DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

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DMA Docket No. 3927

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EXPLORATION ASSISTANCE

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

1 set USBM
1 set 700

Routing Slip

To:	Rare & Misc. Mtls.	Date	8/1/55
To:	Oper Com	Date	8-26-55
To:	Oper. Com	Date	1-31-56
To:	F. E. Johnson	Date	2-1-56
To:	[illegible]	Date	2-1-56
To:	Oper. Com.	Date	3-14-56
To:	F. E. Johnson	Date	3-14-56
To:	[illegible]	Date	3-14-56
To:	Oper Com	Date	4-11-56
To:	F. E. Johnson	Date	4-18-56
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

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file letter

7

224 New Customhouse
Denver 2, Colorado

July 27, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Assistance (Uranium), Capitol Uranium Company, Hulse Homestead, San Juan County, Utah

Enclosed are two copies of the subject application in the amount of $64,675.00. Also enclosed are two copies of our letter to the applicant and two copies of our memorandum to the Grand Junction office.

W. M. TRAVER,

W. M. Traver

Enclosures

HMC:sr

cc Subject
Harshman
Hasler
Chron

224 New Customhouse
Denver 2, Colorado

July 27, 1955

Mr. Warren E. Wiley, Secretary
Capitol Uranium Company
80[illegible] West Main Street
Farmington, New Mexico

Dear Mr. Wiley:

This will acknowledge receipt of your applications for DMEA assistance on Indian lands in Apache County, Arizona and Hulse Homestead, San Juan County, Utah.

Both applications have been forwarded to the Washington office, DMEA for docketing.

Much information is lacking on the Hulse Homestead application. You have submitted no evidence of the existence of a definite mineralized target area. It appears that the work outlined in this application is of a prospecting nature, for which DMEA funds are not available.

To assist us in determining the merits of your proposal, we suggest that the following additional information, if available, be submitted to this office:

1. A topographic map or sketch showing elevations of the surface where the proposed drilling is to be done; also showing the following:

(a) Contact lines on the exposed rock formations and structural features, such as folds, faults, etc.

(b) Indicated or inferred favorable sedimentary and/or channel trends

(c) Location of any samples taken and assay results

(d) Tentative locations of the proposed drill holes

2. A supporting narrative report containing the following:

(a) Specific geologic data concerning the subject property, such as:

(1) Exposures of rock formations and indicated bedding dip

(2) Comments on host rock and its favorability to mineralization, such as thickness of strata, color of sandstone and mudstone, evidence of mineralized trash, logs, etc.

(3) Any other geologic information that will assist in determining the merits of the proposed exploration work.

Will you please advise us if it is feasible to submit this additional information; if so, give the approximate date when we may expect receipt of it. If such information is submitted, we will require 4 complete sets of data.

Very truly yours,

W. M. TRAVER,

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

HMC:sr

cc Subject
Chairman Op. Comm. (2)
Harshman
Hasler
Chron

Date Rec'd.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

JUL 25 1955

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

BUREAU OF MINES
Denver, Colorado

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

Not to be filled in by applicant

Docket No. DMEA 3927
Metal or Mineral
Date Received
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Capitol Uranium Company (A Colorado Corporation)
803 W. Main; Box 1847, Farmington, New Mexico
Fred Carson - President - Farmington, New Mexico
Warren E. Wiley - Secretary - Farmington, New Mexico
M. C. Foster - Treasurer - Farmington, New Mexico

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

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

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract The Hulse homestead, Salt Lake City, Utah Land Office #051755, and recorded patent #1111803, is described as the S½SW¼ Section 18 and NW¼ Section 19, Township 31S, Range 26E, SLB and M, San Juan County, Utah.

(*b*) State any mine name by which the property is known. No mine name as yet.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise lessee

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

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

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

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

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

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

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

16—66551-1

See attached

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore See attached

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

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

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

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

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

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

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

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

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated June 21, 195 5

CAPITOL URANIUM COMPANY
(Applicant)

By [signature]
President

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

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

Capitol Uranium Company
803 W. Main P. O. Box 1847
Farmington, New Mexico

MINERAL LEASE

This lease made and entered into this 8th day of November, 1954, by and between Herman Hulse and Minnie L. Hulse, husband and wife, hereinafter referred to as Hulse, and Capitol Uranium Company, a Colorado corporation, hereinafter referred to as Company;

WITNESSETH:

For and in consideration of the covenants and agreements hereinafter contained to be kept and performed by the parties hereto, it is mutually agreed that:

I

Hulse does hereby convey, grant and lease all minerals and mineral rights together with all rights to prospect, test and develop, mine, ship and sell all minerals and mineral rights, except the minerals of oil and gas, in that described tract of land located in the State of Utah and described as follows:

The Northwest Quarter of Section Nineteen and the South half of the Southwest Quarter of Section Eighteen in Township Thirty-one South, of Range Twenty-six East of the Salt Lake Meridian, Utah, containing Two Hundred Forty (240) acres, according to the official Plat of the Survey of the said Land, on file in the General Land Office.

II.

Hulse does here represent that they are the owers of all said mineral rights in the above described lands and that they have a free and unencumbered right to lease or transfer the same as they see fit.

III.

Company agrees to pay Hulse the total amount of Twelve Hundred ($1,200.00) Dollars, Six Hundred ($600.00) Dollars of which is in hand paid at time of execution of this lease, receiptof which is acknowledged by Hulse. The balance amount of Six Hundred ($600.00) Dollars is to be paid by Company to Hulse on or befor May 8, 1955.

IV

The Company further agrees to pay Hulse twelve and one-half percent (12½%) of the net proceeds received for content from any ores mined and sold from the above described lands. Any allowances made for hauling, development or other allowances will be exclusively for the benefit of the Company and not subject to the 12½% payment provided above.

V

The lease period is that of ten (10) years, expiring on November 8, 1964 and carries with it an option right in the Company to renew the same for an additional ten (10) years on the same terms as herein provided, if the Company elects so to do.

VI

It is understood and agreed that the Company will have the continued right to sell, assign ar transfer all or any part of its rights, title and interest in this lease.

VII

The Company further agrees to proceed with development work beginning at a reasonable time after the snows have melted and seasonable weather exists on the above described lands, following the spring thaw of 1955.

VIII

The Company further agrees to refrain from carrying on surface testing or mining work within a distance of two hundred (200) feet of the Hulse house that now stands upon the above described tract of land. It being undredstood by the parties that the Company, its employees, agents and assigns will all have good and adequate rights of ingress, egress and any other rights incidental to testing developing and mining said above described lands.

Capitol Uranium Company
803 W. Msin P. O. Box 1847
Farmington, New Mexico

WITNESS our hands and seals this 8th day of November, 1954.

Herman Hulse (SEAL)
Minnie L. Hulse (SEAL)

CAPITOL URANIUM COMPANY

By: Fred Carson (SEAL)
Its Pres.

STATE OF NEW MEXICO)
County Of San Juan) SS.

On this 8th day of November, 1954, before me personally appeared Herman Hulse and Minnie L. Hulse, Husband and wife, to me personally known to be the persons described in and who executed the forgoing instrument and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year above written.

M. C. Foster
Notary Public

My Commission expires February 24, 1956

STATE OF NEW MEXICO)
COUNTY OF SAN JUAN) SS.

On this 8th day of November, 1954, befor me appeared Fred Carson, to me personally known, who, being by me sworn, did say that he is the Presidentof the Capitol Uranium Company, a corporation organized under the laws of the State of Colorado and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said Fred Carson acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year above written.

M. C. Foster
Notary Public

My Commission expires February 24, 1956

Hulse Homestead

Capitol Uranium Company
803 W. Main, Box 1847
Farmington, New Mexico

4 (a) There has been no mining or exploration work on this property. There are several producing tunnels on the tract to the North of this property, in which this company has no interest. There are no known mine workings.

4 (b) There has been no exploration or production from this property

4 (c) The surface of the property is in the Dakota formation, except along the North boundary, where rather steep cliffs expose the Brushy Basin, or upper Morrison, and the Salt Wash, or lower Morrison formation. On the adjoining property to the North, tunnels have been driven into the Salt Wash, and some production has resulted, but the quantity and grade is not known. This eroded portion of the property is in the Lisbon Valley and one of the branches of the many faults in the Valley passes through or near the Northern edge of the property. The property is about nine miles Southeasterly from the Steen property, and the geology is described in publications covering the Lisbon Valley and Big Indian districts.

4 (d) The property is accessible over a dirt road which leaves U. S. Highway # 160 at a point 12 miles West of Dove Creek, Colorado, and proceeds North along the Section Line 18 miles and terminates on the property. A branch of this dirt road turns East at the Southwest corner of Section 19 and from there drops into Lisbon Valley and by a branch road reaches the Northern flank of the property and serves the mines mentioned above. Other roads were observed trending towards La Sal, Utah, but their courses and junctions are not known to the writer.

4 (e) For the exploration proposed, all equipment and materials must be transported to the job. Water for drilling is available within 10 miles. There are no power lines nearby.

5 (a) It is proposed to prospect for Uranium, Vanadium minerals, in the Salt
(b) Wash member of the Morrison formation. To avoid drilling through the barren Dakota formation, it is proppsed that one or more drill roads be built by bull-dozer from East to West near the Northern edge of the property. It is believed that such ##### a road near the base of the cliff will allow drill holes to explore the Salt Wash at depths between 200 and 300 feet. If these holes should show mineralization, then a second road could be built that would allow offsets to the South at depths of about 300 feet. It is believed that ore, if present, is apt to be confined to the Northern edge of the property adjacent to the faulting that created Lisbon Valley and the ore bodies being worked on adjacent land.

5 (c) The work could start within 30 days and be completed in 90 days unless the starting date should be in the late fall. Then road conditions might compell recess until dry and warmer weather.

5 (d) The company has been actively drilling and prospecting for Uranium ores since its organization in October 1953. In its earlier stages the work was directed by Forest John Sur, and engineer of wide experience and superintended by William Gianetto of Silverton, Colorado, a practical mining man considered to be one of the best in the San Juan District. Mr. Sur has now resigned, and the company expects to employ Mr. Frank McPherson, of Grand Junction, Colorado, as consultant on geological

5 (d) problems. The operations and drilling will be supervised by Walter W. Bentley, who has supervised the drilling for the past 15 months. He has had more than 30 years of experience in the field of mining, most of it with the Anaconda Copper Mining Company, American Smelting and Refining Company and also more than four years during World War II in the Bureau of Mines as an Explosive Investigator. The foreman in immediate charge of mining are Marshall J. Fletcher, for many years shaft foreman at the Shenandoah-Dives Mine at Silverton, Colorado, and Ward R. Barlow, who has many years experience as an operator of leased properties.

6 (a) The work should be contracted and it is believed that the first row of drill, amounting to 25 should be on 100 foot centers, to be known as phase "A" can be contracted at $4.00 per foot with not over 10% coring at $6.00 per foot. Phase "B" to be carried out in the event of encountering strong mineralization in the first row of holes, should be drilled for not to exceed $4.50 per foot with not to exceed 10% coring at $6.75. The cost would be:

Phase "A"

Twenty Five holes, estimated average depth 250 feet at $4.00 per foot or $1000.00 per hole, plus 20 feet of coring at $2.00 per foot or $1040.00 per hole. $1040.00 x 25 holes or a total for Phase "A" of $26,000.00

Phase "B"

Estimated average depth 300 feet at $4.50 per foot or $1350.00 per hole, plus 20 feet of coring at $2.00 per foot or $1390.00
8 per hole. $1390.00 x 25 holes or a total for Phase "B" of $34,750.00

Dozing drill roads at $12.50 per hour, plus $300.00 moving in and out cost, plus $6.00 per hour for compressor and rock drill rental, plus explosives at cost.

Estimated Costs:

Dozing, 100 hours at $12.50	$ 1250.00
Moving in and out	300.00
Compressor rental, 50 hours at $6.00	300.00
Explosives	220.00
Driller, 100 hours at $2.00	200.00
Helper, 100 hours at $1.75	175.00
	$ 2445.00

6 (b) Supervision

One fourth time at $800.00 per month for three months	$ 600.00
Consultants	
Geologist, 4 days at $120.00 per day	480.00
Engineering	
Surveying, 2 days for party at $200.00 per day	400.00
	$1480.00

6 (c) No supplies except as above.

6 (d) No equipment, repairs, etc.

SUMMARY

Phase "A"	$ 26,000.00
Phase "B"	34,750.00
Drill Roads	2,445.00
6 (b)	1,480.00
Total	$ 64,675.00

Hulse Homestead

Capitol Uranium Company
803 W. Main, Box 1847
Farmington, New Mexico

7 (a) The company is prepared to furnish their share of the cost of the project in cash.

July 29, 1955

Mr. J. H. East, Regional Director
United States Bureau of Mines
Denver, Colorado

Dear Sir:

In reply to your letter requesting additional information in connection with our Application for Defense Minerals Exploration Assistance on the Hulse property, San Juan County, Utah, we regret that very little is available. However, we have been able to obtain one copy of U.S.G.S. Map #3-226, and four copies of Mt. Peale #16 Photogeologic Maps, which are attached.

From the attached Map, U.S.G.S. #3-226, it will be noted that there has been extensive production from the Salt Wash member of the Morrison formation, both to the East and West of the Hulse property. From the photogeolic Map, Mt. Peale #16, shown in larger scale, is the detail of the faulting which seems to be a factor in the location of ore bodies. Also shown on this Map in pencil are the approximate locations of ore bins and inclined shafts of properties developed in the Northwest Quarter (NW/4) of Section Eighteen (18), since the date of the Map. It is in the area to the South of and adjacent to this production that the drilling should be done. The Salt Wash is not exposed in the Southwest Quarter (SW/4) of Section Eighteen (18), but it is in the North Half (N/2) of the section, and with the slight regional dip to Southwest, estimated at 5°, is not at great depth in the area in question.

Reference is made to the U.S.G.S. reports covering the mapped area, copies of which are not available to us but are, no doubt, part of the Bureau Library, which may be of help.

Very truly yours,

CAPITOL URANIUM CO.,

By Walter W. Bentley

Walter W. Bentley,
General Superintendent

WWB:rfb
Enc.

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

RECEIVED
APR 20 1956

224 New Customhouse
Denver 2, Colorado

April 17, 1956

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3927 (Uranium) Capitol Uranium Company, (Simpson No. 1, Lukachukai property) Apache County, Arizona

Your letter of April 13, 1956, with attachments, concerned with the disclosing of confidential information to the subject applicant points up a matter of DMEA policy with which we are repeatedly faced.

No later than March 22, 1956 the Region III Field Team transmitted to all field supervisory personnel for distribution a memorandum on this identical subject. You were provided with two copies.

With regard to Docket DMEA-3927 specifically, as I recall, two different gentlemen called at this office requesting information on the outcome of their various applications. One, whose name I do not recall, stated that he had information from their Farmington office that all three applications in which they were interested had been denied. These three applications were 3927 and 3929, both under the name of Capitol Uranium Company, and 3933, under the name of George Simpson. I inquired as to whether he had reason to question the information furnished from the home office and when he stated that he did not, I advised him that under those circumstances, he had probably been informed correctly.

The other gentleman whose name was Larson, first called on Regional Director East and was referred by him to this office. I advised Mr. Larson when he asked regarding the outcome of Capitol Uranium Company's applications that he would have to obtain his information direct from the Company's Farmington office.

During the time the applications were in process either in the field or elsewhere, Walter Bentley, the applicant's representative, called me by long distance telephone on one occasion at least to inquire as to the status of one or more of the applications. I recall giving an approximate estimate of when he might expect to receive notice of a decision from your office. This report to him was given from referral to the weekly reports from the field office and I would very seldom be able to ascertain from these reports whether a denial or approval was indicated. Therefore, it is unlikely that Bentley would be advised or have any basis for believing that any of the applications had passed this office. I assume Mr. Wiley meant to imply by the word passed that favorable action was or had been recommended either by the Grand Junction or Denver office.

Occasionally, so-called leaks of information are perhaps unavoidable. However, I am inclined to think that in most instances, instead of being actual leaks, they can be attributed to an applicant's hopeful misinterpretation of some statement that is inadvertently made by some one of the DMEA personnel participating in a field examination.

The Region III Field Team is endeavoring constantly to keep everyone connected with the program in this area advised of the necessity of being cautious in his discussion of applications with the applicants themselves and especially discussion of them with outsiders.

W. M. Traver

W. M. Traver

[redacted]

700

FILE COPY

Surname: Murphy

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

APR 13 1956

Mr. Warren E. Wiley, President
Capitol Uranium Company
803 West Main
Post Office Box 1847
Farmington, New Mexico

Re: Docket No. DMEA-3927 (Uranium)
Simpson No. 1, Lukachukai property
Apache County, Arizona

Dear Mr. Wiley:

This is in response to your letter, dated April 4, 1956, relating to action taken by this Agency in processing the above-docketed application.

I am concerned about your statements in regard to our Grand Junction and Denver offices and will take immediate action to clarify this matter. In this connection, I wish to advise you that no member of this organization is permitted to divulge information on any action taken in regard to an application or contract except over the signature of the Administrator or the Regional Executive Officer, and that such information is given only to the applicant.

With respect to your comments concerning the basis for our denial of the application of Capitol Uranium Company, please be advised that the information available to this office indicated that:

1. Except for a favorable mineralization trend through a small area in the northeast corner of the property, the remaining portion was classified as being semi-favorable or unfavorable for significant occurrences of uranium ore;

2. The favorable area has been adequately tested by drilling, with negative results; and

3. A study of the area southwest of the favorable area indicated that the host rock is semi-favorable to unfavorable.

R.C.L.

Our denial of your application does not necessarily mean that we are condemning your property. We must base our decision on data available at the time an application is under consideration. If future drilling on your part reveals evidence which could materially alter our opinion in regard to your property, be assured we will be pleased to consider a new application.

Sincerely yours,

C. O. Mittenzwei

Administrator

FMMurphy/izm 4-11-56
cc to: Docket
Code 700-Mr. Murphy
Admr.'s Reading File
Operating Committee
DMEA Field Team, Region III (2) w/2 cc of incoming letter.
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

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

FILE COPY
Surname:

INTERIOR DEPT.
APR 11 1956
SOLICITOR

Mr. Warren E. Wiley, President
Capitol Uranium Company
803 West Main
Post Office Box 1847
Farmington, New Mexico

Re: Docket No. DMEA-3927 (Uranium)
Simpson No. 1, Lukachukai property
Apache County, Arizona

Dear Mr. Wiley:

This is in response to your letter, dated April 4, 1956, relating to action taken by this Agency in processing the above-docketed application.

I am concerned about your statements in regard to our Grand Junction and Denver offices and will take immediate action to clarify this matter. In this connection, I wish to advise you that no member of this organization is permitted to divulge information on any action taken in regard to an application or contract except over the signature of the Administrator or the Regional Executive Officer, and that such information is given only to the applicant.

With respect to your comments concerning the basis for our denial of the application of Capitol Uranium Company, please be advised that the following information was considered in reaching our decision:

1) Information available to this office indicated that except for a favorable mineralization trend through a small area in the northeast corner of the property, the remaining portion was classified as being semi-favorable or unfavorable for significant occurrences of uranium ore;

2) The favorable area has been adequately tested by drilling, with negative results; and

3) A study of the Climax workings southeast of AEC drill hole No. 1209 indicated that the host rock is becoming semi-favorable to unfavorable in the direction of the above-mentioned hole and therefore no favorable trends could be projected from the workings in a westerly direction. Moreover, it would be most difficult, if not impossible, to drill holes in a northwesterly direction from AEC hole No. 1209, because of topographic conditions.

700

FILE COPY
Surname:

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

APR 13 1956

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

Re: Docket No. DMEA-3927 (Uranium)
Capitol Uranium Company
Simpson No. 1, Lukachukai property
Apache County, Arizona

Dear Mr. Traver:

Enclosed are two copies of a letter, dated April 4, 1956, from the Capitol Uranium Company to the Administrator, and two copies of the Administrator's reply of even date, which are self-explanatory. Will you kindly investigate the basis of Mr. Wiley's implications and submit your findings.

It is possible that new staff members do not realize the importance of divulging information relating to our actions in connection with applications or contracts, especially in cases where the applicant is selling stock. Therefore, it is suggested that you again caution your staff in regard to disclosing such information even to the applicant.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (SWB)

Enclosures

APPROVED:

J. W. Pennington
Member, Bureau of Mines (SWB)

N. E. Nelson
Member, Geological Survey (SWB)

FMMurphy/izm 4-13-56
cc to: Docket
Code 700-Mr. Murphy
Admr.'s Reading File
Operating Committee
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.C.L.

Surname copy

700

Murphy
Ellis
Dwyer

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

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

Re: Docket No. DMEA-3927 (Uranium)
Capitol Uranium Company
Simpson No. 1, Dakechukai property
Apache County, Arizona

Dear Mr. Traver:

Enclosed are two copies of a letter, dated April 4, 1956, from the Capitol Uranium Company to the Administrator, and two copies of the Administrator's reply of even date, which are self-explanatory. Will you kindly investigate the basis of Mr. Wiley's implications and submit your findings.

It is possible that new members of the Field Team do not realize the importance of divulging information relating to our actions in connection with applications or contracts, especially in cases where the applicant is selling stock. Therefore, it is suggested that you again caution your staff in regard to disclosing such information even to the applicant.

Sincerely yours,

Chairman, Operating Committee

Enclosures

FMMurphy/gla
4-10-56
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Murphy

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

4-9-56.

FRED CARSON, PRES. FOREST JOHN SUR, V. PRES. WARREN E. WILEY, SECY. M. C. FOSTER, TREAS.

Capitol Uranium Company

803 W. MAIN

DIAL DA 5-2103 FARMINGTON, NEW MEXICO P. O. BOX 1847

RECEIVED
APR 9 - 1956

April 4, 1956

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-3927 (Uranium)
Simpson No.1, Lukachukai Property
Apache County, Arizona.

Dear Mr. Mittendorf:

This will acknowledge receipt of your letter of March 15, 1956 denying our application for aid on the above property.

We would like a full explanation as to why this application was denied. We were led to believe by the Grand Junction and the Denver offices of DMEA that the application had been passed by those offices and your letter came as quite a shock and surprise to us.

We have another matter which we feel should be called to your attention regarding this application.

We have a large number of stockholders in the Denver area and some of them have been advised that we had made application for aid on this property. One of these stockholders called your Denver office and inquired when the loan would be approved and he was told that it had been denied.

This stockholder immediately spread the news all over Denver, much to the detriment of our market and to our stockholder relations.

We feel very strongly that the Denver office should not have given out Company information to the public. Such information should come from the Company direct. yes

We feel that we are due an explanation.

Very truly yours,

CAPITOL URANIUM COMPANY

Warren E. Wiley

Warren E. Wiley
President

WEW/dw

700

FILE COPY
Surname:
Murphy
Kilgaard
Hosted
Hedrick
Gunter

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

Capitol Uranium Company
803 West Main
Box 1847
Farmington, New Mexico

MAR 15 1956

Re: Docket No. DMEA-3927 (Uranium)
Simpson No. 1, Lukachukai property
Apache County, Arizona

Gentlemen:

Reference is made to your application for Government aid in an exploration program on the above-named property.

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

Careful study of all our information, although noting a small amount of uranium mineralization on your property, indicates to us that the probability of disclosing significant ore reserves is not sufficiently promising to justify Government participation in an exploration program. We regret to advise you that, under these circumstances, your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

FMMurphy/izm 3-14-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
DMEA Field Team, Region III (2)
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.C.G.

Docket Copy
700
Murphey
Ellis

March 14, 1956

Summary of Proposed Project

Object: Denial of application for exploration aid.

Docket No. DMEA-3927

Commodity: Uranium

Applicant: Capitol Uranium Company
803 West Main, Box 1847
Farmington, New Mexico

Property: Applicant has mining permit on plot of land consisting of 120 acres, known as "Simpson #1 Lukachukai," situated within the Navajo Indian Reservation on Mesa 4½, Apache County, Arizona

Date of Application: July 11, 1955 (Region III)

Grand Junction memorandum received: August 29, 1955

Referred to Field Team: August 29, 1955

Field examination made: October 19, 1955

Field Team Report received: January 19, 1956

Answer to Washington's request for additional information to substantiate Field Team's recommendation of denial received: March 9, 1956

Amount of application: $161,090.00

Work Proposed: (Dry rotary drilling)

Stage I - 26 holes totaling 13,300 feet at 50-foot intervals

Stage II - 20,000 feet of holes spaced at 25-foot intervals

Estimated Costs:

Stage I	- Drilling	$54,630.00	
	- Bulldozing roads	3,750.00	
	- Supervision, consultants, labor	7,230.00	
	Total		$65,610.00
Stage II	- Drilling	$82,000.00	
	- Bulldozing roads	6,250.00	
	- Supervision, consultants, labor	7,230.00	
	Total		$95,480.00

Total Estimated Cost of the Project $161,090.00

Excerpts from Field Team Report:

Most of the land is on a steep shale slope on the northern flank of the Lukachukai Mountains, a laccolithic type of igneous intrusion. The property is underlain entirely by the Jurassic Morrison formation, which outcrops in a number of places within the claim area. The known ore deposits in the vicinity appear to be restricted to an interval near the base of the Salt Wash member of the formation.

To the east of the property, along rim outcrops, several average to small deposits are present. The largest of these are being mined by Climax Uranium Company and Kerr-McGee.

Work done on the property consists of 20 holes, spaced 300 to 700 feet apart, drilled by the AEC, and 11 holes, at about 50-foot intervals, drilled in the northeast corner of the property by the Applicant. The holes drilled by the Applicant were all barren. One hole drilled by AEC, about 300 feet west of Climax ore deposit, had 1 foot of 0.12% U_3O_8. However, this ore was cut in the upper Salt Wash sandstone lens which has not been productive in this area.

It was concluded by the field examiners that the only favorable area of the property, the extreme northeast corner, has been adequately explored with essentially negative results. Therefore, they recommend that the application should be denied. The Field Team concur in this recommendation.

Commodity Members' Comments:

USGS, N. E. Nelson, January 24, 1956:

Nelson suggested that alternate mineralization trends than the inferred one might exist and therefore offset holes across a more northwesterly trend line on another axis of the large Climax ore body, appear to be warranted. Nelson also brought up other suggestions based on the examiners report, and recommended that the Field Team reconsider the subject application.

J. W. Hasler, USGS, on March 2, submitted information that was lacking in the field examiners report. After reviewing Hasler's memorandum, Nelson, in a telephone conversation with Murphy of this Division, reluctantly concurred in the Field Team's and field examiners' denial recommendation, but is not sold on their reasoning.

USBM, J. E. Crawford, January 26, 1956:

Crawford concurs in Field Team's recommendation to deny the application because the claims have been adequately explored with negative results.

Rare & Miscellaneous Metals Division, F. M. Murphy, March 14, 1956:

Although two widely spaced holes, 1,700 feet apart, encountered 1 foot of 0.12% and 0.19% U_3O_8, the holes drilled in the intervening area

were barren, indicating that only small low-grade scattered ore deposits exist in the subject claim area. The inferred favorable area (about $3\frac{1}{2}\%$ of the claim area) in the northeast corner of the property has been drilled with negative results. Therefore, this Division concurs in the Field Team's recommendation to deny the subject application.

The Applicant by drilling offset holes to the two ore holes mentioned above might develop some ore reserves on the subject property.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

3/9/56

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

RECEIVED
MAR - 9 1956

March 6, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman, Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 3927 (Uranium), Capitol Uranium Company, Simpson No. 1, Lukachukai Property, Apache County, Arizona

This responds to your letter dated February 2, 1956 on the subject docket.

Enclosed is the original and one copy of a memorandum from J. William Hasler which may clear up some of the confusion due to omissions in the original Report of Examination on the subject property.

We concur in the recommendation that the application be denied.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

MINERAL DEPOSITS
IN REPLY REFER TO:
MAR 5 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 360
Grand Junction, Colorado

RECEIVED
MAR - 9 1956
DMEA
Date Rec'd.

March 2, 1956

MAR 6 1956
BUREAU OF MINES
Denver, Colorado

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman EMH

From: J. William Hasler

Subject: Reply to comments by N. E. Nelson, USGS, on Field Team's report, (DMEA 3927)

In a memorandum from the Operating Committee, dated January 24, N. E. Nelson made several comments regarding the field examination report that examining team prepared on the Capitol Uranium Company's property, DMEA 3927). More specifically, questions were raised by Mr. Nelson concerning the validity of stated trends of mineralization, and, further, the justification of the recommended denial of DMEA assistance in the proposed project.

In the following, we have attempted to reply to the pertinent comments made by Mr. Nelson:

Comment by Nelson -- "The northeast corner of the Permit, about $3\frac{1}{2}$ percent of the whole, was classed as 'favorable' because it lies between two good ore bodies."

Reply -- We have never in the past, and will not in the future, classify ground as favorable for the occurrence of ore deposits . . . "because" it lies between two good ore bodies. Our experience with uranium ore deposits indicates that sandstone which is considered favorable for the occurrence of ore deposits is characterized by certain, well known, physical characteristics; i.e., thickness of sandstone, color of sandstone, color of associated mudstone, etc. However, an additional requirement of "favorable" ground is the presence of a type of sedimentary structure which is capable of localizing ore bodies. Most geologists who have worked with uranium ore deposits are aware of the fact that much sandstone having many characteristics of "favorable" ground is entirely barren of uranium mineralization. All of these factors were considered when classifying the favorability of the subject property.

Comment by Nelson -- "Due to the unfavorable topography, the drilling in the corner was done along the roadways, except for one hole, AEC 1235, and the forced drilling pattern resulted in a concentration of holes along the assumed trend of the mineralization. The trend line was drawn through the two good ore bodies now being mined by Climax Uranium and the Kerr-McGee Companies."

Reply -- The forced drilling pattern did not result in a concentration of holes "along the assumed trend of the mineralization". The trend of mineralization was determined by the examining geologist long after the applicant had drilled the holes. The applicant stated that the holes were drilled as near the Climax property as possible, and were not located on the basis of any trends of mineralization. Therefore, the location of the drill holes had nothing to do with the trend of mineralization as interpreted by the examining geologist. The fact that the holes lie along the trend was purely coincidental. The trend was not drawn "through the two good ore bodies now being mined by Climax Uranium and the Kerr-McGee companies." The trend was determined after detailed studies of the sedimentary structures which very clearly localized the ore bodies in the Climax mine. During the field examination, the Kerr-McGee mine was not open for inspection, and, therefore, no factual data was obtained from that mine. The fact that the Kerr-McGee mine lies along a projection of the trend determined in the Climax mine would seem to lend some support to the validity of the proposed trend.

Comment by Nelson -- "No doubt the assumed trend was the most probable one, but the concentrated drilling suggests the assumption is wrong, if trend there be, and the possibility of alternative trends might be considered."

Reply -- It is difficult to see how "the concentrated drilling suggests the assumption (trend) is wrong . . ." Although the concentrated drilling occurs along the projected trend of sedimentary structures which have localized the ore bodies, it does not mean that all sandstone along this trend will contain ore. To the contrary, special sedimentary structures with a particular type of three-dimensional geometry is necessary to localize or "trap" the ore fluid. A trend should be visualized as the most favorable direction along which one looks for the structures which are known to localize ore bodies. Therefore, one would expect to find considerable barren host rock while drilling along the trend and looking for special structures which have localized ore bodies.

In reply to Nelson's statement, ". . . if trend there be . . .", actual observation in the field justifies the report of field examination, as shown in figure 2.

The "possibility of alternative trends" was considered by evaluating the outcrops, the mines, and prospects, (except Kerr-McGee), and of the drilling done by the AEC. It was concluded that only one favorable trend could be proposed for the applicant's property which might contain economic ore deposits. That trend was shown accordingly on the map submitted with the report.

Comment by Nelson -- "Study of the walls of the underground openings in two mines, especially the Climax mine, should give clues as to possible existance of alternate trends. Otherwise, holes offset from AEC No. 1209, across a more northwesterly trend line on another axis of the large Climax ore body, appear warranted."

Reply -- A study of the walls of the underground openings was made in the Climax mine and the results indicate that alternate trends from the Climax ore body to AEC No. 1209 do not exist. In fact, the Climax workings southwest of ~~the ore deposit~~ (shaded on map) indicate that the host rock itself is becoming semifavorable to unfavorable and that no favorable trends can be so projected in this direction. Further, it would be most difficult, if not impossible, to drill holes northwesterly from AEC hole No. 1209, because of topographic conditions mentioned in the report.

Mr. Nelson's comments might be partially justified on the basis of the somewhat incomplete discussion, in the report, of the features under consideration. We have attempted to clarify the points in question and hope that Mr. Nelson can now re-evaluate the report.

We do not feel that a "small alternative drilling program" would seem to be in order. Results of detailed studies made during the field examination indicate that the property does not warrant further exploration work, with DMEA assistance, and we still maintain that the application be denied.

J. William Hasler

J. William Hasler,
Geologist

JWH/mlr

2/10/56 [illegible]

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

RECEIVED
FEB - 9 1956

February 6, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. W. Hasler
J. F. Shaw

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3927 (Uranium), Capitol Uranium Company, Simpson No. 1, Lukachukai Property, Apache County, Arizona

Enclosed is a letter from the Chairman of the Operating Committee on the subject docket and memoranda of review of the Report of Examination by N. E. Nelson, USGS, and J. E. Crawford, USBM.

We would appreciate your joint comments in regard to N. E. Nelson's observations and his suggestion that a small alternative drilling program appears to be in order.

W. M. TRAVER,
W. M. Traver

Enclosures

HMC:ab

cc: Chair. Op. Comm. (2)
Harshman
Docket 3927
Chron.

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

RECEIVED
FEB - 9 1956

February 6, 1956

Room Customhouse
Denver 2, Colorado

Memorandum

To: J. W. Haslar
J. F. Shaw

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3927 (Uranium), Capitol Uranium Company, Simpson No. 1, Lukachukai Property, Apache County, Arizona

Enclosed is a letter from the Chairman of the Operating Committee on the subject docket and memoranda of review of the Report of Examination by H. H. Nelson, USGS, and J. E. Crawford, USBM.

We would appreciate your joint comments in regard to H. H. Nelson's observations and his suggestion that a small alternative drilling program appears to be in order.

W. M. TRAVER,

W. M. Traver

Enclosures

HMC:ab

cc: Chair. Op. Comm. (2)
Harshman
Docket 3927
Chron.

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

RECEIVED
FEB - 9 1956

February 6, 1956

224 New Customhouse
Denver 2, Colorado

Mr. Walter Bentley
Capitol Uranium Company
803 W. Main
P. O. Box 1847
Farmington, New Mexico

Re: Docket DMEA 3927 (Uranium), Simpson No. 1, Lukachukai Property, Apache County, Arizona

Dear Mr. Bentley:

This has further reference to our telephone conversation this date. Additional information has been requested from the field which may necessitate a further delay in the final processing of your application.

You will be advised as soon as possible by the DMEA Washington office as to their final action on your application.

Very truly yours,

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

HMC:ab

cc: Chair. Op. Comm. (2)
Harshman
Docket 3927
Chron.

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

RECEIVED
FEB - 9 1956

February 6, 1956

224 New Customhouse
Denver 2, Colorado

Mr. Walter Bentley
Capitol Uranium Company
803 W. Main
P. O. Box 1847
Farmington, New Mexico

Re: Docket DMEA 3927 (Uranium), Simpson No. 1, Lukachukai Property, Apache County, Arizona

Dear Mr. Bentley:

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You will be advised as soon as possible by the DMEA Washington office as to their final action on your application.

Very truly yours,

W. M. TRAVER,

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

HMC:ab

cc: Chair. Op. Comm. (2)
Harshman
Docket 3927
Chron.

700

FILE COPY
Surname:
Murphy
Selfridge

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

FEB - 2 1956

Mr. W. A. Traver
Executive Officer
DMEA Field Team, Region III
22[illegible] New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-3927 (Uranium)
Capitol Uranium Company
Simpson No. 1, Lukachukai Property
Apache County, Arizona

Dear Mr. Traver:

The Joint Report of Examination relating to the captioned application forwarded with your memorandum, dated January 17, 1956, has been reviewed.

Enclosed are copies of memoranda, dated January 24 and 26, 1956, from N. E. Nelson, USGS, and J. E. Crawford, USBM, respectively, containing their recommendations after reviewing the above-mentioned report.

We would appreciate your comments in regard to N. E. Nelson's observations and his suggestion that a small alternative drilling program on the subject property would seem in order.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GLB)

Enclosures

APPROVED:

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

Thor H. Kiilsgaard (GLB)
Member, Geological Survey

FMMurphy/izm 1-31-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.G.L.

1/30/56 gla

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

RECEIVED
JAN 27 1956

January 26, 1956

Memorandum

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

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

Subject: Report of Examination, DMEA Docket 3927, Capitol Uranium Company, George R. Simpson Plot No. 1, Lukachukai area, Apache County, Arizona

I have reviewed the report of examination of DMEA Docket 3927, dated January 17, 1956, and received in this office January 24. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The Capitol Uranium Company requested DMEA assistance in the exploration for uranium on approximately 120 acres of land on the Navajo Indian Reservation in the Lukachukai Mountains of northeastern Apache County, Arizona.

A field examination made on October 19, 1955, by DMEA personnel resulted in a recommendation that the application be denied because the favorable ground has been adequately explored with essentially negative results.

We concur in the recommendation of the field team that the application for exploration assistance be denied.

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

John E Crawford
John E. Crawford

1-26-56 [illegible]

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

RECEIVED
JAN 26 1956

January 24, 1956

Re: DMEA 3927
Capitol Uranium Company
George R. Simpson Plot
Apache County, Arizona
$161,090.00 - Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team report.

The applicant requested assistance in further exploration by drilling of an Indian land permit which has been drilled by the applicant and the Atomic Energy Commission. The estimated cost of the proposed drilling is $161,090.00.

The northeast corner of the Permit, about 3½ percent of the whole, was classed as 'favorable' because it lies between two good ore bodies. The remainder is considered 'semifavorable' to 'unfavorable' as a result of the A.E.C. drilling. Of 20 holes drilled, only 2 showed uranium values. One, Hole No. 1209, is near the 'favorable' corner; the other, K6, is 1,750 feet to the west and two barren holes fall between. Two A.E.C. holes and 11 holes drilled by the applicant in the corner are barren. Due to the unfavorable topography the drilling in the corner was done along the roadways, except for one hole, A.E.C. 1235, and the forced drilling pattern resulted in a concentration of holes along the assumed trend of the mineralization. The trend line was drawn through the two good ore bodies now being mined by Climax Uranium and the Kerr-McGee Companies.

No doubt the assumed trend was the most probable one but the concentrated drilling suggests the assumption is wrong, if trend there be, and the possibility of alternative trends might be considered. Study of the walls of the underground openings in the two mines, especially the Climax mine, should give clues as to possible existence of alternate trends. Otherwise holes offset from A.E.C. #1209, across a more northwesterly trend line on another axis of the large Climax ore body, appear warranted.

Except for the noted possibility the conclusions of the examiners are justified. A small alternative drilling program would seem to be in order if drill sites can be found.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

RECEIVED
JAN 26 1956

January 24, 1956

Re: DMEA 3987
Capitol Uranium Company
George R. Simpson Plot
Apache County, Arizona
$161,090.00 - Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team report.

The applicant requested assistance in further exploration by drilling of an Indian land permit which has been drilled by the applicant and the Atomic Energy Commission. The estimated cost of the proposed drilling is $161,090.00.

The northeast corner of the Permit, about 3½ percent of the whole, was classed as 'favorable' because it lies between two good ore bodies. The remainder is considered 'semifavorable' to 'unfavorable' as a result of the A.E.C. drilling. Of 20 holes drilled, only 2 showed uranium values. One, Hole No. 1209, is near the 'favorable' corner; the other, E6, is 1,750 feet to the west and two barren holes fall between. Two A.E.C. holes and 11 holes drilled by the applicant in the corner are barren. Due to the unfavorable topography the drilling in the corner was done along the roadways, except for one hole, A.E.C. 1235, and the forced drilling pattern resulted in a concentration of holes along the assumed trend of the mineralization. The trend line was drawn through the two good ore bodies now being mined by Climax Uranium and the Kerr-McGee Companies.

No doubt the assumed trend was the most probable one but the concentrated drilling suggests the assumption is wrong, if trend there be, and the possibility of alternative trends might be considered. Study of the walls of the underground openings in the two mines, especially the Climax mine, should give clues as to possible existence of alternate trends. Otherwise holes offset from A.E.C. #1209, across a more northwesterly trend line on another axis of the large Climax ore body, appear warranted.

Except for the noted possibility the conclusions of the examiners are justified. A small alternative drilling program would seem to be in order if drill sites can be found.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-1/24/56

cc: Director's reading, 4212
Branch reading, 4212
NMRA (3)
Docket file
J. E. Crawford, 3641
J. O. Rosted, 3210

1-23-56 dgm

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

RECEIVED
JAN 19 1956

224 New Customhouse
Denver 2, Colorado

January 17, 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 3927 (Uranium), Capitol Uranium Company, George R. Simpson Plot No. 1, Lukachukai area, Apache County, Arizona

Enclosed are the original and three copies of the Joint Report of Examination on the subject property.

The examining team is of the opinion that the favorable ground has been adequately explored and additional work is not justified. They, therefore, recommend that the application be denied, and we concur in this recommendation.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
1-23-56
(date)

MINERAL DEPOSITS
DMEA
JAN 19 1956 RECEIVED
JAN 3 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

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

December 30, 1955

Memorandum:

TRANSMITTED
JAN 17 1956

To: Executive Officer, DMEA Field Team, Region III

From: J. William Hasler

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

Subject: DMEA 3927 (Uranium), Capitol Uranium Company, George R. Simpson Plot No. 1, Lukachukai area, Mesa 4-1/2, Apache County, Arizona

Transmitted herewith are 12 copies of a joint engineering and geologic report by Glen Walker and C. H. Roach, covering a field examination of the above-referenced property.

The U. S. Atomic Energy Commission drilling establishes a north-south trend of favorable ground which crosses only the extreme northeast corner of the subject property. This favorable area has been explored by the applicant and no significant mineralized material has been encountered.

The examining team is of the opinion that the favorable ground has been adequately explored and that additional work is not justified. Therefore, they recommend that the application for Government assistance be denied. I concur with their recommendations.

We are returning herewith the brochure covering this application.

J. William Hasler
J. William Hasler,
Geologist

DDH/mlr
Enclosure

Reviewed by
DMEA OPERATING COMMITTEE
1-23-56
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

RECEIVED
JAN 19 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

TRANSMITTED
JAN 17 1956

DMEA 3927

CAPITOL URANIUM COMPANY

SIMPSON #1, LUKACHUKAI

Apache County, Arizona

Uranium

Joint Engineering and Geologic Report

By

Carl H. Roach, Geologist
Geological Survey

Glen Walker, Mining Engineer
Bureau of Mines

January 10, 1956

Reviewed by
DMEA OPERATING COMMITTEE
1-23-56
(date)

DMEA 3927

SIMPSON #1, LUKACHUKAI
CAPITOL URANIUM COMPANY
APACHE COUNTY, ARIZONA

RECEIVED
JAN 19 1960

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2. Map showing location of Drill Holes on Capitol Uranium Co. property, Lukachukai Mountain Area, Apache County, Arizona 4

DMEA 3927

CAPITOL URANIUM COMPANY
GEORGE R. SIMPSON PLOT #1;
LUKACHUKAI AREA, MESA 4-1/2,
APACHE COUNTY, ARIZONA

RECEIVED
JAN 19 1956

SUMMARY AND CONCLUSIONS

The Capitol Uranium Co., Farmington, N. Mex., requested aid from DMEA in the exploration of uranium ore deposits on about 120 acres of Navajo Indian Reservation land on Mesa 4-1/2 in the Lukachukai Mountains of northeastern Apache County, Arizona.

The applicant proposed a dry rotary drilling project in two stages. Stage I consisted of 4 holes about 400 feet deep offsetting AEC hole 1209; 10 holes approximately 450 feet deep along the east side of the Permit plot to prospect the possible western extension of the Climax Uranium Co. ore bodies; 4 holes estimated 600 feet deep to prospect a possible channel between AEC holes K2 and K5; 4 holes about 700 feet deep offsetting AEC hole K6; 4 holes 500 feet deep near north side line south of AEC 1232. These holes would be on 50 feet centers and would total 13,300 feet. Stage II would consist of 20,000 feet of dry rotary drilling offsetting Stage I ore holes at intervals of 25 feet. The cost of the project as outlined was estimated at $161,090.00.

A field examination was made October 19, 1955, by a Region III examining team, from which it was concluded that the promising area of the property, the extreme northeast corner, has been adequately explored with with essentially negative results.

INTRODUCTION

Capitol Uranium Co. of Farmington, New Mexico, requested assistance in the exploration for uranium ores on a 120 acre plot of the Navajo Indian Reservation on Mesa 4-1/2 in the Lukachukai Mountains of northeastern Apache County, Arizona. (Fig. 1)

The applicant's program consisted of drilling 26 dry rotary holes through the Jurassic Morrison Salt Wash member to explore for uranium ore deposits. The first stage consisted of 13,300 feet of drilling, the second 20,000 feet of drilling with holes spaced on 25 foot centers around mineralized holes. First stage holes were to be on 50 foot centers mainly offsetting or near previous AEC ore and mineralized drilling. Ten of the proposed holes were to be along the east side of the plot near the northeast corner and were located to cross-cut a possible extension of the Climax Uranium Co. deposits on the adjoining land. The cost of the project was estimated at $161,090.00.

A field investigation of the property was made October 19, 1955, by a DMEA Region III examining team composed of Carl H. Roach, geologist, and Glen Walker, engineer.

ACKNOWLEDGMENT

Walter Bentley, mining geologist for Capitol Uranium Co. lessee and George R. Simpson, permittee, accompanied the examining team and offered considerable pertinent information on the subject and adjoining properties. Ray Rosatka, geologist with AEC, offered valuable information on the property and general area.

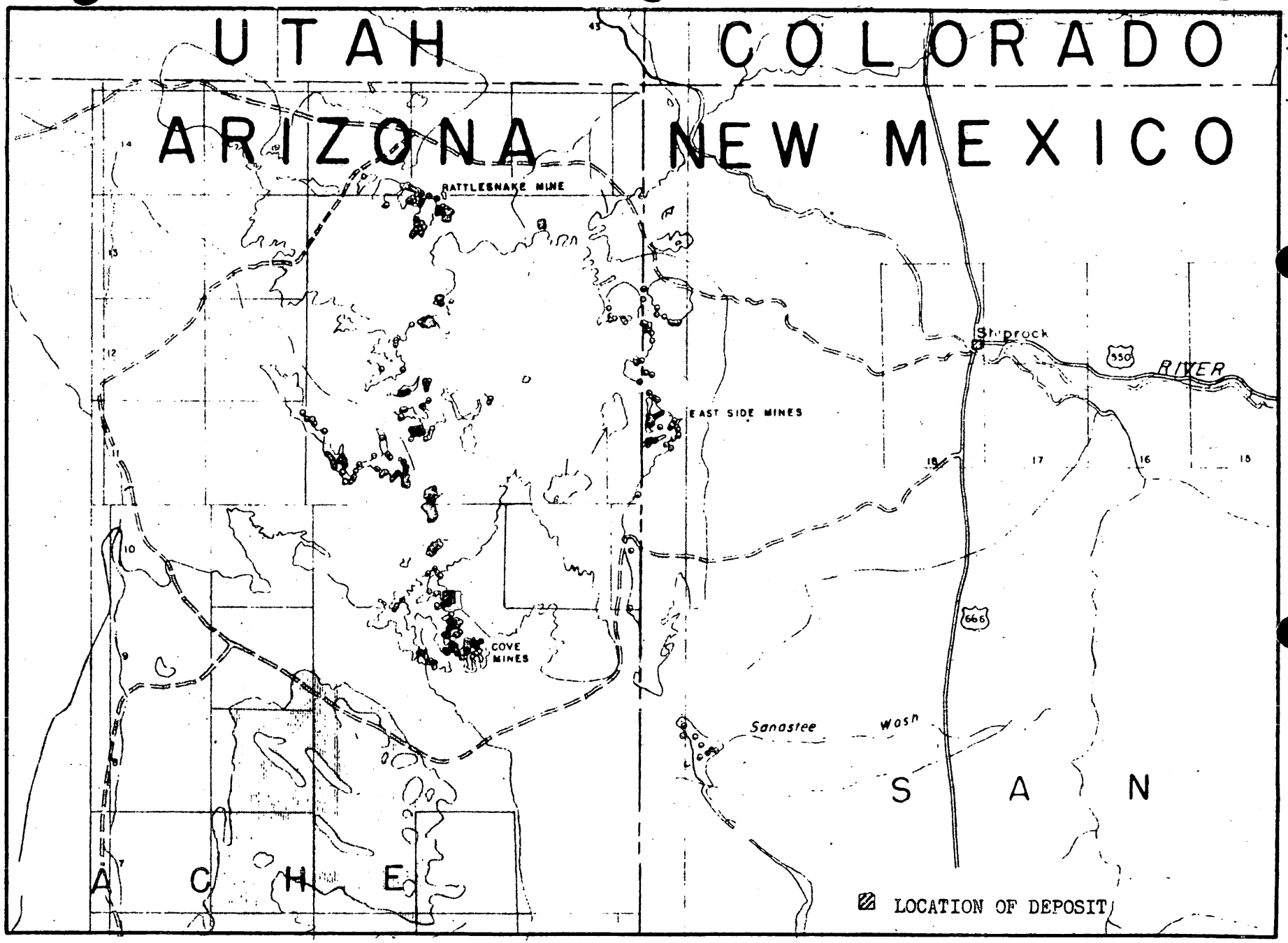

FIGURE 1 - LOCATION MAP, CAPITOL URANIUM CO., APACHE COUNTY, ARIZONA. DMEA 3927

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The property consists of 120 acres and is a mining permit plot on the Navajo Indian Reservation on Mesa 4-1/2 in the Lukachukai Mountains of northeastern Apache County, Arizona.

The surface of the area is predominantly a steep mountainside. Along the east side there is a relief of 183 feet in about 400 feet and on a diagonal line across the preperty there is a difference in elevation of 825 feet in about 2,400 feet.

Most of the land is a steep shale slope which is soil covered and supports a thick growth of oak brush and some saw-log size Ponderosa pine. However, it is understood that a mining permit on the Indian Reservation does not include the timber thereon.

The climate of the district is rather extreme throughout the year with most of the precipitation falling during violent storms. Winter temperatures of below zero have been recorded and 4 to 5 feet of snow are not uncommon.

Because, no doubt, of the rugged topography, little or no water is available on the property and it must be hauled about 4 miles from an Indian village.

Labor is plentiful on the Reservation and it is reported the local Indians adapt themselves readily to underground work and the use of mining equipment.

HISTORY, PRODUCTION AND OWNERSHIP

From available information, the history of uranium mining on Mesa 4-1/2 dates from 1951 when the Climax Uranium Co. started their first mine on the Salt Wash outcrop immediately east of the southeast corner of the subject property. Since then both Climax and Kerr-McGee

Oil and Uranium Co. have produced several thousand tons from adjoining properties.

No production has been made from the subject land.

The Capitol Uranium Co. has a working lease from George R. Simpson, a Navajo, the permittee. The original lease and permit were seen during the field examination.

GEOLOGY AND ORE DEPOSITS

The subject property is on the northern flank of the Lukachukai Mountains, a laccolith type of igneous intrusion. The sedimentary rocks are dipping about 2° to 5° away from the mountains. The Capitol Uranium Company's property is underlain entirely by outcrops of the Jurassic Morrison formation; however, outcrops are very poor in places, because of the cover provided by vegetation in the area. The known ore deposits in the area appear to be restricted to an interval near the base of the Salt Wash member of the Morrison formation. Several average- to small-sized ore deposits are present along the outcrops to the east of the subject property. All of the mines along these outcrops were examined in detail during the field examination. The Climax Uranium Co. has a large mine, presently operating, just east of the subject property (fig. 2). During the examination of the Climax mine workings, it was revealed that the ore has been localized by two large festoon surfaces. The line of intersection of the two large festoon surfaces closely approximates the axis of the ore body and is shown on figure 2. Since the ore has been controlled by the festoon surfaces, an extension of the trend of the

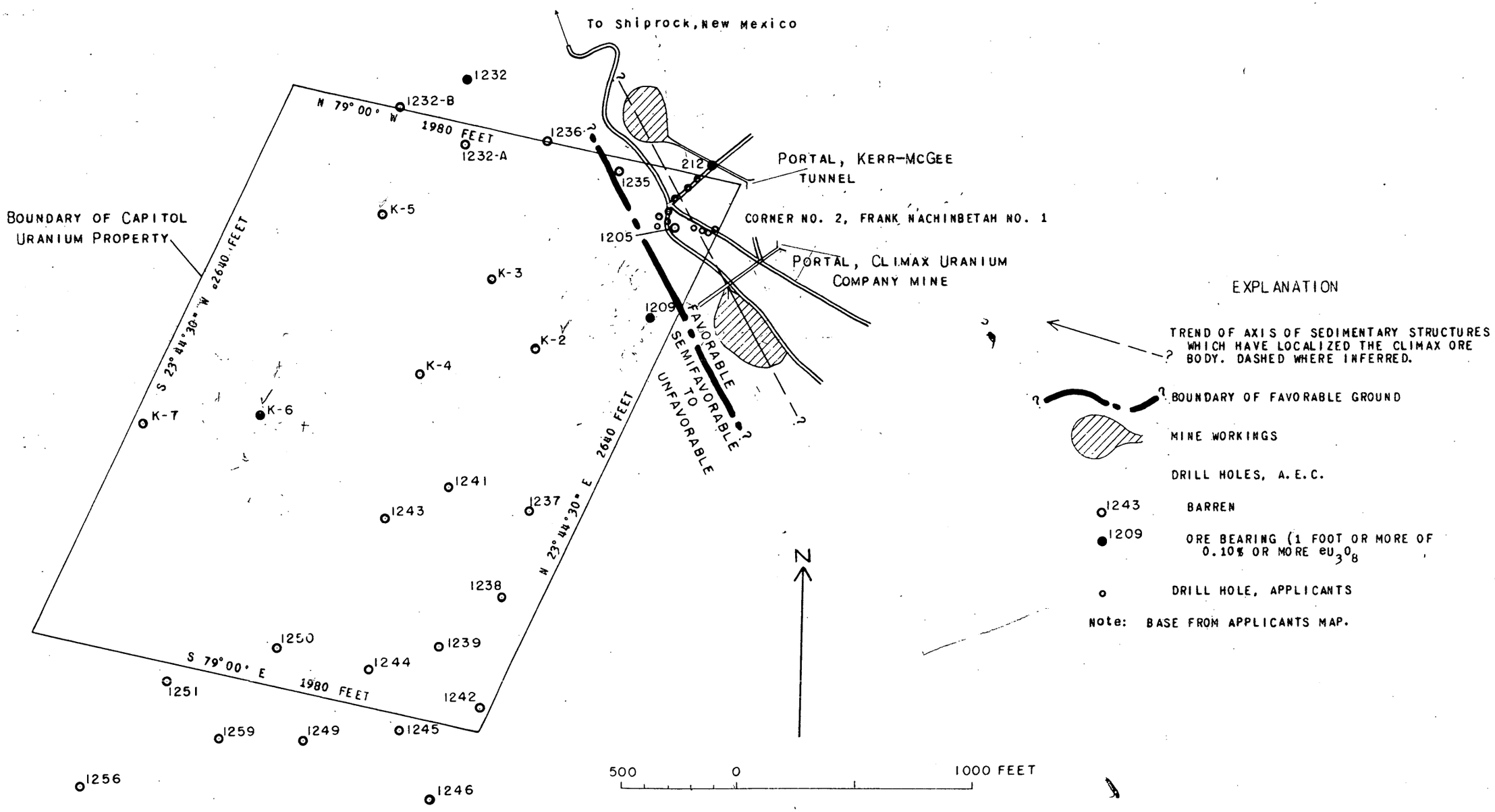

FIGURE 2. MAP SHOWING LOCATION OF DRILL HOLES ON CAPITOL URANIUM COMPANY PROPERTY, LUKACHUKAI MOUNTAIN AREA, APACHE COUNTY, ARIZ

intersection of the two surfaces is thought to be the most favorable area in which to prospect for additional ore deposits. The projected trend of the intersection of the two surfaces, as shown on figure 2, indicates that the most favorable area will cross the Capitol Uranium Co. property only in the northeast corner. The applicant has explored, by drilling, much of the area indicated as favorable. The remainder of the favorable area cannot be explored by drilling because of the very rough topography in that area. Thus, it appears that the favorable trend has already been tested as much as possible on the applicant's property. It is of interest to note that the Kerr-McGee ore deposit occurs on the inferred extension of the favorable trend. It is concluded that the favorable ground between the two mines has been tested as much as seems justified, and that additional drilling in the favorable trend on the applicant's property would not disclose significant uranium reserves.

MINABLE ORE RESERVES

There are no known minable ore reserves on the subject land; however, two widely spaced drill holes encountered some ore grade material. These holes are about 1,700 feet apart; the one nearest the production of the Climax property cut 1 foot of 0.12 percent U_3O_8. The other hole, diagonally across the property southwest of the first, has 1 foot of 0.19 percent U_3O_8. The nearest holes, 400 to 500 feet away, are barren, therefore the available data are inadequate for dependable reserve calculations.

PRESENT STATUS

The only work done to date on the property is the drilling of 31 holes, 20 of which were put down by the AEC and are spaced 300 to 700 feet apart. The remaining 11 were drilled by the applicant and are clustered at about 50 foot intervals near the northeast corner of the property. These 11 holes were drilled subsequent to the AEC project, but no attempt was made to offset their prior favorable holes, instead the intent was to intercept possible extensions of ore deposits from adjoining properties.

It is understood the AEC tried unsuccessfully to core their holes, therefore the applicant drilled his dry. The only chemical assays of hole cuttings were obtained from AEC. As was mentioned previously, only 2 widely spaced AEC holes showed appreciable mineralization and this was at two different sandstone horizons in the 2 holes, separated by 15 to 30 feet of claystone. According to information received from an AEC geologist, the mineralized material found in their K-6 hole, 1,700 feet southwest of the other ore hole, is in an upper Salt Wash sandstone lens that has not been productive in the area. In the productive sandstone only 1 AEC hole, LU-1209, encountered ore. It had 1 foot of 0.12 percent U_3O_8; none of the applicant's holes cut mineralization.

Climax Uranium Co. has produced more than 31,000 tons of ore, averaging 0.27 percent U_3O_8, and 1.11 percent V_2O_5, from the ground adjoining the subject property on the southeast; Kerr-McGee has sold over 6,000 tons of 0.27 percent U_3O_8 ore from the property to the northeast.

PROJECT PROPOSALS

The applicant proposed a dry rotary drilling program in two phases composed of 26 holes totaling 33,300 feet and costing $161,090.00.

Stage I consisted of 4 holes, 400 feet deep at 50 foot intervals offsetting an AEC ore hole, LU-1209, 10 holes 450 feet deep and 50 feet apart in a line parallel to the east side line of the property and near the northeast corner, 4 holes 600 feet deep and 50 feet apart to prospect a possible channel between AEC holes K2 and K5, 4 holes about 700 feet deep offsetting AEC hole K6 at 50 foot intervals, 4 holes 500 feet deep and 50 feet apart in a north-south line between AEC holes Lu-1232B and Lu-1232A.

Stage II was to consist of up to 20,000 feet of dry rotary drilling in an unmentioned number of holes to be placed within 25 feet of Stage I mineralized holes.

The examining team has no exploration proposal for this property.

CONCLUSIONS AND RECOMMENDATIONS

The AEC drilling in the area establishes a north-south trend of mineralization, in the favorable horizon, which crosses about 100 feet of the extreme northeast corner of the subject land. This work also shows the intensity of mineralization gradually diminishes to the north.

An examination of Climax Uranium Co. underground workings shows the major primary sedimentary structures, which apparently control the localization of ore, to be trending about N. 30° W. This structural trend is toward the extreme northeast corner of the subject property but it is obviously unmineralized here as revealed by the negative results of the 11 closely spaced holes.

It is believed that the most promising area for ore deposition has been adequately explored and that additional work would also be discouraging.

It is recommended that the application for DMEA assistance be denied.

1-19-56 [illegible]

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

224 New Customhouse
Denver 2, Colorado

January 17, 1956

RECEIVED
JAN 19 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 3927 (Uranium), Capitol Uranium Company, George R. Simpson Plot No. 1, Lukachukai area, Apache County, Arizona

Enclosed are the original and three copies of the Joint Report of Examination on the subject property.

The examining team is of the opinion that the favorable ground has been adequately explored and additional work is not justified. They, therefore, recommend that the application be denied, and we concur in this recommendation.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
1-23-56
(date)

RECEIVED
JAN 19 1956

MINERAL DEPOSITS
DMEA
RECEIVED
JAN 3 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

DMEA
Date Rec'd.
JAN 17 1956
BUREAU OF MINES
Denver, Colorado

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

December 30, 1955

Memorandum:

TRANSMITTED
JAN 17 1956

To: Executive Officer, DMEA Field Team, Region III

From: J. William Hasler

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

Subject: DMEA 3927 (Uranium), Capitol Uranium Company, George R. Simpson Plot No. 1, Lukachukai area, Mesa 4-1/2, Apache County, Arizona

Transmitted herewith are 12 copies of a joint engineering and geologic report by Glen Walker and C. H. Roach, covering a field examination of the above-referenced property.

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UNITED STATES
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DOUGLAS McKAY, SECRETARY

RECEIVED
JAN 10 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

TRANSMITTED
JAN 17 1956

DMEA 3927

CAPITOL URANIUM COMPANY

SIMPSON #1, LUKACHUKAI

Apache County, Arizona

Uranium

Joint Engineering and Geologic Report

By

Carl H. Roach, Geologist
Geological Survey

Glen Walker, Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
1-23-56
(date)

January 10, 1956

DMRA 3927

SIMPSON #1, LUKACHUKAI
CAPITOL URANIUM COMPANY
APACHE COUNTY, ARIZONA

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DMEA 3927

CAPITOL URANIUM COMPANY
GEORGE R. SIMPSON PLOT #1,
LUKACHUKAI AREA, MESA 4-1/2,
APACHE COUNTY, ARIZONA

RECEIVED
JAN 1 0 1955

SUMMARY AND CONCLUSIONS

The Capitol Uranium Co., Farmington, N. Mex., requested aid from DMEA in the exploration of uranium ore deposits on about 120 acres of Navajo Indian Reservation land on Mesa 4-1/2 in the Lukachukai Mountains of northeastern Apache County, Arizona.

The applicant proposed a dry rotary drilling project in two stages. Stage I consisted of 4 holes about 400 feet deep offsetting AEC hole 1209; 10 holes approximately 450 feet deep along the east side of the Permit plot to prospect the possible western extension of the Climax Uranium Co. ore bodies; 4 holes estimated 600 feet deep to prospect a possible channel between AEC holes K2 and K5; 4 holes about 700 feet deep offsetting AEC hole K6; 4 holes 500 feet deep near north side line south of AEC 1232. These holes would be on 50 feet centers and would total 13,300 feet. Stage II would consist of 20,000 feet of dry rotary drilling offsetting Stage I ore holes at intervals of 25 feet. The cost of the project as outlined was estimated at $161,090.00.

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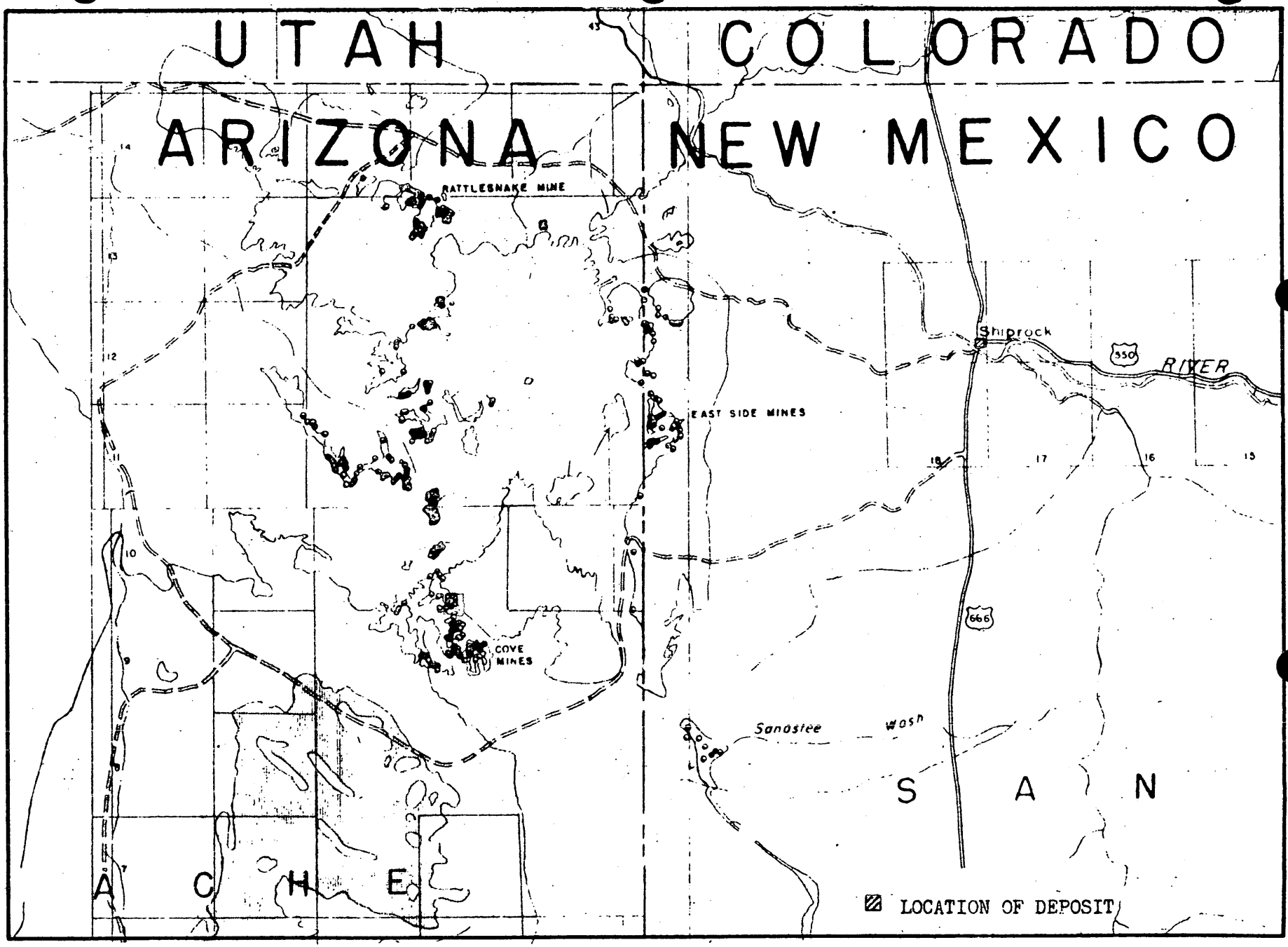

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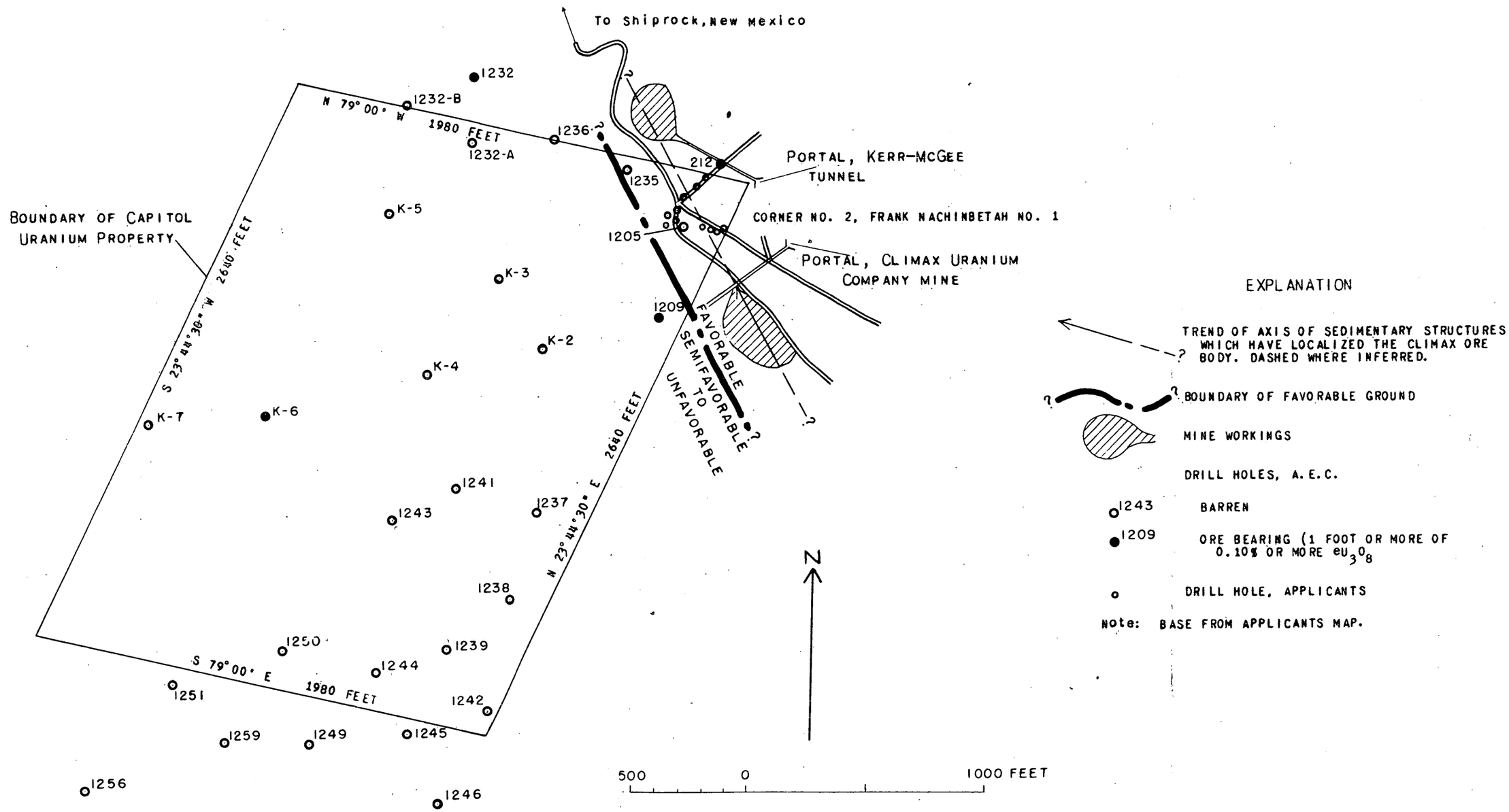

FIGURE 2. MAP SHOWING LOCATION OF DRILL HOLES ON CAPITOL URANIUM COMPANY PROPERTY, LUKACHUKAI MOUNTAIN AREA, APACHE COUNTY, ARIZ.

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MINABLE ORE RESERVES

There are no known minable ore reserves on the subject land; however, two widely spaced drill holes encountered some ore grade material. These holes are about 1,700 feet apart; the one nearest the production of the Climax property cut 1 foot of 0.12 percent U_3O_8. The other hole, diagonally across the property southwest of the first, has 1 foot of 0.19 percent U_3O_8. The nearest holes, 400 to 500 feet away, are barren, therefore the available data are inadequate for dependable reserve calculations.

PRESENT STATUS

The only work done to date on the property is the drilling of 31 holes, 20 of which were put down by the AEC and are spaced 300 to 700 feet apart. The remaining 11 were drilled by the applicant and are clustered at about 50 foot intervals near the northeast corner of the property. These 11 holes were drilled subsequent to the AEC project, but no attempt was made to offset their prior favorable holes, instead the intent was to intercept possible extensions of ore deposits from adjoining properties.

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PROJECT PROPOSALS

The applicant proposed a dry rotary drilling program in two phases composed of 26 holes totaling 33,300 feet and costing $161,090.00.

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The examining team has no exploration proposal for this property.

CONCLUSIONS AND RECOMMENDATIONS

The AEC drilling in the area establishes a north-south trend of mineralization, in the favorable horizon, which crosses about 100 feet of the extreme northeast corner of the subject land. This work also shows the intensity of mineralization gradually diminishes to the north.

An examination of Climax Uranium Co. underground workings shows the major primary sedimentary structures, which apparently control the localization of ore, to be trending about N. 30° W. This structural trend is toward the extreme northeast corner of the subject property but it is obviously unmineralized here as revealed by the negative results of the 11 closely spaced holes.

It is believed that the most promising area for ore deposition has been adequately explored and that additional work would also be discouraging.

It is recommended that the application for DMEA assistance be denied.

Surname 700

Murphy

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

AUG 31 1955

Capitol Uranium Company
803 W. Main
Box 1847
Farmington, New Mexico

Re: Docket No. DMEA-3927 (Uranium)
Simpson No. 1, Lukachukai property
Apache County, Arizona

Gentlemen:

The application for assistance in exploring the subject property under the captioned docket number has been reviewed by the Rare and Miscellaneous Metals Division.

The DMEA Field Team, Region III, Mr. W. M. Traver, Executive Officer, 224 New Customhouse Building, Denver 2, Colorado, will make a field examination of your property if it has not already done so.

Any assistance you may give the members of the Field Team during the examination will be appreciated.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

FTMurphy:am
8-30-55
cc to: Admr. Reading File
Docket
Code 700
DMEA Field Team, Region III(2)
Mr. Murphy

R.C.G.

700

Surname

Murphy
Ellis
Selfridge
Mittendorf

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

AUG 2 9 1955

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

Re: Docket No. DMEA-3927 (Uranium)
Capitol Uranium Company
Simpson No. 1, Lukachukai property
Apache County, Arizona

Dear Mr. Traver:

Enclosed are copies of memoranda pertinent to the subject application, from J. E. Crawford, dated August 11, and N. E. Nelson, dated August 24, 1955, members of the Uranium Commodity Committee.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (2/B)

Enclosures

APPROVED:

P. F. Yopes (2/B)
Member, Bureau of Mines

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

FMMurphy:am
8-26-55
cc to: Admr. Reading File
Operating Committee
Docket
Messrs. J. E. Crawford, Rm. 3641
T. H. Kiilsgaard, Rm. 5222
J. O. Hosted, Rm. 3210, GSA
Code 700
Mr. Murphy

R.C.S.

8/29/55 9a

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

RECEIVED
AUG 29 1955

August 25, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Appraisal relative to necessity for a field examination. Docket DMEA 3927, (Uranium), Capitol Uranium Company, Indian Lands, Apache County, Arizona

Enclosed are four copies of a memorandum report on the subject docket from the Grand Junction office.

A field examination is indicated and the Bureau of Mines brochure has been sent to the engineer.

The date of examination will be scheduled as soon as possible.

W. M. Traver

W. M. Traver

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

Colorado Plateau District
P. O. Box 360
Grand Junction, Colorado

RECEIVED
AUG 29 1955

August 22, 1955

Memorandum

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

From: J. William Beasley, USGS
M. H. Salisbury, USBM

Subject: Appraisal relative to necessity for a field examination. DMEA-3927 (Uranium) CAPITOL URANIUM COMPANY, INDIAN LANDS, Apache County, Arizona.

The applicant has applied for a DMEA loan in the amount of $141,090.00 to explore for uranium on the George R. Simpson No. 1 Plat, Lukachukai Mountain, Navajo Indian Reservation, Mining District 12, Apache County, Arizona. There is an apparent conflict between the George R. Simpson application (DMEA 3933) and the Capital Uranium Company, as they both appear to be working on the Simpson No. 1 Plat, Navajo Tribal permit. As the occurrence of high-grade uranium ore has been reported from Atomic Energy Commission exploration drilling, it is considered that the application should be examined in the field. The examination date will be scheduled as soon as possible.

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

August 25, 1[illegible]

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman of the Operating Committee, [illegible]

From: Executive Officer, DMEA Field Team, Region III

Subject: Appraisal relative to necessity for a field examination. Docket DMEA 5[illegible]7, (Uranium), Capitol Uranium Company, Indian Lands, Apache County, Arizona

Enclosed are four copies of a memorandum report on the subject docket from the Grand Junction office.

A field examination is indicated and the Bureau of Mines brochure has been sent to the engineer.

The date of examination will be scheduled as soon as possible.

W. L. Craver
W. L. Craver

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

Colorado Plateau District
P. O. Box 360
Grand Junction, Colorado

August 22, 1955

Memorandum

To: Executive Officer, Region III Through: E. N. Hershman

From: J. William Hassler, USGS
M. H. Salsbury, USBM

Subject: Appraisal relative to necessity for a field examination. DMEA-3927 (Uranium) CAPITOL URANIUM COMPANY, INDIAN LANDS, Apache County, Arizona.

The applicant has applied for a DMEA loan in the amount of $161,090.00 to explore for uranium on the George R. Simpson No. 1 Plot, Lukachukai Mountain, Navajo Indian Reservation, Mining District 12, Apache County, Arizona. There is an apparent conflict between the George R. Simpson application (DMEA 3933) and the Capital Uranium Company, as they both appear to be working on the Simpson No. 1 Plot, Navajo Tribal permit. As the occurrence of high-grade uranium ore has been reported from Atomic Energy Commission exploration drilling, it is considered that the application should be examined in the field. The examination date will be scheduled as soon as possible.

8/30/55 gla

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

224 New Customhouse
Denver 2, Colorado

August 22, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3927 (Uranium), Capitol Uranium Company, Simpson #1, Lukachukai, Apache County, Arizona

The USGS weekly report states that a field investigation is required on the subject application. Accordingly one copy of the brochure is being forwarded to the Bureau of Mines.

Joint memoranda from the Grand Junction offices of the Bureau and Survey will be forwarded this office on all future Plateau applications.

W. M. Traver

W. M. Traver

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

224 New Customhouse
Denver 2, Colorado

August 22, 1955

Memorandum

To: W. H. King

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3927 (Uranium), Capitol Uranium Company, Simpson #1, Lukachukai, Apache County, Arizona

Enclosed is the subject application in the amount of $161,090.00.

The application consists of Form MF-103 and accompanying answer sheets. The only copy of the map submitted by the applicant was forwarded to J. W. Hasler July 27, 1955.

A field investigation and suitable report are required.

W. M. TRAVER.

W. M. Traver

Enclosures

HMC:pw

cc: File DMEA-3927
Chron
Sec.Op.Comm.(2)
Hasler
Harshman

Sec. Op. Comm. (2)

RECEIVED
AUG 29 1955

August 25, 1955

Memorandum

To: John F. Shaw

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA-3927 (Uranium), Capitol Uranium Company, Simpson #1, Lukachukai, Apache County, Arizona

The subject application in the amount of $161,090.00 is enclosed herewith. The brochure is comprised of the following:

1. Form MF-103 and accompanying answer sheets
2. Copy of Executive Officer's memo to Secretary Operating Committee dated August 22
3. Copy of Executive Officer's memo transmitting the application to this office

Your attention is directed to the Executive Officer's memo which states that: "The only copy of the map submitted by the applicant was forwarded to J. W. Hasler July 27, 1955."

A field examination and suitable report are required. The completed report should be forwarded direct to the Executive Officer with a copy of the memo of transmittal to this office.

W. H. KING

W. H. King

Copy to: E. N. Harshman
W. M. Traver (3)

Sec. Op. Comm. (2)

RECEIVED
AUG 29 1955

August 25, 1955

Memorandum

To: John F. Shaw

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMMA-3927 (Uranium), Capitol Uranium Company, Simpson #1, Lukachukai, Apache County, Arizona

The subject application in the amount of $161,090.00 is enclosed herewith. The brochure is comprised of the following:

1. Form MF-103 and accompanying answer sheets
2. Copy of Executive Officer's memo to Secretary Operating Committee dated August 22
3. Copy of Executive Officer's memo transmitting the application to this office

Your attention is directed to the Executive Officer's memo which states that: "The only copy of the map submitted by the applicant was forwarded to J. W. Mealer July 27, 1955."

A field examination and suitable report are required. The completed report should be forwarded direct to the Executive Officer with a copy of the memo of transmittal to this office.

W. H. King

W. H. King

Copy to: E. N. Harshman
W. M. Traver (3)

8/25/55-gla

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

August 24, 1955

Re: DMEA 3927
Capitol Uranium Co.
Geo. R. Simpson #1 Plot
Navajo Indian Reservation
Apache Co., Ariz.
$161,090.00 - Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application.

This application is incomplete, lacking a claim map and locations and logs of the 18 holes drilled by AEC presumedly somewhere along the west line of AEC Plot 1 (or 2).

As deciphered, using maps of Docket 3933, the Simpson #1 Plot (1 square mile) has been divided into two parts by an east and west line the location of which, on the maps at hand, is not shown but seems to be about coincident with the common end lines of AEC Plots #1 and #2.

The map Simpson #1 Plot of 3933 does not agree with the Drill Hole maps, North and South Ends, in that the AEC Plots numbers are reversed, but the Blocks A, B, and C are identifiable as the ground referred to in the application of DMEA 3933. By difference, DMEA 3927 has to do with the north part of the Simpson #1 Plot.

Of 17 drill holes along the east side of the northern part of the Plot, near the AEC Plot 1 (or 2) line, five showed values in uranium, viz:--

Number	Depth	Thickness (feet)	% Uranium
S45	100.4-101.2	0.8	0.11
S46	93.6- 94.2	0.6	0.08
S47	95.6- 96.2	0.6	0.07
S48	95.0- 95.6	0.6	0.13
S49	97.2- 98.4	1.2	0.11

Hole S45 is 200 feet south of the cluster composed of S46-S49. Three holes, S46, S47, and S48, span 50 feet along the side line and S49 offsets S46, the center hole, 25 feet.

Without a map showing the location of the AEC holes in Plot 1 (or 2) it is not possible to relate the side line drilling to the AEC holes named in the application, #1209, K2 and K3, and #1232. Lack of the logs of the AEC holes makes appraisal of the costly project outlined impossible.

Referral to the Field Team is being recommended for #3933. The two projects adjoin so both may be looked at if a field examination is made. If only an office appraisal is necessary, Grand Junction has information lacking in the application with me.

Referral to the field is recommended.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

August 24, 1955

Re: DMEA 3927
Capitol Uranium Co.
Geo. R. Simpson #1 Plot
Navajo Indian Reservation
Apache Co., Ariz.
$161,090.00 - Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: W. E. Nelson, U. S. Geological Survey

Subject: Review of application.

This application is incomplete, lacking a claim map and locations and logs of the 18 holes drilled by AEC presumably somewhere along the west line of AEC Plot 1 (or 2).

As deciphered, using maps of Docket 3933, the Simpson #1 Plot (1 square mile) has been divided into two parts by an east and west line the location of which, on the maps at hand, is not shown but seems to be about coincident with the common end lines of AEC Plots #1 and #2.

The map Simpson #1 Plot of 3933 does not agree with the Drill Hole maps, North and South Ends, in that the AEC Plots numbers are reversed, but the Blocks A, B, and C are identifiable as the ground referred to in the application of DMEA 3933. By difference, DMEA 3927 has to do with the north part of the Simpson #1 Plot.

Of 17 drill holes along the east side of the northern part of the Plot, near the AEC Plot 1 (or 2) line, five showed values in uranium, viz:--

Number	Depth	Thickness (feet)	% Uranium
845	100.4-101.2	0.8	0.11
846	93.6- 94.2	0.6	0.08
847	95.6- 96.2	0.6	0.07
848	95.0- 95.6	0.6	0.13
849	97.2- 98.4	1.2	0.11

Hole 845 is 200 feet south of the cluster composed of 846-849. Three holes, 846, 847, and 848, span 50 feet along the side line and 849 offsets 846, the center hole, 25 feet.

Without a map showing the location of the AEC holes in Plat 1 (or 2) it is not possible to relate the side line drilling to the AEC holes named in the application, #1309, K2 and K3, and #1232. Lack of the logs of the AEC holes makes appraisal of the costly project outlined impossible.

Referral to the Field Team is being recommended for #3933. The two projects adjoin so both may be looked at if a field examination is made. If only an office appraisal is necessary, Grand Junction has information lacking in the application with me.

Referral to the field is recommended.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-8/24/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641
J. O. Hosted, 3210

8/12/55 gla

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

August 11, 1955

Memorandum

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

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

Subject: Application for assistance, DMEA Docket 3927, Capitol Uranium Company, Indian Lands, Apache County, Arizona

I have reviewed the application for assistance, Capitol Uranium Company, DMEA Docket 3927; and I have discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The Capitol Uranium Company proposes a two phase drilling program. The first phase will consist of 13,300 feet of 50 foot center holes which would offset 5 existing AEC drill holes. The average depth of the 26 holes proposed in the first phase would be 520 feet. In the second phase, the applicant proposes to drill 20,000 feet of offset holes on 25 foot centers. The total cost of the project is to be $161,090.00.

A complete evaluation cannot be made due to lack of supporting data, such as diagrams and maps, but based on the information submitted to this office, I would not recommend approval of application inasmuch as a drilling program of the nature described by the applicant goes beyond the exploration stage.

In accordance with a telephone request made by Mr. Ernest William Ellis, the application is being forwarded to Mr. Thor Kiilsgaard, USGS.

John E. Crawford
John E. Crawford

RECEIVED
AUG 12 1955

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

DMEA-3927
RECEIVED DMEA-3929
AUG - 8 1955

224 New Customhouse
Denver 2, Colorado

August 5, 1955

Memorandum

To: Robert E. Adams, Chief, Operator's Control and Statistics Division

From: Executive Officer, DMEA Field Team, Region III

Subject: Assignment of Docket Numbers, Capitol Uranium Company

Enclosed are two memoranda from your office assigning docket numbers on two applications from Capitol Uranium Company. Both of the applications are located on the Colorado Plateau; one in Utah and the other in Arizona.

Under the new procedure one copy of each of these applications has been referred to the Grand Junction field office, and it is necessary that we advise them the correct DMEA docket number on each of these applications.

Please indicate on your original memoranda some description of the land covered in each docket and return to this office so we will know which docket number pertains to the Arizona application.

W. M. Traver

W. M. Traver

Enclosures

August 2, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region III.

DMEA-3927 Capitol Uranium Co.

Robert E. Adams,
Chief, Operation's Control
and Statistics Division

Property:
Simpson #1 Lukachukai
Apache County, Arizona

August 1, 1955
Subject: DMEA-3927
Re: Exploration Assistance
Simpson #1 Lukachukai

Capitol Uranium Co.
803 W. Main
Box 1847
Farmington, N. Mex.

Gentlemen:

The receipt of your application dated July 11, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3927 and referred to the Rare and Miscellaneous Metals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

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

RECEIVED
AUG - 1 1955

224 New Customhouse
Denver 2, Colorado

July 27, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Assistance, Uranium, Capitol Uranium Company, Indian Lands, Apache County, Arizona

Enclosed are two copies of the subject application in the amount of $161,090.00. One copy of the application has been sent to the Grand Junction field office, and enclosed with that application was one claim map and one set of drill hole logs submitted by the applicant.

Only one copy of the Assignment of Tribal Mining Permit was included with the application, and it is attached to your copy of the application. Also attached is a copy of our letter to the Grand Junction field office.

W. M. Traver

W. M. Traver

Enclosures

Crawford
ice

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

RECEIVED
AUG - 1 1955

224 New Customhouse
Denver 2, Colorado

July 27, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III DMEA 3927

Subject: Application for DMEA Assistance, Uranium, Capitol Uranium Company, Indian Lands, Apache County, Arizona

Enclosed are two copies of the subject application in the amount of $161,090.00. One copy of the application has been sent to the Grand Junction field office, and enclosed with that application was one claim map and one set of drill hole logs submitted by the applicant.

Only one copy of the Assignment of Tribal Mining Permit was included with the application, and it is attached to your copy of the application. Also attached is a copy of our letter to the Grand Junction field office.

W. M. Traver

W. M. Traver

Enclosures

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

RECEIVED
AUG - 1 1955

224 New Customhouse
Denver 2, Colorado

July 27, 1955

Memorandum

To: J. W. Hasler

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Assistance, (Uranium), Capitol Uranium Company, Indian Lands, Apache County, Arizona

Enclosed is one copy of the subject application in the amount of $161,090.00.

Your copy of the application contains the only claim map submitted, and the only copy of the drill hole logs which were submitted by the applicant.

You will be advised of the docket number at a later date.

W. M. Traver

W. M. Traver

Enclosures

HMC:sr

cc Subject
Chairman Op. Comm. (2)
Harshman
Chron

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

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
AUG - 1 1955

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

Not to be filled in by applicant

Docket No. 3927
Metal or Mineral Uranium
Date Received 8-1-55
Estimated Cost $161,090
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Capitol Uranium Company (A Colorado Corporation)
[illegible]
Denver, Colorado
Fred Carson, President-Principal, [illegible]; Carol A. Wiley, Secretary-[illegible]

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

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

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract
See Attached

(*b*) State any mine name by which the property is known. Singer #1 Adjacent

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise
by Assignment

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

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

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

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

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

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

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

16—66551-1

See Attached

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore See Attached

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

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

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

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

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

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

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

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

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

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

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

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

See Attached

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated July 11, 1955

Carson Mountain Company
(Applicant)

By Paul Carson
President

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

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

Lukachukai Property

Capitol Uranium Company
803 W. Main Box 1847
Farmington, New Mexico

This map is not at hand

4 (a) The accompanying map shows the George R. Simpson # 1 Plot, Lukachukai Mountain, Navajo Indian Reservation, Mining District 12, Apache County, Arizona. The 18 holes shown were drilled by the A.E.C. and the logs are attached. These holes were drilled through the Salt Wash Member of the Morrison formation, which is exposed on the walls of the canyon.

4 (b) The property on the North, the Tom Joe #1, is producing steadily through the Kerr-McGee tunnel shown on the map. On the East, the Climax Uranium Company is operating one of the larger ore producers of the Colorado Plateau. Other mines are operating and shipping in the vacinity, but output and values are not available to the writer

4 (c) The mineralization of this property is found in the Salt Wash member of the Morrison formation. It is mostly carnotite.

4 (d) The property is readily accessible and ganerally does not require drill roads. It may be noted that there is a fair dirt road from the property to the main road to Shiprock. From the property to the Kerr-McGee mill at Shiprock, it is 48 miles and to the Vanadium Corporation of America mill at Durango, it is 128 miles. Supplies are obtained in Farmington, New Mexico, Durango or Denver, Colorado

4 (e) There is a plentiful supply of manpower. All materials and supplies will have to be trucked in.
Domestic and drilling water can be obtained from wells near the property.
There is no power on this portion of the Reservation.

5 (a) The project will consist of wagon drilling for additional ore bodies.
The ore bodies sought are Uranium*Vanadium bearing sandstones.

5 (b) The project would consist of drilling from surface through the ore horizan of the Salt Wash. It would be divided into two Phases. Phase one would consist of a series of holes near the productive areas and offsetting the ore holes drilled by A.E.C.. Phase two would consist of drilling on closer intervals in the areas showing commercial ore in Phase One, in an effort to prove sufficient tonnage to justify the expense of the development required to produce the ore. Thus, Phase One would require the following holes: 4 holes, estimated average depth 400 feet to offset A.E.C. hole # 1209. Ten holes along the East side line near A.E.C. hole # 1209, to prospect the westerly projection of the Climax ore body, which is being produced just East of the side line. These 10 holes are estimated to be 450 feet average. Four holes, estimated average depth, 600 feet, to prospect a possible channel between K2 and K3 holes. Four holes estimated 700 foot depth to offset K6 hole. Four holes estimated 500 foot depth to the South of ore hole # 1232 along side line. These holes would be on 50 foot centers and would total 13,300 feet. Phase Two would be carried out only if the results of

prob. average

Capitol Uranium Company
803 W. Main Box 1847
Farmington, New Mexico

Phase One show sufficient commercial ore to justify it, would be 20,000 feet and consist of offsets to ore holes of Phase One on 25 foot centers.

5 (c) The work would start within 30 days and be completed in 18 months.

5 (d) The company has been actively drilling and prospecting for Uranium ores since its organization in October 1953. In its earlier stages the work was directed by Forest John Sur, an engineer of wide experience and superintended by William Gianetto of Silverton, Colorado, a practical mining man considered to be one of the best in the San Juan District. Mr. Sur has now resigned and the company expects to employ Mr. Frank McPherson, of Grand Junction, Colorado, as consultant on geological problems. The operations and drilling will be supervised by Walter W. Bentley, who has supervised the drilling for the past 15 months. He has had more than 30 years of experience in the field of mining, most of it with the Anaconda Copper Mining Company, American Smelting and Refining Company and also more than four years during World War II in the Bureau of Mines as an Explosive Investigator. The foreman in immediate charge of mining are Marshall J. Fletcher, for many years shift foreman at the Shenandoah-Dives Mine at Silverton, Colorado, and Ward R. Barlow, who has many years experience as an operator of leased properties.

6 (a) The work would be carried on by independent contractors. Drilling cost in this area are about $4.00 per foot with not over 5% of the footage of any hole to be cored at $6.00 per foot.

Thus Phase One would cost:		
12,635 feet at $4.00 per foot	$ 50640.00	
665 feet at $6.00 per foot	3990.00	$ 54,630.00
Phase Two would cost:		
19,000 feet at $4.00 per foot	$ 76000.00	
1,000 feet at $6.00 per foot	6000.00	82,000.00
Bulldozing:		
300 hours at $12.50 per hour for Phase One		3,750.00
500 housr at $12.50 per hour for Phase Two		6,250.00

6 (b)

Supervision:	
One full time engineer at $650.00 per month	11,740.00
Engineering:	
Surveying party at $200.00 per day for 10 days	2,000.00
Consultants:	
Geologist at $100.00 per days plus expenses averaging $20.00 per day for 6 days	720.00

There will be no materials, repairs or other costs in addition to the above.

7 (a) The company is prepared to furnish its share of the cost of the project in cash.

Lukachukai Property

Capitol Uranium Company
803 W. Main Box 1847
Farmington, New Mexico

SUMMARY

Phase One:		
Drilling	$ 54,630.00	
Dozer	3,750.00	
Other	7,230.00	$ 65,610.00
Phase Two:		
Drilling	$ 82,000.00	
Dozer	6,250.00	
Other	7,230.00	95,480.00
Total		$ 161,090.00

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

RECEIVED
AUG - 1 1955

224 New Customhouse
Denver 2, Colorado

July 27, 1955

Memorandum

To: J. W. Hasler

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Assistance, (Uranium), Capitol Uranium Company, Indian Lands, Apache County, Arizona

Enclosed is one copy of the subject application in the amount of $161,090.00.

Your copy of the application contains the only claim map submitted, and the only copy of the drill hole logs which were submitted by the applicant.

You will be advised of the docket number at a later date.

W. M. Traver

W. M. Traver

nclosures

C:sr

Subject
Chairman Op. Comm. (2)
Harshman
Chron

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd.
JUL 25 1955

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

RECEIVED
AUG - 1 1955
BUREAU OF MINES
Denver, Colorado

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

Not to be filled in by applicant

Docket No. 3927
Metal or Mineral Uranium
Date Received 8-1-55
Estimated Cost $16,090
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Capital Uranium Company (A Colorado Corporation)
609 N. Main Box 1247
Farmington, New Mexico

Fred Carson, President-Farmington, New Mexico; Vernon E. Riley, Secretary-Farmington, New Mexico; F. C. Hooton, Treasurer-Farmington, New Mexico

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

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

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract
See Attached

(*b*) State any mine name by which the property is known Simpson #1 Lukachukai

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise
by Assignment

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

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

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

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

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

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

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

16—66551-1

See Attached

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore See Attached

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

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

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

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

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

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

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

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

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

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

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

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

See Attached

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated July 11, 1955

CAPITOL URANIUM COMPANY
(Applicant)

By Lee Carson
President

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

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

Lukachukai Property

Capitol Uranium Company
803 W. Main Box 1847
Farmington, New Mexico

4 (a) The accompanying map shows the George H. Simpson # 1 Plot, Lukachukai Mountain, Navajo Indian Reservation, Mining District 12, Apache County, Arizona. The 18 holes shown were drilled by the A.E.C. and the logs are attached. These holes were drilled through the Salt Wash Member of the Morrison formation, which is exposed on the walls of the canyon.

4 (b) The property on the North, the Tom Joe #1, is producing steadily through the Kerr-McGee tunnel shown on the map. On the East, the Climax Uranium Company is operating one of the larger ore producers of the Colorado Plateau. Other mines are operating and shipping in the vacinity, but output and values are not available to the writer

4 (c) The mineralization of this property is found in the Salt Wash member of the Morrison formation. It is mostly carnotite.

4 (d) The property is readily accessible and ganerally does not require drill roads. It may be noted that there is a fair dirt road from the property to the main road to Shiprock. From the property to the Kerr-McGee mill at Shiprock, it is 48 miles and to the Vanadium Corporation of America mill at Durango, it is 128 miles. Supplies are obtained in Farmington, New Mexico, Durango or Denver, Colorado

4 (e) There is a plentiful supply of manpower. All materials and supplies will have to be trucked in.
Domestic and drilling water can be obtained from wells near the property.
There is no power on this portion of the Reservation.

5 (a) The project will consist of wagon drilling for additional ore bodies.
The ore bodies sought are Uranium-Vanadium bearing sandstones.

5 (b) The project would consist of drilling from surface through the ore horizan of the Salt Wash. It would be divided into two Phases. Phase one would consist of a series of holes near the productive areas and offsetting the ore holes drilled by A.E.C.. Phase two would consist of drilling on closer intervals in the areas showing commercial ore in Phase One, in an effort to prove sufficient tonnage to justify the expense of the development required to produce the ore. Thus Phase One would require the following holes: 4 holes, estimated average depth 400 feet to offset A.E.C. hole # 1209. Ten holes along the East side line near A.E.C. hole # 1209, to prospect the westerly projection of the Climax ore body, which is being produced just East of the side line. These 10 holes are estimated to be 450 feet average. Four holes, estimated average depth, 600 feet, to prospect a possible channel between K2 and K3 holes. Four holes estimated 700 foot depth to offset K6 hole. Four holes estimated 500 foot depth to the South of ore hole # 1232 along side line. These holes would be on 50 foot centers and would total 13,300 feet. Phase Two would be carried out only if the results of

Capitol Uranium Company
803 W. Main Box 1847
Farmington, New Mexico

Phase One show sufficient commercial ore to justify it, would be 20,000 feet and consist of offsets to ore holes of Phase One on 25 foot centers.

5 (c) The work would start within 30 days and be completed in 18 months.

5 (d) The company has been actively drilling and prospecting for Uranium ores since its organization in October 1953. In its earlier stages the work was directed by Forest John Sur, an engineer of wide experience and superintended by William Gianetto of Silverton, Colorado, a practical mining man considered to be one of the best in the San Juan District. Mr. Sur has now resigned and the company expects to employ Mr. Frank McPherson, of Grand Junction, Colorado, as consultant on geological problems. The operations and drilling will be supervised by Walter W. Bentley, who has supervised the drilling for the past 15 months. He has had more than 30 years of experience in the field of mining, most of it with the Anaconda Copper Mining Company, American Smelting and Refining Company and also more than four years during World War II in the Bureau of Mines as an Explosive Investigator. The foreman in immediate charge of mining are Marshall J. Fletcher, for many years shift foreman at the Shenandoah-Dives Mine at Silverton, Colorado, and Ward R. Barlow, who has many years experience as an operator of leased properties.

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Thus Phase One would cost:		
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665 feet at $6.00 per foot	3990.00	$ 54,630.00
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Supervision:	
One full time engineer at $650.00 per month	11,740.00
Engineering:	
Surveying party at $200.00 per day for 10 days	2,000.00
Consultants:	
Geologist at $100.00 per days plus expenses averaging $20.00 per day for 6 days	720.00

There will be no materials, repairs or other costs in addition to the above.

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Lukachukai Property

Capitol Uranium Company
803 W. Main Box 1847
Farmington, New Mexico

SUMMARY

Phase One:		
Drilling	$ 44,630.00	
Dozer	3,750.00	
Other	7,230.00	$ 65,610.00
Phase Two:		
Drilling	$ 82,000.00	
Dozer	6,250.00	
Other	7,230.00	95,480.00
Total		$ 161,090.00

ASSIGNMENT OF TRIBAL MINING PERMIT

RECEIVED
AUG - 1 1955

THIS INDENTURE made and entered into by and between George R. Simpson (Census # 32932) and Callie Mae Simpson his wife of Farmington, New Mexico hereinafter called "Assignor", partie_s of the first part, and Capitol Uranium Company, a Corporation of Farmington, New Mexico, hereinafter called the "Assignee", party of the second part.

W I T N E S S E T H

WHEREAS, the said George R. Simpson, a Navajo Indian, is the approved holder of that certain Navajo Tribal Mining Permit No. 71, bearing date the 24th day of November 1952, covering that/those certain mining claim(s) known as Simpson # 1 Lukachuki located in District No. 11 & 12 in the Navajo Reservation, and in the County of Apache State of Arizona.

NOW, THEREFORE, for and in consideration of the sum of Ten ($10.00) Dollars and other good and valuable consideration, the receipt of which is hereby acknowledged, and of the covenants and agreements hereinafter contained to be paid, kept and performed by the party of the second part, the said George R. Simpson, have sold, transferred, set over and assigned, and by these presents do sell, transfer, set over and assign to the Assignee, his heirs, successors and assigns, all of the Assignor's right, title, interest and claim in and to the aforesaid Mining Permit and renewal thereof, and any lease which may be granted, based upon said Permit, in and to the following described land covered thereby, to-wit:

Plot 3 in the Lukachuki Mountain Area: Beginning at Corner No. 1, the Northeast Corner, which is one and the same as Corner No. 2 of the Frank No. 1 Claim, from whence Corner No. 1 of the Frank No. 1 Claim bears South 79° East 1,980 feet; thence North 79° West about 1,980 feet to Corner No. 2, the Northwest Corner; thence about South 23° West 2,640 feet to Corner No. 3, the Southwest Corner; thence about South 79° East 1,980 feet to Corner No. 4, the Southeast Corner, and being one and the same as Corner No. 3 of the Frank No. 1 Claim; thence about North 23° East 2,640 feet to Corner No. 1, the point of beginning containing about 120 acres. Said tract being further described as adjoining and lying West of Frank No. 1 Claim, the said Corner No. 1 of Frank No. 1 Claim lying approximately South 48° West 12,144 feet from the Cove School in Districts 11 and 12 of the Navajo Indian Reservation in Apache County, Arizona

RECEIVED
AUG - 1 1955

This assignment shall be subject to prior approval by the Advisory Committee of the Navajo Tribal Council and the Secretary of the Interior or his authorized representative, and is to become effective only from the date of such approval.

In further consideration hereof, it is mutually agreed as follows:

1. The Assignee assumes and agrees to perform all obligations to the Navajo Tribe insofar as said described land is affected, and to do and perform all such things and acts as are required by said Mining Permit as to the above described land, to the same extent and in the same manner as if the provisions of said Mining Permit were fully set out herein; and, without limiting in any manner the duties and obligations imposed by said Permit, Assignee specifically agrees that he will:

a) Pay or cause to be paid to the Navajo Tribe any and all royalties and/or bonuses at the times and in the amounts or percentages set forth and required by the terms of said Permit and paragraph four of Advisory Committee Resolution No. ACS-80-51 and Amendment No. ACM-5-52 for and on account of any and all ore mined, produced and sold from the premises.

b) Commence mining operations under said Permit and produce and sell ore from said premises within six (6) months from the date of approval of this assignment as hereinbefore provided.

c) Operate any mine opened or developed on the premises in a good and workmanlike manner, and in accordance with applicable mining laws, rules and regulations, and to leave any such mine timbered in the event of the abandonment thereof.

d) Comply with the rules and regulations of the Navajo Tribe, and Advisory Committee and/or the Secretary of the Interior governing the cutting of timber from any land under the jurisdiction of said authorities, of either of them, before cutting or using any such timber for mining operations and to pay for any such timber at the rate or price provided by said rules and regulations.

e) Comply with all and singular the terms of said Permit as to said premises and mining operations thereon, and to do and perform annually actual mining development work required in connection therewith at any expenditure of not less than the minimum requirements provided by Advisory Committee Resolution No. ACS-80-51 and the terms of said Permit, and to pay or cause to be paid to the Navajo Tribe any and all advance annual rentals to become due and payable thereunder for the lands covered hereby, and to furnish any required surety bond in an amount to conform to Departmental Mining Regulations to insure the full performance of the terms of said Permit; and to save harmless the Assignor, his or their heirs, administrators, executors or assigns, for or on account of any liability arising or to arise under said Permit or any public laws or decisions of courts, national, state or local, in connection with said premises and/or mining operations conducted thereon by Assignee.

It being made a further condition hereof that this assignment shall become void in the event:

f) That the Assignee shall fail, refuse or neglect to comply with the provisions of sub-paragraph (b) hereinabove set forth without justifiable reason therefor satisfactory to the Advisory Committee and the Area Director at a hearing upon order to show cause thereon, such decision to be binding on the parties subject to any right of appeal by either party to the Secretary of the Interior or his authorized representative as may be allowed by the rules of the Secretary.

g) That it is shown to the satisfaction of the Advisory Committee and the Area Director at a hearing upon order to show cause that the Assignee knowingly and intentionally has directly or indirectly contravened the prohibition of paragraph three of Advisory Committee Resolution No. ACS-80-51 relative to acreage limitation for mining permits and leases, such decision to be binding subject to any right of appeal as may be allowed by the rules of the Secretary of the Interior.

2. The Assignee agrees to pay or cause to be paid to the Assignor an over-riding royalty of not less than two (2%) per cent or more than five (5%) per cent on all ores produced and sold from the premises, based upon and in accordance with the schedule for determining percentage of over-riding royalty set forth in Advisory Committee Resolution No. ACS-80-51 and to pay or cause to be paid to Assignor an over-riding royalty on all ores or other products produced and sold from said premises which are not included in determining mine value per dry ton as defined in said Resolution No. ACS-80-51 at the following rates:

1. 2% of the gross value of ore having a gross ton value of $30.00 or less.

2. 3% of the gross value of ore having a gross ton value of more than $30.00 and not more than $60.00.

3. 4% of the gross value of ore having a gross ton value of more than $60.00 and not more than $80.00.

4. 5% of the gross value of ore having a gross ton value of more than $80.00.

Assignee further agrees to pay or cause to be paid to the Assignor as additional over-riding royalty ten (10 %) per cent of any bonus paid by the United States Atomic Energy Commission for the production of uranium ore from said premises; provided, however, that this clause shall not be effective and such additional royalty shall not accrue or be payable unless the amount of the percentage thereof is written and inserted in the space hereinabove in this clause provided for. Unless otherwise agreed upon in writing all over-riding royalty shall be paid to the said assignors.

3. At the option of the Assignee and prior to the expiration of said Permit, Assignor agrees to make application for renewal thereof and/or during the primary or renewed term thereof to make application to convert said Permit to a ten year mining lease covering all or any portion of said land at the election of the Assignee, and to make, execute, and deliver to the Assignee an assignment thereof; provided, that any such application, renewal, and/or lease and assignment shall be subject to the prior approval of the Advisory Committee and the Secretary of the Interior or his authorized representative, and shall provide for and be subject to each, all and singular the terms hereof and to the provision for payment by the Assignee to the Assignor of an over-riding royalty the same as in paragraph two hereinabove set forth.

4. Assignee agrees to give the said George R. Simpson preference for employment in mining operations on said mining claim during the continuance of said Mining Permit and this assignment, any renewal thereof, and any lease based thereon, at the prevailing wage rate, and to employ available Navajo Indians in connection with said mining operations at prevailing wage rates in all positions for which, in the opinion of Assignee, they are qualified.

5. It is agreed that the Assignee shall succeed to all the rights, benefits, and privileges granted the Assignor by the terms of said Mining Permit, any renewal thereof, and any lease which may be granted, based upon said Permit, as to the land covered hereby, subject, nevertheless, to the terms and provisions of this assignment; and that this assignment includes the entire agreement between the parties, and shall extend to and be binding upon the heirs, devisees, legatees, administrators, executors, trustees, and assigns of each of the parties hereto.

6. It is further understood and agreed that Assignee shall not re-assign this assignment or said Mining Permit as to said premises or any portion thereof nor sub-lease or underlet said premises or any portion thereof, and shall not enter into any working agreement with any person, firm, or corporation, covering this assignment or said Permit or said premises, and that this assignment shall ipso facto become terminated and void in the event any re-assignment hereof or sublease or working agreement affecting said Permit or said premises or any portion thereof is entered into by Assignee with any other person, firm or corporation.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals this 2nd day of Aug. 1954

George R. Simpson (SEAL)
Callie Mae Simpson (SEAL)
(SEAL)
Parties of the First Part

CAPITOL URANIUM COMPANY
By M. C. Foster
Party of the Second Part

STATE OF NEW MEXICO)
COUNTY OF SAN JUAN)

On this 2nd day of Aug 1954 before me personally appeared George R. Simpson & Callie Mae Simpson, to me personally known to be the persons described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

My Commission Expires October 4, 1957

Murray Palmer
Notary Public

My commission expires _____

STATE OF New Mexico)
COUNTY OF San Juan)

On this 2nd day of Aug 1954, before me appeared M. C. Foster to me personally known, who, being by me duly sworn did say that he is the Treasurer of Capitol Uranium Company a corporation organized under the laws of the State of Colorado and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said M. C. Foster acknowledged said instrument to be the free act and deed of said corporation.

My Commission Expires October 4, 1957

Murray Palmer
Notary Public

My commission expires _____

STATE OF _____)
COUNTY OF _____)

Before me, a Notary Public, in and for said County and State, on this _____ day of _____ 195__, personally appeared

_____

_____

_____

to me known to be the identical persons described in and who executed the within and foregoing instrument, and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

_____
Notary Public

My Commission expires _____

RECOMMENDED FOR APPROVAL Aug. 4, 1954

(Signed) Sam Ahkeah
Chairman, Navajo Tribal Council

APPROVED Oct. 15, 1954
Date

(Signed) R. D. Holtz
Assistant Area Director

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STRATEGIC MINERALS INVESTIGATIONS
PRELIMINARY MAP 3-226

SIMPLIFIED GEOLOGIC MAP
OF THE
VANADIUM REGION OF SOUTHWESTERN COLORADO
AND
SOUTHEASTERN UTAH

COMPILED BY R.P. FISCHER

1944

SCALE

2 0 2 4 6 8 10 MILES

Adjustments necessary in the compilation of the township grid from several sources have resulted in slight distortion of parts of the map.

EXPLANATION

- Qal — Alluvium; boundary shown only where it is in contact with the Morrison formation
- Post-Morrison formations
- Jm — Morrison formation; base of principal ore-bearing sandstone shown by dashed line in the areas of detailed mapping
- Pre-Morrison formations
- Fault, showing downthrown side; only faults that influence the position of the Morrison formation are shown
- Vanadium-uranium ("carnotite") deposits or group of deposits; nearly all mines or groups of mines that have yielded 1,000 or more tons of ore are named
- Copper or copper-silver mine
- Federal and State highways, surfaced
- Secondary roads, mostly unsurfaced

INDEX MAP

Salt Lake City — UTAH — COLORADO — Denver

INDEX MAP
SHOWING SOURCE OF GEOLOGY

EXPLANATION

- Uravan area: Fischer, R. P., U.S. Geol. Survey Bull. 936-P, fig. 47, 1942
- Egnar-Slick Rock area: Duncan, D.C., and Stokes, W.L., U.S. Geol. Survey unpublished report, 1942
- Monticello area: Fischer, R.P., Strobell, J.D., Jr., and Russell, R.T., U.S. Geol. Survey unpublished material
- East Gateway area: Stokes, W.L., Butler, A.P., Jr., and Russell, R.T., U.S. Geol. Survey unpublished material
- West Gateway area: Stokes, W.L., and Butler, A.P., Jr., U.S. Geol. Survey unpublished material
- Thompsons area: Stokes, W.L., U.S. Geol. Survey unpublished material
- Dane, C.H., U.S. Geol. Survey Bull. 863, pl. 1, 1935
- Baker, A.A., U.S. Geol. Survey Bull. 841, pl. 1, 1933 *(Vanadium deposits mapped in reconnaissance, 1941-1943)*
- Sample, R.D., Sullwold, H.H., Jr., and Gould, E.E., U.S. Geol. Survey unpublished report, 1943
- Mapped in reconnaissance and compiled from aerial photographs and from Coffin, R.C., Colorado Geol. Survey Bull. 16, pl. 1, 1921 *(Not all vanadium deposits are mapped)*

INDEX MAP
SHOWING TOTAL PRODUCTION OF SIGNIFICANT AREAS 1936-1943, INCLUSIVE. PRODUCTION IS EXPRESSED IN TENS OF THOUSANDS OF TONS OF ORE.

VANADIUM DEPOSITS OF SOUTHWESTERN COLORADO AND SOUTHEASTERN UTAH

By R. P. Fischer

The vanadium deposits of southwestern Colorado and southeastern Utah have been the principal domestic source of uranium and radium as well as vanadium. The accompanying map of these deposits is a compilation, based largely upon field studies made by the Geological Survey from 1939 to 1943, in the course of a general investigation of domestic vanadium resources. Much of this work was done in cooperation with the State of Colorado and the Colorado Metal Mining Fund. The field studies were greatly facilitated by generous aid received from the several mining companies and many independent mine operators.

Production.--From 1911 to 1923 these deposits were intensively mined for radium, and after 1914 some vanadium was recovered from them as a by-product. From 1924 to 1935 there was not much mining activity in the region. Since 1936 these deposits have again been intensively mined, but this time primarily for vanadium. The tonnage, expressed in tens of thousands of tons, of ore produced during 1936-43 from significant areas is shown on an index map.

The vanadium-bearing deposits in the Morrison formation are commonly referred to as "carnotite deposits," a term that has been carried over from the time of the mining operations before 1923, when carnotite was the desired mineral because of the radium it contains. "Carnotite ore" has been mined from the Morrison formation not only in the region shown on the map, but also near Meeker, Colo., near Greenriver and Hanksville, Utah, and in the Navajo Indian Reservation in Arizona and New Mexico. Similar ore has been mined from the Shinarump formation in south-central Utah and north-central Arizona, but the deposits in this formation have been generally less productive than the deposits in the Morrison. About 95 percent of all the "carnotite ore" mined during 1936-43 has come from the region shown on the map.

Large deposits of vanadium-bearing sandstone have been mined from the Entrada sandstone at Rifle and Placerville, Colo., and less productive deposits in the same formation have been worked near Rico and Durango, Colo. The deposits in the Entrada, however, are commonly referred to as "roscoelite deposits," for they contain less uranium and radium than the deposits in the Morrison and Shinarump formations.

General geology.--Much of southwestern Colorado and southeastern Utah is a ruggedly dissected plateau, in which the altitudes range from about 5,000 to 7,500 feet above sea level. The climate is semi-arid. The rocks exposed consist mainly of nearly horizontal sedimentary beds, from late Paleozoic to Tertiary in age, disturbed in places by broad folds and high-angle faults. On the map, the only individual formation that is distinguished is the Morrison, which is of Jurassic age; the formations older than the Morrison are represented collectively by one pattern, and the formations younger than the Morrison by another pattern.

In this region the Morrison formation is 500 to 900 feet thick, and it can conveniently be divided into two lithologic units of about equal thickness, but the boundary between these divisions is indistinct. The lower unit consists of massive sandstone lenses interbedded with shale. The sandstones mostly form cliffs, with steep slopes between, but benches have been cut on the sandstones in places, especially on the uppermost sandstone of this unit. The upper unit, which forms a steep slope below the cliff of the overlying Dakota (?) sandstone (Cretaceous), is composed of varicolored shales and thin beds of hard sandstone and limestone. Thick lenses of sandstone, in part conglomeratic, occur locally in both the lower and upper parts of this unit. Except for a few vanadium deposits in conglomeratic sandstone near the middle of the Morrison formation, which thus might be considered as being in the upper unit, all deposits are in the lower unit.

Stratigraphic position of the ore deposits.--In some areas the ore deposits in the Morrison are largely or wholly confined to sandstone of a certain stratigraphic zone, and wherever possible, in the areas that have been studied in detail in the course of the vanadium investigations, the outcrop of the base of the principal ore-bearing sandstone has been mapped, and is shown with a dashed line on the map. Generally speaking, the stratigraphic position of the deposits becomes progressively lower from north to south. Although this relationship probably has some genetic significance, it is not yet clearly understood. It is important, however, from the prospecting standpoint, for under certain topographic conditions it influences the position of the bed with relation to the surface.

In the Thompsons area, many of the deposits are in conglomeratic sandstone, either at the top of the lower unit or in the basal part of the upper unit, 250 to 300 feet above the base of the formation. Other deposits, however, are in sandstones lower in the formation, so that no attempt was made in this area to distinguish a principal ore-bearing sandstone. Where the Morrison crops out, the surface has low relief and bevels the gently northward dipping beds at a low angle, so that the several ore-bearing beds lie at or near the surface of a series of low benches. In the part of the region extending from Gateway southward to Slick Rock and Dry Valley, most of the deposits are in a zone of sandstone at the top of the lower unit, 200 to 300 feet above the base of the Morrison. Even though this part of the region is ruggedly dissected, the ore-bearing sandstone is bench-forming in many places and can be tested with relatively shallow holes drilled from the surface of the bench. In the canyons east of Blanding, the principal ore-bearing sandstone is about two-thirds of the way up in the lower unit of the Morrison, or approximately 150 feet above the base. It cannot be reached by shallow drill holes except in a few places, because nearly everywhere the surface rises steeply for about 100 feet from the outcrop of the ore-bearing sandstone to a bench formed on overlying barren sandstone. In Cottonwood Canyon, west of Blanding, erosion has locally cut benches on the ore-bearing sandstone, even though it occurs at about the same stratigraphic position as in the canyons east of Blanding. Around the north end of the Carrizo Mountains, about 30 miles south of the region shown on the map, the deposits are in sandstones 20 to 120 feet above the base of the Morrison. Owing to local geologic and topographic conditions, the ore-bearing sandstones are at or near the surface in wide areas.

Character of the ore deposits.--The ore is sandstone impregnated with vanadium minerals; it is mostly gray, and the color darkens as the vanadium content increases. Shale pebbles and clay films along bedding planes in the ore also contain concentrations of vanadium, and fossil plants in and adjacent to ore bodies are in places richly mineralized. As the mineral content of the ore is not uniform, selective mining is required to obtain ore of the desired grade. Vanadium ore of milling grade contains from about 1 to 5 percent V_2O_5. The ore bodies are spotty and form irregularly tabular masses that lie essentially parallel to the sandstone beds, but they do not follow the beds in detail. They range in content from a few tons of ore to many thousand tons. The ore deposits do not appear to have been localized by such geologic structures as fractures or folds.

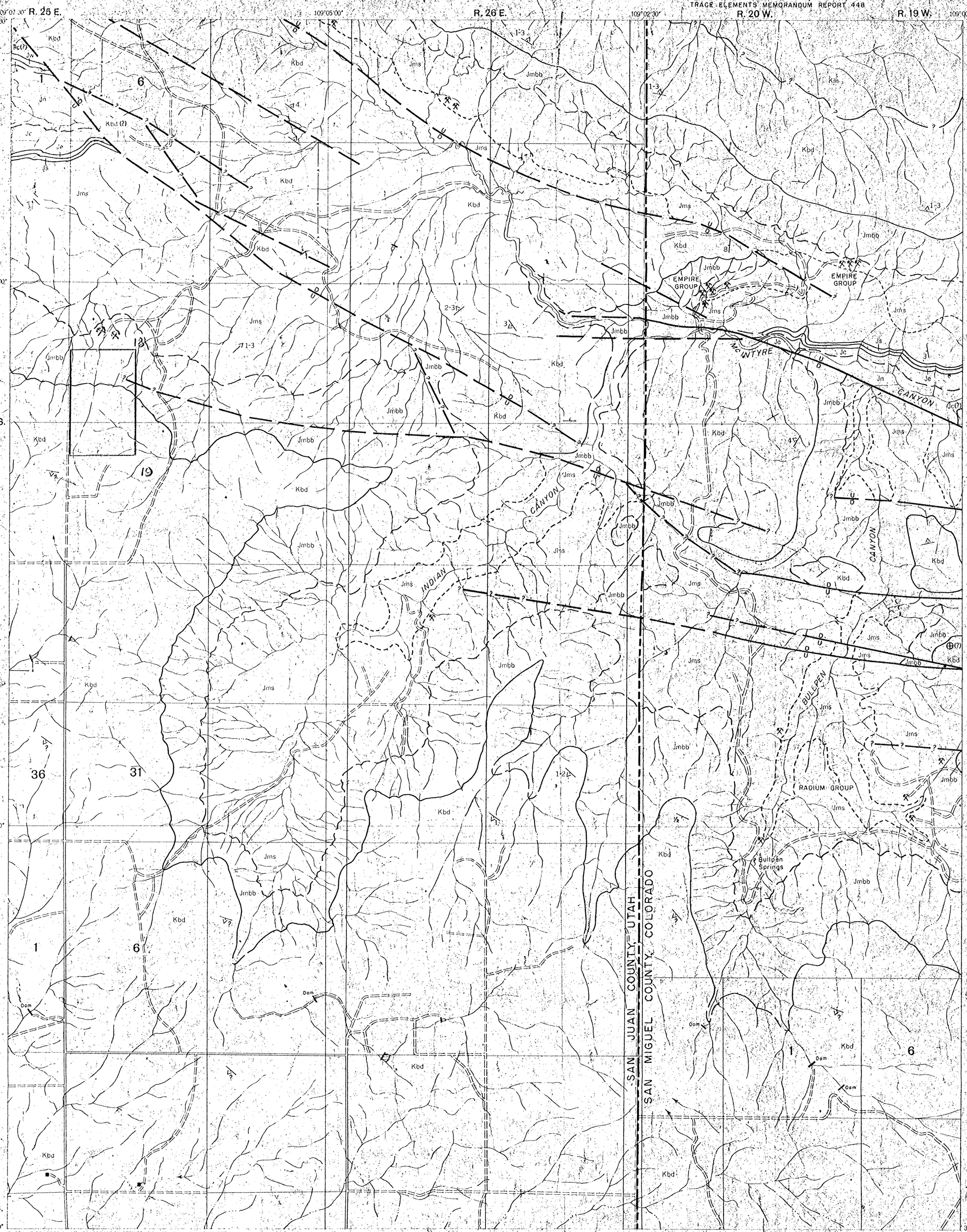
A more detailed description of the ore deposits is given by Fischer in a report entitled "Vanadium deposits of Colorado and Utah," published in U. S. Geological Survey Bulletin 936-P, 1942.

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
ATOMIC ENERGY COMMISSION

COMPILATION OF PHOTOGEOLOGY AND SURFACE GEOLOGY
COLORADO PLATEAU AREA, UNITED STATES

TRACE ELEMENTS MEMORANDUM REPORT 448



EXPLANATION

QUATERNARY
- Qal — Alluvium. Valley fill and terrace gravel

CRETACEOUS
- Km — Mancos shale
- Kbd — Burro Canyon formation and Dakota sandstone, undifferentiated (In places may be covered by thin mantle of Mancos shale (Upper Cretaceous))

JURASSIC
- Upper
  - Jmbb, Jms — Morrison formation. Brushy Basin shale member, Jmbb; Salt Wash sandstone member, Jms. Dashed line shows position of base of carnotite-bearing sandstone
  - Js — Summerville formation
  - Je — Entrada formation
- Middle
  - Jc — Carmel formation
  - Jn — Navajo sandstone
- Lower
  - Jk — Kayenta formation
  - Jw — Wingate sandstone

TRIASSIC
- Upper
  - Rc — Chinle formation

Contact (Can be accurately located within 30 feet horizontally)

Contact (Can be approximately located within 30 to 200 feet horizontally)

Contact (Cannot be located accurately; probable error greater than 200 feet)

Probable or doubtful contact

Fault (Dashed where approximately located)

Probable or doubtful fault

High-angle fault (U, upthrown side; D, downthrown side)

Strike and dip of beds (Based on field measurement)

Strike and dip of beds (Based on photo-interpretation)

Horizontal beds

Mine or quarry

Spring

Primary road

Secondary road

Trail

Fence

State boundary

BASE MAP COMPILED BY SOIL CONSERVATION SERVICE
U. S. DEPT. OF AGRICULTURE

JULY 1962

4	3	2	1
5	6	7	8
12	11	10	9
13	14	15	16

MT. PEALE QUADRANGLE

15° TRUE NORTH

PHOTOGEOLOGIC MAP
MT. PEALE - 16
UTAH - COLORADO

PHOTOGEOLOGY BY R. J. HACKMAN
PHOTOGEOLOGIC UNIT, ALASKAN GEOLOGY BRANCH

SCALE 1:24,000
0 — 1 MILE

Stratigraphic column modified from Colorado Geol. Survey Bull. 16; U. S. Geol. Survey Strategic Minerals Inv., Geologic map of vanadium region of southwestern Colorado and southeastern Utah, by R. F. Fischer, 1944; Oil and Gas Inv., Prelim. Map 93; and U. S. Geol. Survey unpublished report.