
Executive Officer, DMEA
Field Team, Region III

JDC:jy
cc: Chm. Op. Comm. (2)
Harshman
DMEA,DFC
Townsend
Corres. file, Reg. III
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 30 1957

DATE		CODE
9/30	C	220
9/30	B	215
11	~~FBK~~	700

September 26, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4791 (Uranium), Contract No. Idm-E1132, Caleb V. Haynes, Jr. (Black Knight and Billikin Lodes), Jefferson County, Colorado

Enclosed are the Government's and Audit copies of Exploration Project Contract No. Idm-E1132, which was forwarded by your letter of September 11, 1957 for insertion of a starting date under Article 3 of the contract and signature by the Operator.

Also enclosed are three copies of a letter from this office, dated September 26, 1957, whereby we forwarded the "Operator's Copy" of the contract, blank report forms and instructions relative to reporting on work performed under the contract, and procedures to be followed in communicating with this office in all matters pertaining to the contract.

The contract, dated September 11, 1957, provides for work estimated to cost $20,256.00, toward which the Government will contribute 75%, or an amount not in excess of $15,192.00.

Copies of the contract have been distributed to the Finance Office, Region III, and to others concerned.

J. W. Townsend

J. W. Townsend

OFFICIAL FILE COPY
DMEA
RECEIVED 30 1957
CODE

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

September 26, 1957

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Contract No. 1Dm-81132
Caleb V. Haynes, Jr.
(Black Knight and Billikin Lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

Enclosed herewith is the "Operator's Copy" of Exploration Project Contract No. 1Dm-81132, Docket No. DMEA 4791.

Also enclosed are six copies of form MF-104, "Operator's Monthly Report and Voucher," and six copies of form MF-104A, "Operator's Unit Cost and Progress Report." At the end of the first calendar month after work is commenced, and monthly thereafter, you are required to submit the original and four copies of each form to the

Executive Officer
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado.

The extra copy is for your records.

Forms MF-104 and MF-104A are to be combined into five sets of one of each form. Each set of the combined forms is to be accompanied by a map or sketch showing the location and extent of work performed and a <u>signed</u> narrative report which describes the work performed, conditions encountered, and results of the work. The monthly accounting report will not be processed for reimbursement unless it is accompanied by a signed narrative report and other required or pertinent data. Additional copies of forms MF-104 and MF-104A will be forwarded to you each month on receipt of your report for the prior month.

For your information, and in reply to many questions that have been asked, after forms MF-104 and MF-104A are received, an engineer will check progress on the project and review your accounts, after which the report forms will be forwarded to this office for administrative examination and vouchering. If the report is in order, a check will be issued

by the Treasury Department for the Government's portion of the approved costs. If you have any difficulty in completing these forms and the reports, please call on this office for assistance.

In the matter of your claim for reimbursement of drilling costs under the terms of the contract, reimbursement to you will be on the basis of a hole or holes completed to the objective, which has, or have been, drilled in compliance with the conditions under the "General Provisions" section of Exhibit "A" of the contract and the special conditions pertaining to the drilling under each stage. Therefore, your monthly report should include only such holes which are completed to that extent and the required records made a part of your claim for reimbursement.

The contract is prepared on form NF-200, and under its provisions and as outlined in Exhibit "A" of the contract, the allowable costs are a combination of actual costs with a maximum average unit cost established for work under Category (1) and fixed unit costs for performing the remaining items of work or services. Under the provisions of Exhibit "A", the work under Category (1) is to be performed by subcontract. The costs recorded under item (1) of form NF-104 for such work must be supported each month by a signed or certified copy of the billing from the subcontractor. Amounts reported on the basis of "Fixed Unit Costs" require no documentation, as they are otherwise verified.

In reference to ANNEX II (f) of the contract pertaining to the average unit cost of the drilling, if excess costs are suspended by reason of exceeding the maximum unit cost of the drilling described under Category (1), the excess costs will be held in suspense and be reinstated by this office, to the extent suspended funds are available, in the event the unit costs for any month should cause the average unit cost to fall below the maximum average unit cost established in the contract for the drilling.

In the event you desire to perform the work under Category (1) on company account instead of subcontracting it, as provided in the contract, it will be necessary that you request and obtain an appropriate amendment to the contract before reimbursement can be made to you for the Government's portion of the allowable incurred costs.

Your requests to this office for work approval, changes in the contract, or any other communication pertaining to operations under the contract, must be in writing, of which please supply the original and five copies, each copy complete with maps or other pertinent data. Each request for action by this office must pertain to one matter only. Such requests are <u>not</u> to be incorporated in your narrative report accompanying monthly progress report forms NF-104 and NF-104A.

The locations of holes to be drilled under Stage I are indicated on the map, "Figure 3," attached to the contract. Should conditions encountered necessitate or make desirable a change in the location of any of the holes, approval of this office for the change must be obtained prior to performance of the drilling. Otherwise, the drilling may not be acceptable for reimbursement to you under the terms of the contract.

Your attention is directed to the provision that Stage II work is contingent on results obtained from Stage I, and performance of the work under Stage II is subject to the prior written approval of the Government.

When work under Stage I has been completed, or sufficiently so to permit evaluation of results of the work, you must request approval from this office for the work you propose to perform under the next stage. Your request for the work approval must be in sextuplicate, each copy complete with a map showing the location and extent of the work completed and the location of the additional work proposed. Also, your request must include an evaluation of the work completed and include Assay returns and any other pertinent data which will be of value to the Government in appraising the results of the work.

You should anticipate a suspension of operations between stages of work, to enable the Government geologist and engineer to evaluate the results of the work performed and make their recommendations to this office relative to the additional work you propose.

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

No oral statement of any person shall be construed to modify or change the terms of the contract. Field representatives of the Government are not authorized to approve any changes in the work program or contract provisions. Such approval can only be given by the Washington Office, DMEA, or by the DMEA Field Team, Region III.

It is a regulation that reimbursement for the cost of the work accomplished prior to the date of the contract will not be allowed. It is a <u>requirement and imperative that you notify this office in writing the date work actually commences under the contract</u>.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III

JWT:prl
cc: Chem.Op.Comm.-3
Finance Office, Region III
Amendment file, Region III
Barshman
DMEA/DPC-Winkel
Townsend
Corres. file
Chron.

OFFICIAL FILE COPY DMEA RECEIVED SEP 23 1957		
DATE	INITIALS	CODE
9/23	C	220
"	~~FLE~~	700

224 New Customhouse
Denver 2, Colorado

September 18, 1957

CERTIFIED MAIL

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket No. DMEA 4791 (Uranium)
Caleb V. Haynes, Jr.
(Black Knight and Billikin Lodes)
Jefferson County, Colorado -
Proposed Exploration Project
Contract No. Idm-E1152

Dear Mr. Haynes:

Enclosed are the Government's, Audit, Finance Office, and Field Team Copies of proposed Exploration Project Contract No. Idm-E1152, which has been prepared pursuant to your application for Government assistance in exploration work under the Defense Minerals Exploration Administration program.

If the contract is satisfactory, all copies are to be signed by you as indicated and all copies promptly returned to this office.

In the event the contract is not satisfactory, all copies are to be returned promptly to this office together with your comments on or objections to the contract.

Your attention is especially directed to three provisions in the contract:

1. The Government will not contribute to the costs of any of the work that is provided for in the contract which is performed prior to the date of the contract.

2. The contract requires completion of the exploration work by the date fixed therefor. Approval must be obtained from this office for any suspension of work which may result in failure to complete the work by the date specified.

3. Royalty is due the Government on all production from the land described in the contract, beginning on the date of the contract.

If the contract is satisfactory, and upon return of all copies properly signed, the Operator's Copy of the contract will be forwarded to you, together with blank report forms and instructions relative to reporting on work performed under the contract. Also, instructions will be given as to the procedure to be followed in corresponding with this office in matters concerning operations under the contract.

When the signed copies of the contract are returned, please advise us the date on or before which work will be commenced, for our insertion in Article 3 of the contract form.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III

Enclosures

JWT:prl

cc: Chmn. Op. Comm(2)
Marshman
DMEA/DFC
Townsend
Corres. file (Docket)
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Signature	Code
9-12	Knouse	700
9-12	Ellis	700
9/12	[illegible]	130
"	Johnson	110
9/13	[illegible]	100
		220
		700

Department of the Interior

DMEA

SEP 13 1957

14X4401(01) Revolving Fund, Defense Production Act, ~~Interior (Transfer to Office of Secretary)~~

T E L E T Y P E

WILLIAM H. KING
EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER, COLORADO

REFERENCE DMEA 4791 CALEB V. HAYNES, JR. BEFORE APPLICANT SIGNS CONTRACT CHANGE WORK COMPLETION DATE IN ARTICLE 3 TO FEBRUARY 1, 1958.

George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE

FLKnouse/izm 9-12-57

cc: Mr. Knouse
Admr.'s Reading File
Operating Committee
Confirmation cc to Reg. 3

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-5	Knouse	700
9-5	Ellis	700
9/11	Talbert	800
9/11	GCS	130
"	Johnson	110
		~~700~~
		~~[illegible]~~
9/12	P	220
		700

SEP 11 1957

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

Re: Docket No. DMEA-4791 (Uranium)
Caleb V. Haynes, Jr.
Black Knight and Billikin Lodes
Jefferson County, Colorado

Dear Mr. King:

Enclosed are the original and four copies of a proposed long-form contract between the Government and the subject Applicant, signed by the Administrator. The contract consists of form MF-200; Annex I, one page; two Consents to Lien and Subordination Agreements; Annex II, one page; Exhibit "A," four pages; and 2 maps (Figures 2 and 3). Also enclosed are two extra copies of Annex I, Annex II, Exhibit "A," and maps (Figures 2 and 3), for the use of the Field Team.

If you and the Applicant find the contract satisfactory, it is ready for the signature of the Applicant provided a suitable starting date is inserted under Article 3. After the contract is signed, please make the usual distribution of the document.

In the event that any part of this proposed contract does not meet with your approval or the Applicant's, and cannot be amended within your delegated authority, the original and all copies are to be returned with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures
APPROVED:

Frank D. Lamp (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

FLKnouse/izm 9-4-57
cc to: Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224 8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/6	Chambers	800

September 6, 1957

Memorandum

To: Chairman, Operating Committee

From: Jay L. Chambers, Director
Contract Administration and Audit Division

Subject: Docket No. DMEA-4791 (Uranium)
Caleb V. Haynes, Jr.
Black Knight and Billikin Lodes
Jefferson County, Colorado

I am transmitting the above cited proposed contract to the Operating Committee without my surname because the contract combines the cost of drilling and bulldozing when the Operator's application separates these items. We would probably run into difficulty in making payment for the bulldozing if a contractor other than the one doing the drilling did the work. The man who bid on the drilling at $5.50 a foot did not bid on the bulldozing.

Incidentally, we increased the applicant's estimate by $208.00. This increase would have had little if any effect on my surnaming.

Attachment

JLChambers/ama
September 6, 1957

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

Government's copy

MF-200
(Revised June 1954)

Docket No. DMEA 4791

Commodity Uranium

Contract No. Idm-E

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this ..... day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] .....

Caleb V. Haynes, Jr.

whose mailing address is Post Office Box 5, Golden, 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~~ Annex II, 2 maps (Figures 2 and 3)

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 Jefferson, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] lessee of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of ~~a~~[6] two leases, [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: Royalties as are set forth in the leases.

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: Consents to Lien and Subordination Agreements of Lessors signed by Louis S. Malach and Carl L. Kuehster.

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

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Uranium. The work to be performed is described in Exhibit "A." The Operator on or before ..... shall commence the work, and on or before February 1, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall ~~either~~ have completed the work ~~or shall have incurred allowable costs (see Article 6) in an amount not less than the estimated total allowable cost set forth in Exhibit "A"~~, except as otherwise provided in Exhibit "A" with respect to stages of work. (See Annex II.)

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 $~~20,410.00~~ 20,256.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $~~15,307.00 (rounded)~~ 15,192.00: *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

All Drillsites and access roads thereto shall be prepared with a model D-8 Caterpillar tractor w/dozer or an equivalent size unit of another make.

The location, direction, and extent of all work are subject to the approval of the Government. At the completion of the project, upon Government approval, all stored samples may be disposed of by the Operator.

The project shall be supervised at all times by a qualified geologist or mining engineer, who shall direct or perform the required surveying, mapping, sampling, and drill hole logging, and shall prepare reports required pursuant to this Contract.

The work shall be performed in two stages. The Operator shall perform all the Stage I work, and shall perform as much of the work under Stage II as the Government approves in writing in advance, either after the completion of the Stage I work, or concurrently. In the event the estimated footages are insufficient to reach a specified horizon in any hole in Stage I, additional footage and necessary funds, upon the written approval of the Government, may be transferred and deducted from Stage II

Stage I

~~Drillsite preparation and access roads thereto with bulldozer and~~ Prepare drill roads and drill sites and drill ~~Stage I consists of~~ five (5) vertical core-drill holes to intersect the Black Knight breccia zone approximately 150 feet down-dip below the surface and one inclined core drill hole to intersect the Billikin breccia zone about 150 feet down-dip below the surface. The holes are designated as B, C, D, E, F, and G and their locations are shown on the attached map entitled "Figure 3 - Geologic Map Showing Recommended Exploration of Black Knight and Billikin Lodes, Jefferson County, Colorado."

The approximate depths, directions, and inclinations of holes are as follows:

Hole No.	Direction and Inclination	Approximate Depth-Feet
B	Vertical	190
C	Vertical	220
D	Vertical	190
E	Vertical	170
F	Vertical	160
G	N. 70° W at -60° Inclination	350

Stage II

~~drill site preparation and access road thereto with a tractor and~~

The

Prepare access roads and drill sites and

~~A Stage II consists of~~ drilling not more than eight (8) holes aggregating not more than 1,600 feet to explore for the extension of favorable mineralization intersected in Stage I drill holes. The location, inclination, and depth of each hole are subject to the prior written approval of the Government.

Estimated Cost of the Project

(In addition to maximum set forth in Article 6, an asterisk indicates maximum)

* Insert

Stage I

Actual Costs

Category (1) Independent Contracts

1,280 feet of core drilling, including transportation, drill site, and access trail preparation thereto, @ $5.97/ft.	$7,641.60	
Categories (2) through (6) None	- - -	
Category (7) Miscellaneous None except		
20 chemical sample analyses @ $5.00*/each sample	100.00	$7,741.60

Fixed Unit Costs (See Article 13 and Annex II)

Incidental allowances[1] for each foot of core drilling completed, 1,280 feet @ $1.03/ft.	1,318.40	1,318.40
Estimated Total Cost of Stage I		$9,060.00

Stage II

Actual Costs

Category (1) Independent Contracts

1,600 feet of core drilling, including transportation, drill site, and access trail preparation thereto, @ $5.97/ft.	$9,552.00	
Categories (2) through (6) None	-----	
Category (7) Miscellaneous None except		
30 chemical sample analyses @ $5.00*/each sample	150.00	$9,702.00

Fixed Unit Costs (See Article 13 and Annex II)

Incidental allowances 1/ for each foot of core drilling completed, 1,600 feet @ $1.03/ft.	$1,648.00	$1,648.00
Estimated Total Cost of Stage II		$11,350.00

S U M M A R Y

Estimated Total Cost of Stage I	$9,060.00
Estimated Total Cost of Stage II	11,350.00
Estimated Total Cost of the Project	$20,410.00
Government Participation @ 75% (rounded to)	$15,307.00

1/ Includes all costs that might otherwise be allowable costs of the project under Categories (2) through (7) of Article 6(a).

* Insert

Stage I

Actual Cost

Category (1) Independent Contractor

1,280 feet of core drilling @ $5.50/ft. $ 7,040.00

40 hours ~~of actual tractor w/dozer~~ of bulldozing ~~operating time~~ (including operator and all necessary costs) @ $15.00/hr. 600.00

Categories (2) Through (6) None

Category (7) Miscellaneous None except

20 Chemical Sample analyses @ $5.00*/each Sample 100.00 $7,740.00

Fixed unit costs (See Article 13 and Form II)

Incentive allowances[1] for each foot of core drilling completed, 1,280 feet @ $1.03/ft. 1,318.40 $1,318.40

Estimated total cost of Stage I $9,058.40

Stage II

Actual Cost

Category (1) Independent Contractor

1,600 feet of core drilling @ $5.50/ft. $ 8,800.00

40 hours of ~~actual tractor w/dozer~~ bulldozing ~~operating time~~ (including operator and all necessary costs) @ $15.00/hr. 600.00

Categories (2) through (6) None

Category (7) Miscellaneous None except

30 Chemical Sample analyses @ $5.00*/each Sample 150.00 $9,550.00

Fixed unit cost (SEE Article 13 and Summary II)

Incidental allowances[1] for each foot of core drilling completed, 1,600 feet @ $1.03/ft. $1,648.00 $1,648.00

Estimated total cost of Stage II $11,198.00

Summary

Estimated total cost of Stage I	$ 9,058.00
Estimated total cost of Stage II	$11,198.00
Estimated total cost of the project (Rounded)	$20,256.00
Government participation @ 75%	$15,192.00

1/ Includes all costs that might otherwise be allowable costs of the project under categories (2) through (7) of Article 6 (a)

MF-200
(Revised June 1954)

Docket No. DMEA 4791

Commodity Uranium

Contract No. Idm-E

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this ..... day of ....., 195...., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] .....

Caleb V. Haynes, Jr.

whose mailing address is Post Office Box 5
Golden, 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 2 maps (Figures 2 and 3)

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 Jefferson, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] lessee of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of ~~a~~[6] two leases, [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: Royalties as are set forth in the lease.

(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."

and Subordination Agreements

of the land (lessor, seller, optionor, etc.), are attached, as follows: Consents to Lien of Lessors ~~and~~ signed by Louis S. Malach and Carl L. Kuehster

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

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Uranium. The work to be performed is described in Exhibit "A." The Operator on or before ..... shall commence the work, and on or before February 1, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall ~~either~~ have completed the work ~~or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A."~~ See Article 13.

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 $ 20,410.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $15,307.00: *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 for any such necessary excesses in any categories, sub-categories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated total allowable cost of the work~~ See Article 13.

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.*—

(a) That part of the last sentence of Article 3 beginning with the word "either" is deleted and replaced by the words "have completed the work, except as otherwise provided in Exhibit 'A' with respect to stage of work."
(b) That part of the last sentence in the first paragraph of Article 6(a) commencing after the semicolon is deleted.
(c) Categories (2) through (6) of Article 6(a) are deleted.
(d) In addition to the costs of work estimated in Exhibit "A" by categories of actual costs, the costs of work requirements specified in Exhibit "A" as "Fixed Unit Costs" are allowable costs of the project. The Government will contribute to the fixed unit costs as work units are performed. A "Fixed Unit Cost" is an agreed price for each unit of work to be performed regardless of costs incurred by the Operator. Costs set forth in Exhibit "A" include all allowable costs of the work to be performed under the Contract.
(e) In the last sentence of Article 6(c), the words "Article 8" are substituted for the words "Article 9."
(f) Notwithstanding any other provision of the Contract, the allowable unit cost per foot of a drilling item is the average unit cost per foot computed on the basis of all the actual unit costs of said drilling item incurred by the Operator: Provided, That the Government will not contribute to any portion of an average unit cost of a drilling item that exceeds the estimated unit cost of said item set forth in the contract.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By .....

.....
(Operator)

By .....

.....

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

.....

[CORPORATE SEAL]

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

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8-21-57

EXPLORATION PROJECT CONTRACT
CALEB V. HAYNES, JR.
DOCKET NO. DMEA-4791

ANNEX I

The land referred to in Article 2 of the contract consists of the following:

The S½ SW¼, sec. 3, T. 7 S., R. 70 W., 6th P.M.

The south one-half (S½) of the southwest one-quarter (SW¼) of section three (3), Township Seven (7) South, Range Seventy (70) West of the Sixth Principal Meridian, Jefferson County, Colorado, (80 acres more or less) leased by the Operator from Louis Malach and Carl L. Kuehster.

The location of the land is shown on the attached map entitled "Figure 2 - Map Showing Location of Recommended Drill Holes, Black Knight and Billikin Lodes, Caleb V. Haynes, Jr., Jefferson County, Colo. DMEA 4791."

EXPLORATION PROJECT CONTRACT
CALEB V. MAYNES, JR.
DOCKET NO. DMEA-4791

EXHIBIT "A"

Description of the Work

General Provisions

The work consists of exploration by diamond core drilling from the surface for the downward projection of the uranium ore bearing Black Knight and Billikin breccia zones.

Each hole shall be diamond core drilled the entire length not less than 5 feet nor more than 10 feet through the ~~maximum~~ uranium bearing breccia zones (Black Knight and/or Billikin lodes). No payment shall be made for any uncompleted drill hole. The minimum collar size of core shall be BX, and no part of any hole shall be less than AX size without prior approval of the Government. All holes shall be reamed and cased as necessary.

All core and cuttings shall be saved by such methods and at such drilling intervals, and shall be checked for radioactivity in such manner, as may be specified by the Government. The sections of the drill core and cuttings that indicate significant radioactivity shall be split into halves. One-half of each of the radioactive drill cores shall be analyzed chemically for uranium, and one-half of each of the radioactive cores and cuttings shall be furnished to the Government upon request. The remaining half of the radioactive cuttings, and all the non-radioactive cores and cuttings, shall be property boxed, labeled, and stored pending Government final inspection.

All drill holes shall be logged geologically and probed for radioactivity, and copies of each log shall be furnished to the Government with each copy of the Operator's monthly report.

No drill hole shall be drilled closer than 100 feet to the outside boundary of the land, and no Stage II drill hole shall be drilled closer than 75 feet from any Stage I hole from where it intersects the breccia zones.

The method of all sampling is subject to the approval of the Government. Not more than 20 samples for Stage I nor more than 30 samples for Stage II shall be analyzed chemically for U_3O_8.

The location, direction, and extent of all work are subject to the approval of the Government. At the completion of the project, upon Government approval, all stored samples may be disposed of by the Operator.

The project shall be supervised at all times by a qualified geologist or mining engineer, who shall direct or perform the required surveying, mapping, sampling, and drill hole logging, and shall prepare reports required pursuant to this Contract.

The work is divided into two stages as set forth below. The Operator shall complete Stage I, and shall perform as much of the work under Stage II as the Government approves in writing in advance, either after completion of Stage I, or concurrently. In the event the estimated footages are insufficient to reach a specified horizon in any hole in Stage I, additional footage and cost may be transferred from Stage II, if approved in writing by the Government.

Stage I

Stage I shall consist of five (5) vertical core drill holes to intersect the Black Knight breccia zone approximately 150 feet down-dip below the surface and one inclined core drill hole to intersect the Billikin breccia zone about 150 feet down-dip below the surface. The holes that shall be drilled are designated as B, C, D, E, F, and G and their locations are shown on the attached map entitled "Figure 3 - Geologic Map Showing Recommended Exploration of Black Knight and Billikin Lodes, Jefferson County, Colorado."

The approximate depths, directions, and inclinations that these holes shall be drilled are as follows:

Hole No.	Direction and Inclination	Approximate Depth Feet
B	Vertical	190
C	Vertical	220
D	Vertical	190
E	Vertical	170
F	Vertical	160
G	N. 70° W at -60° Inclination	350

Stage II

Stage II consists of drilling not more than eight holes aggregating not more than 1,600 feet to explore for the extension of favorable mineralization intersected in Stage I drill holes. The location, inclination, and depth of each hole are subject to the prior written approval of the Government.

Estimated Cost of the Project

(in addition to maximum set forth in Article 6
an asterisk indicates maximum)

Stage I

Actual Costs

Category (1) Independent Contracts

1,280 feet of core drilling, including transportation, drill site, and access trail preparation thereto, @ $5.97/ft.	$7,641.60	
Categories (2) through (6)	None	
Category (7) Miscellaneous		
None except 20 chemical sample analyses @ $5.00*/each sample	100.00	$7,741.60
Fixed Unit Costs (See Article 13)		
Incidental allowances[1/] for each foot of core drilling completed, 1,280 feet @ $1.03/ft.	$1,318.40	$1,318.40
Estimated Total Cost of Stage I		$9,060.00

Stage II

Actual Costs

Category (1) Independent Contracts

1,600 feet of core drilling, including transporation, drill site, and access trail prepration thereto, @ $5.97/ft.	$9,552.00	
Categories (2) through (6)	None	
Category (7) Miscellaneous		
None except 30 Chemical sample analyses @ $5.00*/each sample	150.00	$9,702.00
Fixed Unit Costs (See Article 13)		
Incidental allowances[1/] for each foot of core drilling completed, 1,600 feet @ $1.03/ft.	$1,648.00	$1,648.00
Estimated Total Cost of Stage II		$11,350.00

S U M M A R Y

Estimated Total Cost of Stage I	$9,060.00
Estimated Total Cost of Stage II	11,350.00
Estimated Total Cost of the Project	$20,410.00
Government Participation @ 75% (rounded to) ..	$15,307.00

1/ Includes all costs that might otherwise be allowable costs of the project under Categories (2) through (7) of Article 6(a).

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/21	Knouse	700
		140
Resources		
		700

August 21, 1957

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Ernest Wm. Ellis, Director
Division of Rare and Miscellaneous Metals

Subject: Preparation of contract
Docket No. DMEA-4791 (Uranium)
Caleb V. Haynes, Jr.
Black Knight and Billikin Lodes
Jefferson County, Colorado

INTERIOR DEPT.
AUG 22 1957
SOLICITOR

Attached is a draft of a long-form contract covering the subject application. Eight prints each of maps, Figures 2 and 3 and the original and five copies each of two "Consents to Lien and Subordination Agreements", are forwarded for attachment to the contract.

We are also forwarding the file Docket No. DMEA-4104, Caleb V. Haynes, Jr., and Glen A. Boyd, Jr., for reference. A contract was written for this project and was withdrawn because the Applicant was unable to obtain the necessary "Consents to Lien and Subordination Agreements."

You will note in our letter, dated July 25, 1957, to Region III, that "Consents to Lien and Subordination Agreements" were forwarded for execution. However, the memorandum, dated August 13, 1957, from the Acting Executive Officer, states the landowners will not execute the agreements, and also states the Field Team believes the exploration program can be successfully executed within the area covered by the above-referenced agreements, and will be sufficient area to protect the Government's interest. This Division concurs with the Field Team's statement and recommends that a contract be prepared on that basis.

Ernest Wm. Ellis
Ernest Wm. Ellis

Attachments
FLKnouse/izm 8-21-57
cc to: Mr. Knouse

RECEIVED
AUG 22 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

8623

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DMEA
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Complete

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

August 20, 1957

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of joint field examination memorandum, DMEA 4791, (uranium), Caleb V. Haynes, Jr., Black Knight and Billikin Claims, Jefferson County, Colorado

The subject property was recently the subject of re-examination in the field. This was brought about because the applicant could not obtain Consents to Lien from all his lessors. The initial application, DMEA 4104, was considered withdrawn but has now been reactivated as DMEA 4791.

The original report of field examination under DMEA 4104, has been reviewed by Messrs. Crawford and Nelson of the Bureau of Mines and Geological Survey, respectively. They concur with the examining team's recommendation for approval of the application.

In their recent memorandum the field examiners state, "The second field examination produced no new data which would affect the exploration program as planned." They recommend approval of the exploration program as previously recommended under DMEA 4104. I agree with their recommendation.

It appears that the Government's interest would be protected without obtaining signatures from the two lessors who refuse to execute the Owner's Consent to Lien.

W. P. Williams

W. P. Williams

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

Date August 20, 1957

DMEA Docket No. 4791
DMEA Contract No.
Commodity Uranium
Name of Applicant Caleb V. Haynes, Jr.
Name of property Black Knight & Billikin Lodes
Location of property Jefferson County, Colorado
Estimated cost of project

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: James Paone, Bureau of Mines Member
Uranium Commodity Committee

Subject: Review of Field Team Report
(Application, Field Team Report, etc.)

1. Date of subject document: 8/13/57. 2. Date received by reviewer: 8/19/57

3. Prior reports on this property known to reviewer: Yes ☐ No ☐

4. Prior reports on nearby properties known to reviewer: Yes ☐ No ☐

5. Information available on past production: Yes ☐ No ☐

6. Other pertinent factors known to reviewer: Yes ☐ No ☐

7. Explain items marked yes above:

8. Factors needing special consideration:
   a. Location ☐
   b. Ownership ☐
   c. Evidence of mineralization ☐
   d. Geology ☐
   e. Proposed exploration method ☐
   f. Alternate exploration method ☐
   g. Costs ☐
   h. _____ ☐

9. Action advised:
   a. Obtain information from applicant ☐
   b. Refer to Field Team ☐
   c. Denial ☐
   d. Agree with Field Team [x]
      i. Consult with Mr. _____ at _____ AEC office.
   e. Disagree with Field Team ☐
   f. Suggest alternate plan ☐
   g. Request another examination ☐
   h. Approval [x]

10. Remarks: (Use back of page if necessary)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

August 13, 1957

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Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: DMEA Docket 4791 (formerly DMEA 4104) (Uranium) Caleb V. Haynes, Jr. (Black Knight and Billikin Lodes) Jefferson County, Colorado - Joint memorandum of examination

Enclosed are the original and two copies of the joint memorandum of examination on the subject property by W. W. Winkel, USBM, and F. B. Moore, USGS.

The field examiners conclude that the probability for making a significant discovery is sufficiently promising to justify Government participation. Accordingly, they recommend that the Applicant's work proposal be approved in which the Field Team concurs.

The Applicant has verbally informed us that it is impossible to secure the signatures of Mr. Malach and Mr. Kuehster on the Consents to Lien, which would subordinate the entire SW$\frac{1}{4}$, T. 7 S., R 70 W. to the Government. Also the financial position of the Applicant has not improved to the extent that a Performance Bond can be obtained in lieu of these Consents to Lien.

The Field Team believes that the exploration project as recommended by the field examiners can be successfully executed within the area (S$\frac{1}{2}$, T. 7 S., R. 70 W.) covered by the signed Consents to Lien already in the possession of the Washington Office under Docket DMEA 4104. Further, the Field Team believes that this amount of land will be sufficient to protect the interest of the Government.

Also enclosed are eight extra copies of Figures 2, 3, and 4 for use in the preparation of the contract.

E. N. Harshman

E. N. Harshman
Acting Executive Officer

Reviewed by
DMEA OPERATING COMMITTEE
8-19-57
(date)

ON-SITE EXAM

FOR OFFICIAL USE ONLY

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

IN REPLY REFER TO:
DMEA
DEPARTMENT OF THE INTERIOR
AUG 12 1957
REGION III
DENVER, COLORADO

August 9, 1957

TRANSMITTED
AUG 13 1957
EMH

Memorandum

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

From: F. B. Moore
W. W. Winkel

Subject: DMEA Docket 4791 (formerly DMEA 4104) (Uranium) Caleb V. Haynes, Jr. (Black Knight and Billikin lodes), Jefferson County, Colorado

The subject application is a resubmission of the original application - DMEA 4104. An exploration program was approved under the original application and a contract prepared. Owing to the applicant's inability to obtain consents to lien, the contract was not signed and the applicant withdrew the application. Because exploration on the property was done by lessors, subsequent to the field examination, a second field examination was requested. This examination was made on August 8, 1957, by F. B. Moore, Geological Survey, and W. W. Winkel, Bureau of Mines.

The second field examination produced no new data which would affect the exploration program as planned. A 55-foot shaft has been sunk on the Black Knight fault zone at Pit 3. The shaft, unfortunately, followed the foliation of the gneiss which dips about 70° N. The fault zone, having a dip about 60° N. (10° flatter) was lost in the hanging wall. A short crosscut at the bottom of the shaft and a dog-hole about

Reviewed by
DMEA OPERATING COMMITTEE
8-19-57
(date)

20 feet below the collar intersected the fault on the hanging wall side. At the time of the examination only the dog-hole could be seen as water stood about 20 feet from the collar.

The Black Knight fault zone in the shaft consisted of 1-inch gouge streaks and zones of iron-stained crushed rock. Radioactivity anomalies of 0.5 to 2.0 Mr/hr were registered on a counter in the shaft. The uranium appears to be associated with the iron-stained fractured rock and not with the gouge. According to the applicant, thin (1/8 inch) streaks of pitchblende were encountered at about 40 feet; above that the uranium minerals were essentially all secondary with remnants of pitchblende. Radioactivity anomalies along the fault zone and on a small stockpile of material from the shaft are moderately strong (0.5 to 1.0 Mr/hr).

Because reexamination disclosed no evidence indicating less favorable conditions and because both the targets and hole locations are believed satisfactory, it is recommended that an exploration program as previously recommended in Examination Report DMEA 4104 of May 15, 1956, be approved. There is no change in targets or in costs.

Twelve extra copies of the maps for contract use are enclosed.

F. B. Moore

F. B. Moore, Geologist

W. W. Winkel

W. W. Winkel, Mining Engineer

Enclosures

FBMoore:arh

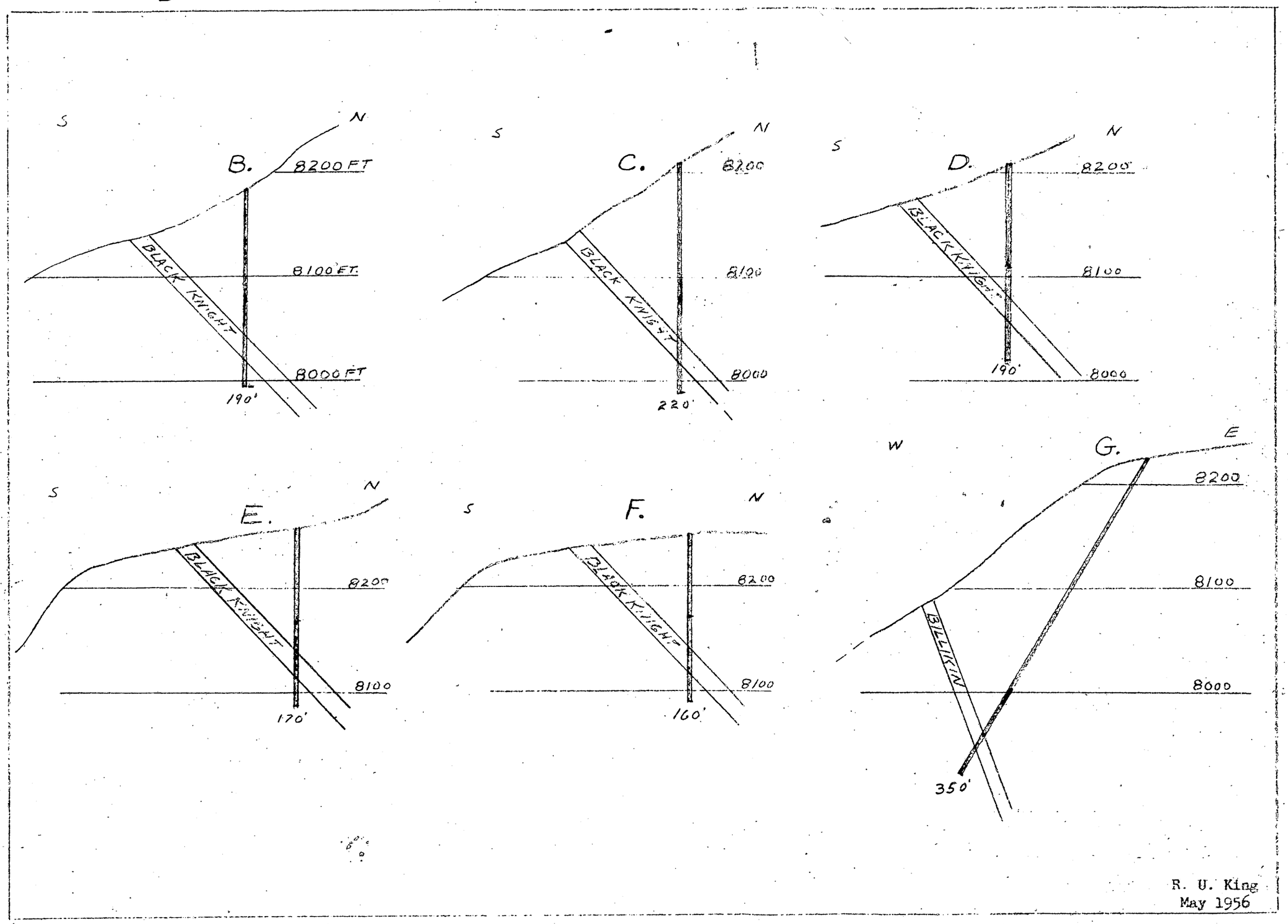

FIGURE 4 --PROFILES OF DIAMOND DRILL HOLES RECOMMENDED FOR EXPLORATION OF BLACK KNIGHT AND BILLIKIN LODES, JEFFERSON COUNTY, COLORADO

Scale 1 inch = 100 feet

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224 New Customhouse
Denver 2, Colorado

August 9, 1957

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Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Re: Docket DMEA-4791 (Uranium)
Caleb V. Haynes, Jr.
(Black Knight and Billikin Lodes)
Jefferson County, Colorado

Dear Mr. Haynes:

Enclosed are two sets of six copies each of Form MF-205, "Consent to Lien and Subordination Agreement."

One set is to be signed by Louis S. Malach, as indicated, and the other set by Carl L. Kuehster.

The original and four copies of both signed sets are to be returned to this office. The remaining copy of each set is for your files.

Your immediate attention to having these Consent to Lien forms signed and returned to this office as soon as possible will expedite the processing of your application.

Sincerely yours,

Original signed by
E. N. HARSHMAN

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

Enclosures
MHM:jy
cc: Sec. Op. Comm. (2)
DMEA/DFC (2) } w/copy of Acting Chm.'s
Harshman } ltr. dtd. 7-25-57
Docket 4791
Chron.

DN 235 BUR MINES 8-9-57 10-11

CHAIRMAN OPERATING COMMITTEE DMEA

RE DOCKT DMEA-4791, CALEB V HAYNES, JR. MF-205 FORMS SENT APPLICANT TODAY. FORTHCOMING PROJECT RECOMMENDATIONS IDENTICAL TO THOSE OF PRIOR UNEXECUTED CONTRACT ON LAND DESCRIBED IN CONSENT TO LIEN FORMS FORWARDED THIS OFFICE BY ACTING CHAIRMAN S LETTER OF JULY 25.

E N HARSHMAN ACTING EXECUTIVE OFFICER

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DMEA

Denver, Colorado

AUG 9 12 54 PM '57
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

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"	~~CUK~~	700

224 New Customhouse
Denver 2, Colorado

July 29, 1957

Memorandum

To: DMEA/DFC) W/enclosures, Items 1 & 2
E. N. Harshman

From: DMEA Field Team, Region III

Subject: Docket DMEA 4791 (Uranium) Caleb V. Haynes, Jr. (Black Knight and Billikin Lodes) Jefferson County Colorado

Enclosed is the following material relating to the subject docket:

1. Copy of application for Government assistance in exploration work under the DMEA program.
2. Routing Control Sheet.

A field examination of the property and a joint report of findings and recommendations pertaining to the Applicant's work proposal are requested.

By letter of July 25, 1957, the Acting Chairman, Operating Committee, DMEA sent two sets of six copies each of Form MF-205 to this office, covering the SW¼, Sec. 3., T. 7 S., R. 70 W. for execution if the field examiners view the project proposal favorably. We are holding these forms in this office until we have received the Examination Report. If the project is recommended, please advise this office of the fact immediately so that we may send these forms to the Applicant for signatures by the persons whose names are listed thereon.

Eleven extra copies of each map used in the Joint Report, which show the land to be subordinated and the location and extent of recommended work, relative to property boundaries, should be submitted if Government participation is recommended.

The Bureau of Mines' copy of the application, with the exception of the two leases attached, should not be returned to this office, but is to be kept with the Examining Engineer's file. You are to return the two referred-to-leases and the completed Routing Control Sheet with the Joint Examination Report.

Original signed by
W. H. KING

W. H. King
Executive Officer

Enclosures

NHM:eh

cc: Sec. Op. Comm. (2)
IMMA/DFC
Docket
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE

Date	Surname	Co
7/22	Knouse	700
"	Ellis	700
7/24	Martin	130
"	Johnson	110
"	Stutendorf	100
7/25	S.K.	220
		700

JUL 25 1957

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

Re: Docket No. DMEA-4791 (Uranium)
Caleb V. Haynes, Jr.
Black Knight and Billikin Lodes
Jefferson County, Colorado

Dear Mr. King:

We note in the leases submitted by the Applicant that it controls all of the SW¼, sec. 3, T. 7 S., R. 70 W., approximately 160 acres. However, the executed Consents to Lien and Subordination Agreements forwarded by the Applicant cover only the S½ of the SW¼, sec. 3, approximately 80 acres.

Since exploration of this area would furnish valuable information in the exploration of the adjacent area, it should be included in the application. Therefore, we have prepared and enclose two sets of six copies each of Form MF-205, Consent to Lien and Subordination Agreement, that the Applicant should have signed by the parties listed thereon, and five copies should be returned to this office.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee (24B)

FLKnouse/gla
7-22-57

Enclosures

Horace T. Reno (24B)
Member, Bureau of Mines

Thor H. Kiilsgaard (24B)
Member, Geological Survey

cc to: Admr.'s Reading File
Operating Committee
Code 700, Mr. Knouse
THKiilsgaard, Rm. 5224

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

July 19, 1957

Mr. Caleb V. Haynes, Jr.
P. O. Box 5
Golden, Colorado

Subject: DMEA 4791
Re: Application

Dear Mr. Haynes,

Your application for exploration assistance, dated July 6, 1957 submitted to our office at Denver, Colorado has been assigned Docket Number 4791 and referred to the Division of Rare & Miscellaneous Metals in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Chief
Operations Control and
Statistics Division

Copy to:
Region III

3571

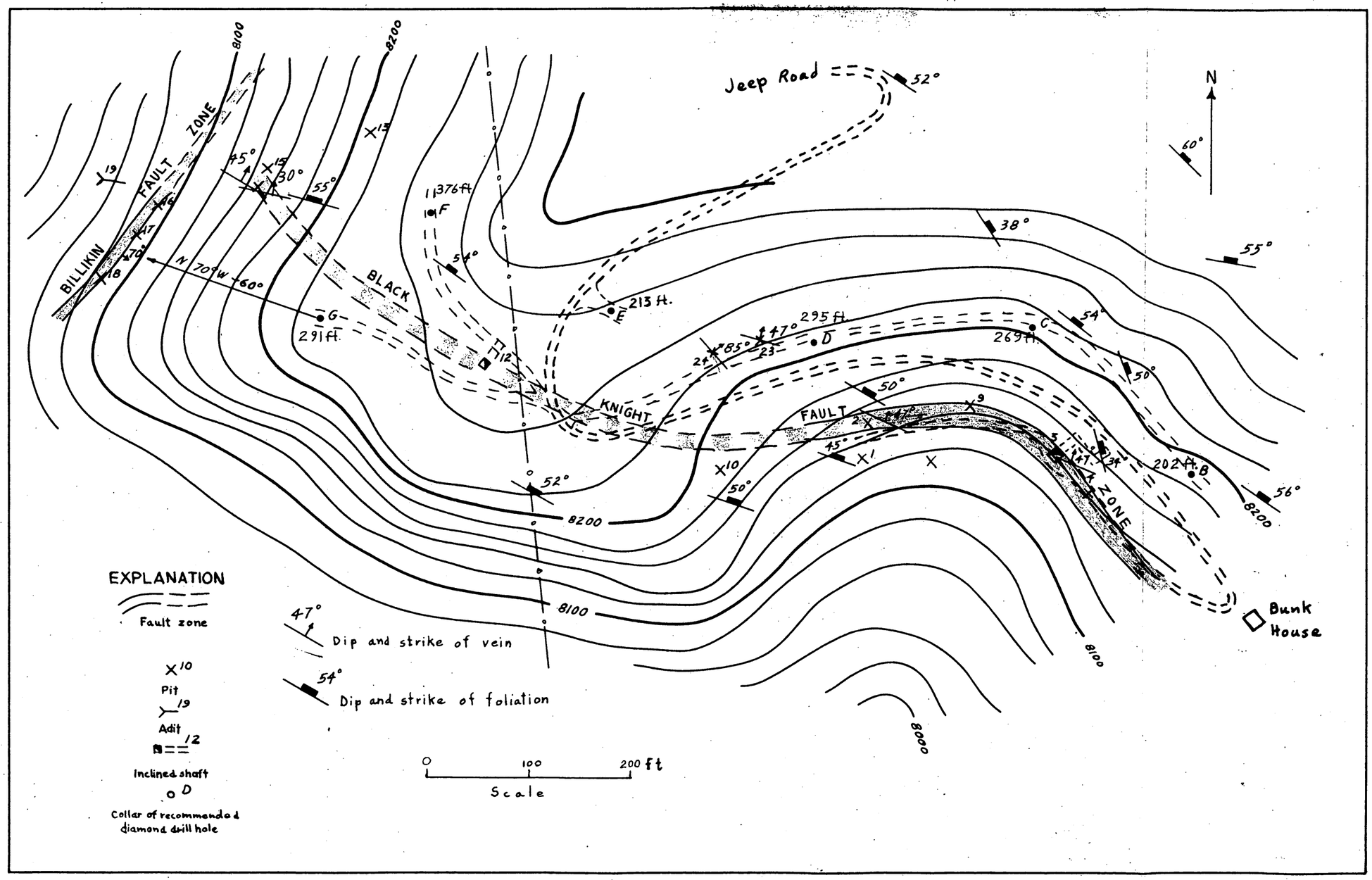

Figure 1. (revised)

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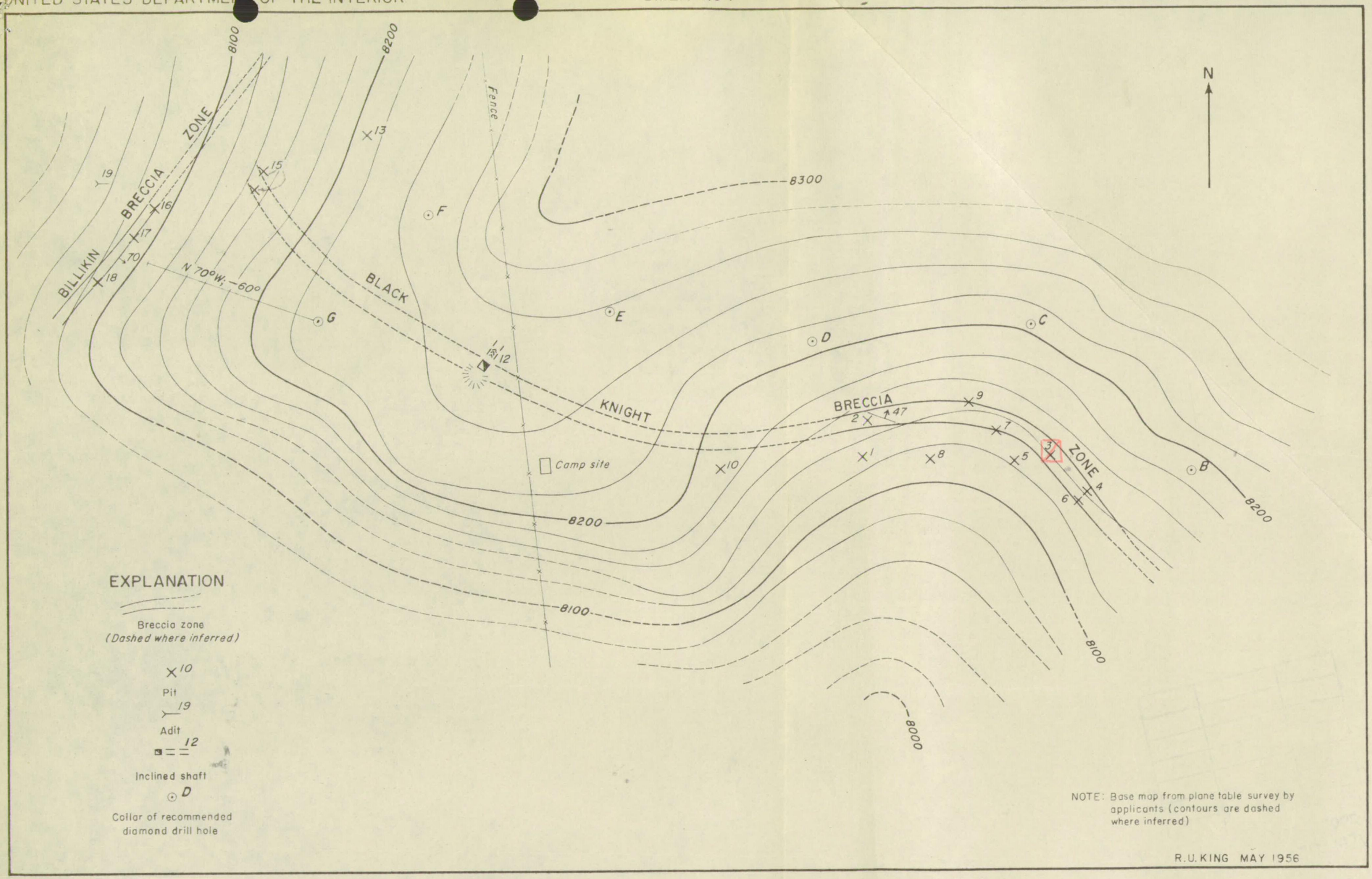

FIGURE 3.—GEOLOGIC MAP SHOWING RECOMMENDED EXPLORATION OF BLACK KNIGHT AND BILLIKIN LODES, JEFFERSON COUNTY, COLORADO

100 50 0 200 Feet

Contour interval 20 feet
Datum is approximately mean sea level

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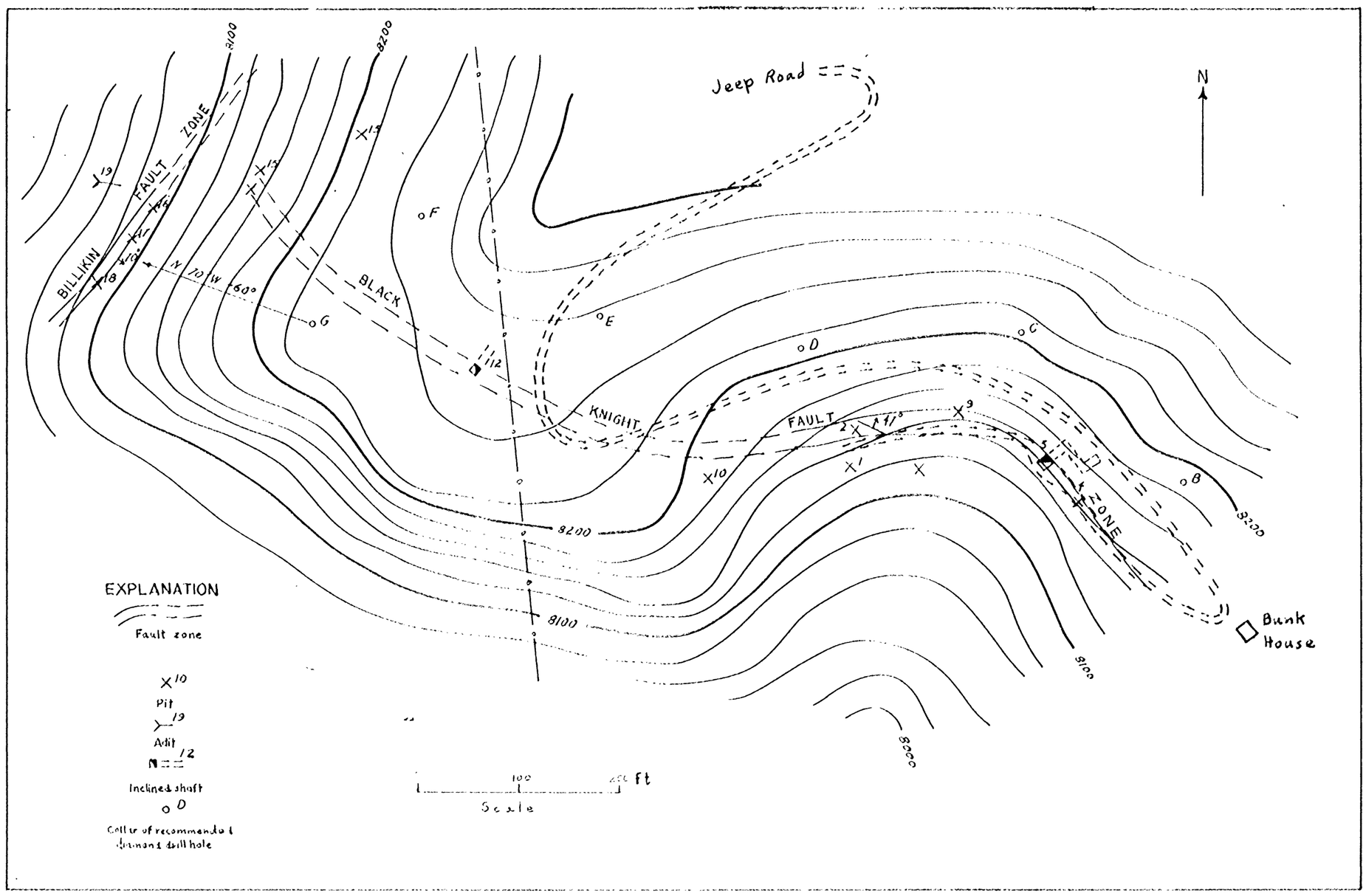

Figure 1.

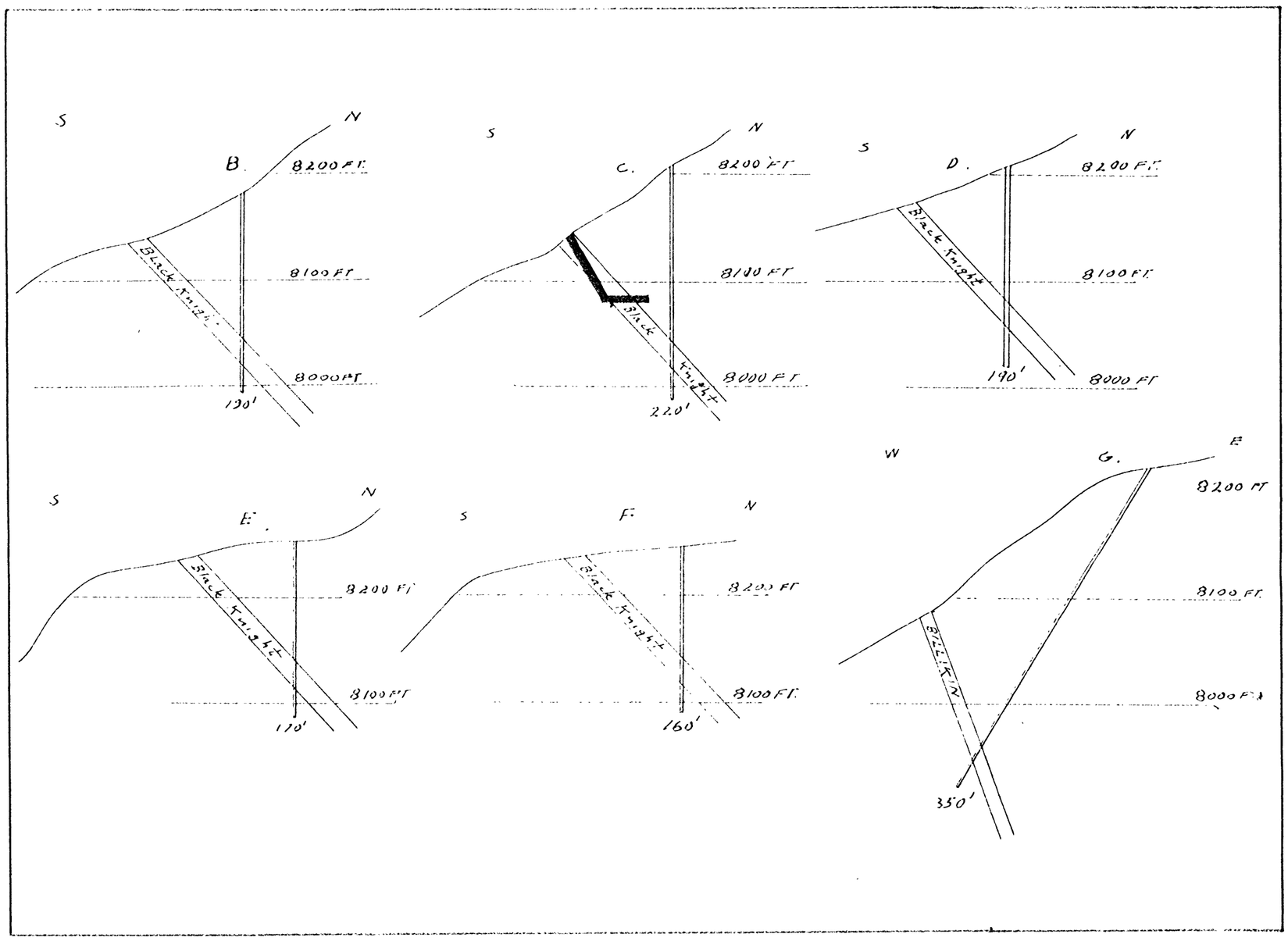

Figure 2.