DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

DMEA NO. 4682

Application (Denied ✓
(~~Withdrawn~~
(After disposition, delete items not applicable)

Contract (Terminated - not Certified
(Cancelled
(Terminated - Certified
(Royalty Agreement

This is the official contract file containing all official records of the project. The records contained in the files are checked and are arranged in this order:

Left Side

Interim Royalty Audits
Reports of Royalty Review
Certification of Discovery
Certificate of Audit (Final)
Interim Audit(s)
Report of Review
Termination Notice or Agreement
Recision Notice
Assignment of Contract
Contract Amendments (latest on top)
Contract with all exhibits and annexes
Owner's Consent to Lien
Subordination Agreement
Leases and assignments of leases
✓ Application and attachments
(3) Envelope for maps

Right Side

Project summary
Work completed analysis
All other material is filed in chronological order with correspondence including the following reports as checked:

Final Field Team Report (Tab)
Operator's Final Report
(2R) Interim Reports
(2R) Operator's monthly reports and all attachments (latest on top)
✓ On-site Exam Report(s) (Tab)
(4) Settlement Sheets

When the volume of records is expected to warrant additional folders, or when convenience of reference warrants separate folders for certain records, they should be set up in this order:

Left Side

Folder No. 2: (In chron. order) Interim Summary Reports by W. O. Engineers

Right Side

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

Folder No. 3: Maps (Use pocket folder or envelope. Fold maps with title block out and show reference to related document or correspondence.)

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

9775

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 14 1957

DATE	INITIALS	CODE

March 11, 1957

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Four Corners Exploration Company (Flat Claims 1-6) McKinley County, New Mexico

Enclosed are the original and one copy of the subject application. One copy of the application is being forwarded to the Grand Junction Office, DMEA, and two copies are being retained in our file. The Operator submitted an extra copy; therefore, it will not be necessary for you to return a copy for field use.

The applicant proposed a three stage drilling program consisting of 31,800 feet of non-core drilling and 1,600 feet of core drilling. The proposed Stage I holes are shown on the accompanying map, but no indication is given in the application as to the number of holes or the requirements for drilling under Stages II and III. No drilling bids were submitted with the application. The description and location data for the property do not appear to be adequate. why? states SW 1/4 of sec. 32, T 13N, R 9W.

The total estimated cost for the proposed work is $47,657.50.

DMEA Field Team, Region III

E. N. Harshman

By E. N. Harshman
Acting Executive Officer

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DMEA

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

DEPARTMENT OF THE INTERIOR
MAR 11 1957
REGION III
DENVER, COLORADO

Not to be filled in by applicant

Docket No. 4682
Metal or Mineral Uranium
Date Received 3-14-57
Estimated Cost $47,657.50
Participation (Government %)

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

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: Four Corners Exploration Company
Box 116, Grants, New Mexico

Individual Ownership - Irving Rapaport, owner.

(*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 SW¼ of Section 32, T13N, R9W,
McKinley County, New Mexico.

(*b*) State any mine name by which the property is known. Flat Claims

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owner; claims filed in McKinley County Court House, N.M. Book 32, pages 49-54.

(*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.

(*e*) If you own the land, describe any liens or encumbrances on it none

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. N.M. Book 32, pages 49-54.

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. None

(*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.

see attached report

16—66551-1

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

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

(*c*) The work will start within 60 days and be completed within 10 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.

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)?

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

☐ 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 March 5, 1957

Four Corners Exploration Company
(Applicant)

By

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

IRVING RAPAPORT
FORREST FINCHER

FOUR CORNERS EXPLORATION COMPANY
BOX 116
GRANTS, NEW MEXICO

TEL. AT 7-4722

SUPPLEMENT TO FORM MF - 103

4a Physical Description of the Flat Claims located in the S.W. ¼, Section 32, T13N, R9W, NMPM.

September 3, 1957, The Four Corners Exploration Company instituted a preliminary exploration program to determine the presence and extent of Todilto formation underlying the Flat Claims. Eighteen non-core holes totaling 2121 feet were drilled which established the presence of a favorable host rock, the Todilto limestone. Uranium mineralization was found in at least trace amounts in 8 of the 18 holes drilled (see map).

This property is one of the most accessable in the Grants Mining District. It is located approximately 11 miles north of U.S. 66 along the San Mateo Road. The northwest corner of the property is located approximately ¼ mile from the San Mateo Road.

4b There has been no past production from exploration, beyond the above, on the property.

4c The Flat Claims are located on a broad, flat, treeless, alluvial plain. The most prominent geographical feature is a rather wide, sandy, southerly-trending arroyo which bisects the property. (see map I) There are no rock outcrops either on the property or in the immediate vicinity; therefore, all geological information has been interpreted from drilling done on this and adjacent ground. Drilling on the 36 line (see map I) indicates the presence of an anticlinal fold between holes A-36 and G-36. The configuration of the adjacent syncline, between holes G-36 and L-36, makes it seem likely that these structures trend northerly. Thus a very limited amount of drilling has shown the probable existence of the shallow synclinal warp which is considered to be the most useful criterion in the search for uranium deposits in limestone.

The limited drilling performed resulted in the detection by Babbel drill hole probe of low grade uranium mineralization in 8 of the 18 holes.The lack of ore is not considered negative since it has been the experience of the Four Corners Exploration Company that ore is usually found in the Todilto limestone only after favorable structures have been delineated by wide spaced drilling and said areas have been explored by drill holes on 100 and 50 foot grids. It has also been learned, from studies of ore bodies in Todilto limestone, that the haloes of uranium mineralization common in sandstone host rocks are not found peripheral to uranium ore bodies in limestone.

The ore deposits of the Todilto limestone are nearly always located in structural downwarps and may be of considerable size. Section 29, T13N, R9W, adjoining Section 32 on the north, is the site of a large orebody discovered in limestone by Westvaco. Northwest of Section 32, in Section 30, T13N, R9W, are many large ore bodies including the Flat Top Mine, 32,000 tons of .42% U_3O_8, the highly profitable operations on the Roundy Lease, and the 100,000 tone ore body on the Barbara J. Claims of the Mid-Continent Uranium Corporation.

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Reasons For Drilling the Flat Claims

1. The Flat Claims are situated south of the large north-trending Westvaco ore body in Section 29, T13N, R9W. The existence of a downwarped zone has already been proven on the Flat Claims. The known structures in this general area have proven to be extremely persistant and productive.

2. The average drilling depth is calculated to be 144.3 feet. This is less than one-third of the average depth of exploration now in progress in the Grants District. The shallow depth permits proportionately cheaper exploration, assures rapid development, and implies much lower mining costs. Alluvium directly overlies the limestone on the southern portion of these claims and a stripping operation would be feasible in this area.

3. There is no royalty on the property; even the more marginal of uranium deposits could be profitably mined.

4. There is an assurance on a good market for limestone. The Anaconda Mill and the other planned mills of the Grants District employ or will employ the carbonate leach method. The limestone ores are not only valuable for their contained uranium but are also desired for the regeneration of the leaching solution.

4d The Flat Claims are located within one-quarter of a mile of N.M. Highway 53 which is to be black-topped this year. It is about 10 miles from the A.E.C. Buying Station, 16 miles from the Anaconda Mill, and about 8 miles from the proposed Homestake Mill which will begin construction this spring.

4e The city of Grants with its population of about 6,000 provides a good supply of labor for mining operations in this area. Most of the mining and drilling supply firms now maintain supply and repair facilities in Grants. Albuquerque, New Mexico is about 80 miles via U.S. Highway 66 or the Santa Fe Railway east of Grants. Equipment and supplies of virtually any description may be bought in Albuquerque.

The Four Corners Exploration Company has been conducting mining operations on limestone ores in the Grants District for the past five years. It has also drilled well over 500,000 feet of hole both on contract and on its own properties in the past four years and is in possession of two 1500 Failing Rotary Drills. A Four Corners water well is situated about one-quarter of a mile from the Flat Claims.

5 The Exploration Project

It is proposed that the Flat Claims be explored in the following manner:

1. It is suggested that exploration be conducted by drilling through the Todilto limestone to a point approximately five feet below its base. Rotary drills employing air and water, as required, for circulation have become standard in this district.

2. It is suggested that drilling be conducted in three stages with the government's granting of subsequent stages to be dependent upon the results of prior stages.

IRVING RAPAPORT
FORREST FINCHER

FOUR CORNERS EXPLORATION COMPANY
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Stage I.

The following procedure is recommended for Stage I. exploration:
a. Five east-west lines of holes to be drilled. Holes on the line to be one hundred feet apart and the lines to be four hundred feet apart. Drilling on the line is to be begun at the western end since erosion may have removed the limestone in the southeastern portion of the claims. Limestone may not be present east of E-44 and east of E-40. It appears virtually certain that the favorable structures will trend north-south and this east-west pattern should conclusively define the zones of favorability.

b. Collect sample from a point determined to be the top of the limestone to a point approximately five foot below the base of the Todilto, in two foot intervals, with the sample placed in properly marked nail bags. This proceedure will allow the project geologist to obtain a reliable lithologic log and past experience has shown that the samples are adequate for assay purposes. It has been determined that recrystallization of the limestone and the gangue minerals, pyrite, barite, and fluorite are the the chief mineralogic criteria and these can be determined from chips as well as core. This sampling proceedure is suggested to avoid the more costly coring when on a comparatively wide-spaced grid, with the delineation of the structure and mineralogic character as the chief targets.

c. Upon the completion of a hole, it will be logged with a drill hole counter and a permanent record kept of the results.

d. The project geologist will provide accurate structure contour maps based on the Todilto-Entrada contact, and will submit all required reports and information. He will also provide a lithologic log of the Todilto formation for each hole bottomed.

Following the logging of the sample and the collection of sample that may be of lithologic interest, or contain significant mineralization, it is suggested that the remainder of the sample be left at the holesite to avoid an unnecessary materials handling problem. Each sample should weigh about 34 pounds.

Stage II.

The purpose of Stage II. is to more closely define any structures encountered in Stage I.. Should a major ore body be present, significant mineralization should be found during this stage. It is suggested that 100 foot centers be used in Stage II.

Stage III.

The purpose of Stage III. is to determine the trend of the mineralization discovered in Stage II. It is proposed that drilling on 100 and 50 foot centers be used for this purpose. It is also suggested that core be taken through limestone during this stage.

5d Project geologists are to be I. Rapaport and F. Fincher. Mr. Rapaport has been continuously engaged in the uranium industry for the past 8 years. Mr. Fincher has in charge of exploration projects in the Grants District and elsewhere on the Colorado Plateau for the past 5 years.

IRVING RAPAPORT
FORREST FINCHER

FOUR CORNERS EXPLORATION COMPANY
BOX 116
GRANTS, NEW MEXICO

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6 Estimate of Costs

Stage I.

Bulldozing of access roads 50hours @ $12.50/hour	625.00
15,300 feet of non-core drilling @1.25/foot	19,125.00
50 chemical assays @ $4.00/assay	200.00
Total Stage I.	19,950.00

Stage II.

Bulldozing 30 hours @ 12.50/hour	375.00
10,000 feet of non-core drilling @$1.25/foot	12,500.00
50 chemical assays @ 4.00/foot	200.00
Total Stage II.	13,075.00

Stage III.

Bulldozing 15 hours @ 12.50/hour	187.50
6,500 feet of non-core drilling @ 1.25/foot	8,125.00
1,600 feet of core drilling @ 3.70/foot	5,920.00
100 chemical assays @ 4.00/assay	400.00
Total Stage III.	14,632.50

Estimated Total Cost of Project $47,657.50

Drilling Includes:
1) Direct drilling costs including supply of water (estimated 5,000 gallons per shift) and circulating agents (bran, mud, ect.)
2) Supervision of Project.
3) Core logging, sample logging, and gamma ray logging.
4) Surveying.
5) Sampling.
6) The preparation and reprinting of maps and reports.
7) Accounting.

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D M E A
RECEIVED MAR 14 1957

DATE	INITIALS	CODE

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/20	Murphy	700
6/20	Ellis	700
6/21	Kloodie	130
6/21	Lanik	130
6/21	Nelson	130
"	Jones	110
"	Mittendorf	100
6/24	C	220
		[redacted]

225

JUN 24 1957

Four Corners Exploration Company
Box 116
Grants, New Mexico

Re: Docket No. DMEA-4682 (Uranium)
Flat Claims
McKinley County, New Mexico

Gentlemen:

Your application for aid in an exploration project and other information available to us in Washington concerning the above-named property have been reviewed.

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 indicates that the probability of disclosing significant ore reserves is not sufficiently promising to justify Government participation. 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 Exploration Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

FMMurphy/izm 6-20-57
cc to: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
DMEA FT Reg. 3 (2)

8623

Docket

Murphy
Ellis

June 20, 1957

Summary of Proposed Project

Object: Denial of application for exploration aid.

Docket No.: DMEA-4682

Commodity: Uranium

Amount of Application: $47,657.50

Applicant: Four Corners Exploration Company
Irving Rapaport, owner
Box 116, Grants, New Mexico

Property: Owner Flat claims Nos. 1 through 6, situated in SW¼ sec. 32, T. 13 N., R. 9 W., N.M.P.M., McKinley County, New Mexico.

Date of Application: March 5, 1957

Referred to Region III: March 27, 1957

Field Examination made: April 10, 1957

Field Team Report received: June 14, 1957

Work Proposed: 31,800 feet of non-core and 1,600 feet of core drilling in three stages to explore the Todilto limestone said to underly the claims.

Estimated Costs:

Stage I		
Bulldozing 50 hrs. @ $12.50/hr.	$625.00	
15,300 ft. non-core drilling @ $1.25/ft.	19,125.00	
50 chemical assays for U_3O_8 @ $4/each	200.00	$19,950.00
Stage II		
Bulldozing 30 hrs. @ $12.50/hr.	$375.00	
10,000 ft. non-core drilling @ $1.25/ft.	12,500.00	
20 chemical assays for U_3O_8 @ $4/each	200.00	$13,075.00
Stage III		
Bulldozing 15 hrs. @ $12.50/hr.	$187.50	
6,500 ft. non-core drilling @ $1.25/ft.	8,125.00	
1,600 ft. core drilling @ $3.70/ft.	5,920.00	
100 chemical assays for U_3O_8 @ $4/each	400.00	$14,632.50
Total Estimated Cost of Project		$47,657.50

Excerpts from Field Team Report:

The claims are in the Grants Mining District, covering the southern fringe of the San Juan Basin, and lie in an alluvial plain dissected by a southerly trending arroya.

The potential ore-bearing Todilto limestone is not exposed on the claims but it crops out about ½ mile to the northwest. Quaternary alluvium and blow sand blanket the area and form a relatively flat surface with an average altitude of 6,930 feet. Prior drill hole data indicate that the Todilto limestone on the claims ranges in thickness from a few feet to 40 feet and locally may be erroded. The average depth of the proposed drill holes is estimated to be 140 feet.

The Applicant drilled a total of 18 barren holes, aggregating 2,121 feet, on the claims to determine the presence and extent of the Todilto limestone and to find what was referred to as "favorable structures." The Applicant failed to mention that 252 holes were drilled elsewhere on sec. 32.

The examining team could not find sufficient evidence of the so called "favorable structures" in the Todilto limestone on the basis of the 18 holes drilled. A rather large amount of drilling on and adjacent to sec. 32 indicates that ore bodies if present on the Applicant's claims are apt to be small and discontinuous and not economical.

The field examiners and Field Team recommend the application be denied.

Commodity Member's Comments: (excerpts)

USGS, N. E. Nelson, June 17, 1957:

In view of the unfavorable results of the drilling on and adjacent to the subject claims, Mr. Nelson concurs in the Field Team's recommendation to deny the application.

USBM, James Paone, June 18, 1957:

Mr. Paone concurs in the Field Team's recommendation that the application be denied.

Div. of Rare & Misc. Metals, F. M. Murphy, June 20, 1957:

The data submitted by the field examiners indicate there is little possibility that ore bodies of significant size might be present on the subject claims as in their opinion the 18 holes drilled on the claims show no evidence of the "favorable structures" mentioned in the application.

CONCLUSION AND RECOMMENDATIONS:

This Division agrees with the conclusions of the field examiners in regard to the ore potential of the subject claims and therefore concurs

in their recommendation that application DMEA-4682 should be denied.

Ernest Wm. Ellis

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

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RECEIVED JUN 19 1957

DATE	INITIALS	CODE
6/19	C	220
"	Murphy	700

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

Date: June 18, 1957

DMEA Docket No. 4682
DMEA Contract No.
Commodity Uranium
Name of applicant Four Corners Exploration Co.
Name of property Flat Claims
Location of property McKinley County, New Mexico
Estimated cost of project $47,657.50

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

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

1. Date of subject document: 5/57. 2. Date received by reviewer: 6/17/57

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

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

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

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

7. Explain items marked yes above:

8. Factors needing special consideration:
- a. Location ☐
- b. Ownership ☐
- c. Evidence of mineralization ☐
- d. Geology ☐
- e. Proposed exploration method ☐
- f. Alternate exploration method ☐
- g. Costs ☐
- h. _____ ☐

9. Action advised:
- a. Obtain information from applicant ☐
- b. Refer to Field Team ☐
- c. Denial [x]
- d. Agree with Field Team [x]
  - i. Consult with Mr. _____ at _____ AEC office.
- e. Disagree with Field Team ☐
- f. Suggest alternate plan ☐
- g. Request another examination ☐
- h. Approval ☐

10. Remarks: (Use back of page if necessary)

IN REPLY REFER TO:

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

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 18 1957

DATE	INITIALS	CODE
6/18	JWD	220
"	FMM	700

June 17, 1957

Re: DMEA 4682
Four Corners Exploration Company
Flat Claims
McKinley County, N. Mex.
$47,657.50 - 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 a 3-stage exploratory drilling project, searching for possible deposits in the Todilto limestone.

The limestone does not outcrop on the referenced claims and no suggestion of a favorable structure appears to have been found by 18 drill holes put down by the applicant. Also 252 holes on adjoining properties indicated only one small favorable structure.

In view of the unfavorable results of the drilling, the examiners and Field Team recommend that the application be denied.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

June 12, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 14 1957

DATE	INITIALS	CODE
6/14	C	220
		130
6/18	JWS	220
"	FMM	700

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 4682 (Uranium) Four Corners Exploration Company (Flat Claims) McKinley County, New Mexico

Enclosed are the original and three copies of the Joint Report of Examination on the subject property by Carl Belser, USBM, and W. B. Gazdik, USGS.

The field examiners conclude that the probability for making a significant discovery is not sufficiently promising to justify Government participation. Accordingly they recommend that the Applicant's work proposal be denied to which the Field Team concurs.

ON-SITE EXAM

W H King
W. H. King
Executive Officer

Reviewed by
DMEA OPERATING COMMITTEE
6-17-57
(date)

OFFICIAL FILE COPY
DME
RECEIVED JUN 14 1957

DATE	INITIALS	CODE

DEPARTMENT OF THE INTERIOR
JUN 7 - 1957
REGION III
DENVER, COLORADO

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

IN REPLY REFER TO:

JUN 6 1957

GEOLOGICAL SURVEY
DENVER, COLORADO

June 5, 1957

TRANSMITTED
JUN 12 1957

Memorandum

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

Through: E. N. Harshman EMH
A. S. Konselman ASK

From: J. William Hasler

Subject: Transmittal of joint engineering and geologic report on Four Corners Exploration Company, DMEA docket 4682 (Uranium), Flat claims, McKinley County, New Mexico.

Enclosed are 12 copies of a joint engineering and geologic report denying a request for Government assistance to explore the Flat claims owned by the Four Corners Exploration Company, Grants, McKinley County, New Mexico.

The applicant applied to the DMEA for assistance to explore for uranium deposits on the above-mentioned group of claims in McKinley County, New Mexico, on March 5, 1957. The application was referred to the field and an examination was made on April 10.

The area under consideration consists of six unpatented claims lying immediately east of the San Mateo road in the SW$\frac{1}{4}$ of sec. 32, T. 13 N., R. 9 W. The application was for exploring the Todilto limestone of Jurassic age. The limestone does not crop out on the property and prior drilling data indicates that the limestone on the property ranges from a few feet to 40 feet in thickness, lying at an average depth of 140 feet. The applicant drilled 18 holes aggregating 2,121 feet, all of which were barren. Their attempt was to find favorable structural evidence for ore disposition. The applicant did not mention that 252 holes had been drilled elsewhere on sec. 32 and the examining team could not find sufficient evidence of the so-called favorable structures in the Todilto limestone on the basis of the 18 holes that had been drilled. A rather large amount of drilling on their claims adjacent to sec. 32 indicates that ore bodies, if present on applicant's claim, are accepted to be small and discontinuous and may not even be of ore grade. Because of these unfavorable criteria, it is recommended that the application be denied. I concur with the recommendations of the examining team.

The Atomic Energy Commission was consulted relative to the appraisal of the property and memoranda by J. E. Crawford, U. S. Bureau of Mines, and W. P. Williams, U. S. Geological Survey, were noted.

Reviewed by
DMEA OPERATING COMMITTEE
6-17-57

DMEA 4682 6/5/57

Enclosed are 12 copies of figures 1, 2, and 3 (attached to report) and the brochure.

J. William Hasler
J. William Hasler,
Geologist

JWH/mlr

Enclosure
12 reports w/maps
Brochure

FOR UNITED STATES GOVERNMENT USE ONLY

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

TRANSMITTED

JUN 12 1957

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 14 1957

DATE	INITIALS	CODE
		130
		220

DMEA 4682

Four Corners Exploration Company

Flat Claims

McKinley County, New Mexico

Uranium

Joint Engineering and Geologic Report

by

W. B. Gazdik
U. S. Geological Survey

Carl Belser
Bureau of Mines

May 1957

Reviewed by
DMEA OPERATING COMMITTEE
6-17-57
(date)

DMEA 4682
FOUR CORNERS EXPLORATION COMPANY
FLAT CLAIMS
McKINLEY COUNTY, NEW MEXICO

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DATE	INITIALS	CODE

DMEA 4682
FOUR CORNERS EXPLORATION COMPANY
FLAT CLAIMS
McKINLEY COUNTY, NEW MEXICO

INTRODUCTION AND SUMMARY

On March 5, 1957, Four Corners Exploration Company, Box 116, Grants, New Mexico, applied for DMEA aid to explore for uranium deposits on the Flat claims in McKinley County, New Mexico.

A three-stage project requiring 31,800 feet of non-core drilling and 1,600 feet of core drilling at a total estimated cost of $47,650.00 is proposed by the applicant.

A field examination was made on April 10, 1957 by a DMEA examining team consisting of W. B. Gazdik and J. William Hasler, U. S. Geological Survey, and Carl Belser, U. S. Bureau of Mines, accompanied by Mr. Forrest Fincher who represented the applicant.

The area under consideration consists of 6 unpatented claims lying immediately east of the San Mateo road in the SW¼ sec. 32, T. 13 N., R. 9 W., NMPM. The ore-bearing Todilto limestone is not exposed on the property but it crops out about 1/2 mile to the northwest. Quaternary alluvium and blow sand blanket the area and form a relatively flat surface with an average altitude of 6,930 feet. Prior drill hole data indicate that the Todilto limestone on the claims ranges in thickness from a few feet to 40 feet and locally may be eroded. The average depth of proposed drill holes is estimated to be 140 feet.

The applicant drilled a total of 18 barren holes aggregating 2,121 feet on the property to determine the presence and extent of the Todilto limestone and to find what was referred to as "favorable structures" in the ore-bearing limestone. The company geologists failed to mention that 252 holes were drilled elsewhere on sec. 32.

The examining team could not find sufficient evidence of so-called "favorable structures" in the Todilto limestone on the basis of the 18 holes drilled on the claims. A rather large amount of drilling on and adjacent to sec. 32 indicates that ore bodies if present on the applicant's claim are apt to be small and discontinuous and not economical. Denial of the application is therefore recommended.

ACKNOWLEDGEMENTS

Personnel of the Atomic Energy Commission were consulted relative to appraisal of the property and memorandums by J. E. Crawford and W. P. Williams were noted.

LOCATION, TOPOGRAPHY, AND CLIMATE

The Flat claims are in the SW¼ sec. 32, T. 13 N., R. 9 W., NMPM, McKinley County, New Mexico. They lie at an average altitude of 6,930 feet (fig. 1). The area is an alluvial plain, dissected by a southerly trending arroya. The climate is semi-arid and work can be carried on throughout the year.

The San Mateo graveled road is one-fourth mile west of the claims and extends southerly, 11 miles where it meets U. S. Highway 66 at a point 3 miles east of Grants, New Mexico, a station on the Atcheson, Topeka, and the Santa Fe railroad. An ore-buying depot is near the junction of the San Mateo road and U. S. Highway 66. The Bluewater mill is 16 miles to the west over a good surfaced road. An REA transmission line is along the west side of the property.

Labor and materials can be obtained at Grants, and water can be obtained from the applicant's nearby well.

HISTORY AND PRODUCTION

The 6 Flat claims were recorded by the Four Corners Exploration Company on August 31, 1956, and drilling started September 3, 1956. Eighteen non-core holes were drilled, of which 8 are said to have penetrated rock having slight uranium mineralization. Defense Minerals Exploration assistance was requested on March 5, 1957.

No ore production has come from the property.

OWNERSHIP AND EXTENT

The 6 unpatented Flat claims are recorded in the office of the County Clerk and Recorder of McKinley County as follows:

Claim	Book	Page	Date recorded	Locator		
				64%	16%	20%
Flat No. 1	32	49	8/31/56	I. Rapaport,	F. Fincher,	and L. Hanosh
2	"	50	"	"	"	"
3	"	51	"	"	"	"
4	"	52	"	"	"	"
5	"	53	"	"	"	"
6	"	54	"	"	"	"

The records appear to be in good order.

PRESENT STATUS

Exploration and Development

The claims have been explored by 18 drill holes aggregating 2,121 feet of non-core drilling.

Mining and Milling Equipment and Other Facilities

The applicant has its own drilling equipment but there was no equipment on or near the property at the time of the examination.

GEOLOGY

The Grants Mining district lies on the southern fringe of the San Juan Basin. The rocks exposed in the general area consist of marine and terrestrial formations ranging in age from Permian to Upper Cretaceous. A late Tertiary sequence of acidic pyroclastics and basic flows are present locally. Pre-Cambrian rocks crop out in the Zuni Uplift to the south. This broad asymmetrical dome trends in a northwesterly direction and extends from Grants, New Mexico on the east to Gallup, New Mexico on the west.

The beds in the district dip generally northward, at a low angle, into the San Juan Basin. The rocks are folded broadly and high-angle north- and northeast-trending faults with minor displacement are common. A well developed joint set trends north while other joints trend generally east.

Productive uranium deposits in the district are contained in a sequence of sedimentary rocks of Jurassic and Cretaceous age. These sediments in ascending order are the Entrada sandstone, Todilto limestone, Summerville formation, Bluff sandstone and Morrison formation of Jurassic age, and the Dakota sandstone, Mancos shale and Mesa Verde group of Cretaceous age. Significant uranium deposits occur in the Todilto and Morrison formations. This report will be concerned only with Todilto limestone deposits.

The ore-bearing Todilto limestone, which the applicant proposes to explore, is not exposed on the property (fig. 3). Erosional remnants of the overlying Summerville formation covered with alluvium and unconsolidated blowsand blanket all of section 32.

According to the applicant, the Todilto limestone underlying the Flat claims ranges in thickness from a few feet to 40 feet although locally, the limestone may be eroded. It consists of dark gray fetid limestone that in some places is recrystallized. A few thin partings of calcareous shale and siltstone are included in the limestone and the bedding in the limestone is partly wavy. Larger anticlinal folds are present in the Todilto but do not appear to be reflected in overlying

strata. The trend of the folds is generally north, but locally the trend may be east-west. A series of step-like faults of minor displacement appear to be present in the vicinity of the Flat claims and apparently caused the Todilto limestone to be preserved in this area while it was eroded on the upthrown side a short distance to the west (fig. 3).

ORE DEPOSITS

Known ore deposits in the Todilto limestone tend to occur mostly as long sinuous masses. Mineralized rock consists of blebs and crystals of uranium minerals disseminated in the limestone and to a lesser extent along joint surfaces and bedding planes. Common oxidized uranium minerals are tyuyamunite and carnotite but less oxidized minerals are also present.

No reliable geologic guides to Todilto deposits are known, however. In the vicinity of ore deposits, the limestone appears to be more crystalline than away from ore deposits and disseminated iron oxides, in some cases, seem to form small halos around ore bodies. These altered zones do not materially increase the width of the drilling target but are of some help in following mineralized trends. The lack of suitable guides to ore and the long sinuous nature of the deposits make it necessary to explore the Todilto limestone by drilling relatively close-spaced holes on fence lines essentially normal to the long axis of inferred ore bodies.

U. S. Geological Survey personnel in the Grants area estimate that there are about 200 Todilto deposits that range up to 1,000 tons, 15 in the 1,000 to 10,000 ton class, 12 that range from 10,000 to 20,000 tons and 3 that may be over 50,000 tons. Some of these deposits, north and northwest of the Flat claims, are shown in figure 3. The deposits are relatively thick, commonly averaging 6 or 7 feet, consequently considerable tonnages of ore are developed from deposits of small areal extent. The grade of the ore runs from 0.10 to 0.50 percent U_3O_8 and may average well above 0.30 percent.

The applicant drilled 18 holes on the Flat claims. All of the holes were essentially barren although 8 of the holes reportedly penetrated trace amounts (less than 0.02 percent U_3O_8) of mineralized rock. Although requested to do so by the field examiners, the applicant failed to submit lithologic logs of these holes. The company geologists also neglected to mention that a relatively large number of holes had been drilled on section 32 immediately northeast of the Flat claims and in the northwestern part of the section (fig. 2). After the field examination had been made and the usual investigative work on the property was being carried out in the Grand Junction office, it was found that the applicant had drilled a total of 252 holes in sec. 32 in addition to the 18 holes drilled on the Flat claims. This additional drilling was not very successful although a small deposit containing an estimated 1,200 tons averaging 0.25 percent U_3O_8 was found about 1,200 feet northeast of the Flat claims (fig. 2). A large number of holes on 100-foot

centers were also drilled on the northern end of sec. 31 adjoining sec. 32 on the west with discouraging results (fig. 3). This drilling tends to indicate that ore deposits where present in the immediate vicinity of the applicant's claims are apt to be small and discontinuous in contrast to the relatively large deposits, with a high frequency of occurrence, that are found north and northwest of the applicant's claims (fig. 3).

SAMPLING AND ORE RESERVES

Cuttings from the holes drilled in September 1957, showed little or no radioactivity when tested with a scintillation counter. The applicant reports that 10 of these holes were barren and that the other 8 holes indicated slight uranium mineralization.

There are no known ore reserves on the property.

PROPOSED EXPLORATION

The applicant's proposed exploration program consists of 31,800 feet of non-core drilling and 1,600 feet of core drilling in three stages costing an estimated $47,650.00.

The drilling project is based on the premise that favorable structures in the Todilto limestone trend north-south across the Flat claims. It is hardly possible on the basis of only 18 holes, most of which were drilled on an east-west fence line, that a suitable contour map could be drawn on the base of the Todilto limestone. The

applicant's assumption that favorable structures exist on the property is, therefore, questionable.

A drilling program is not presented by the field examiners because prior drilling on and in the vicinity of the Flat claims indicates that the chances of finding significant ore deposits on the claims are poor.

APPLICANT'S ESTIMATE OF EXPLORATION COSTS

The applicant proposed a three-stage project in which the drilling costs include supplying water, supervision, logging of holes, surveying, sampling, reports, and accounting. Only independent contract and assaying categories are shown. The applicant's estimated costs follow:

Stage I

Independent contracts

Bulldozing 50 hrs at $12.50/hr.	$ 625.00	
15,300 ft of non-core drilling at $1.25/ft	19,125.00	
Total independent contracts		$19,750.00
50 chemical assays at $4.00 each		200.00

Stage II

Bulldozing 30 hrs at $12.50/hr.	375.00	
10,000 ft of non-core drilling at $1.25/ft	12,500.00	
Total independent contracts		12,875.00
50 chemical assays at $4.00 each		200.00

Stage III

Independent Contracts

Bulldozing 15 hrs at $12.50/hr.	$ 187.50	
6,500 ft non-core drilling at $1.25/ft.	8,125.00	
1,600 ft core drilling at $3.70/ft.	5,920.00	
Total independent contracts		$14,232.50
100 chemical assays at $4.00 each		400.00
Total estimated cost of independent contracts for project		$46,857.50
Estimated cost per foot of drilling (33,400 feet)		$ 1.40
Total chemical assays 200 at $4.00 each		800.00
Total estimated cost of project		$47,657.50

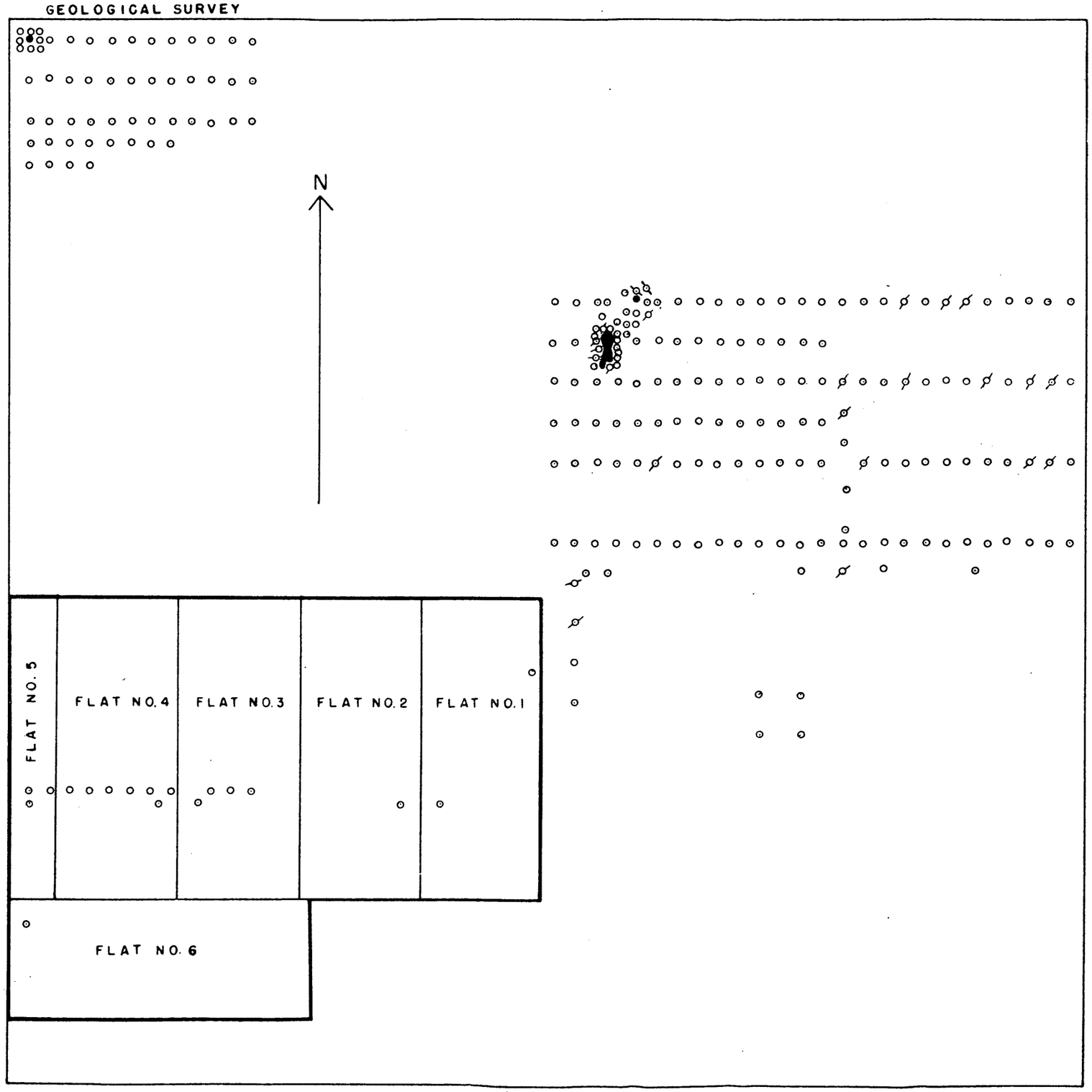
Estimated costs presented by applicant are not excessive.

CONCLUSIONS AND RECOMMENDATIONS

On the basis of a rather large number of holes drilled on and adjacent to the applicant's claims in sec. 32, it is concluded that the Flat claims lie outside of the favorable area of Todilto limestone on the north and northwest (fig. 3). The ore deposits to the north are relatively large and have a high frequency of occurrence in contrast to the infrequent occurrence of mineralized ground in the vicinity of the applicant's claims. The chances of finding ore deposits of significant size and grade on the Flat claims are considered poor. It is recommended therefore that the application be denied.

U S DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
MAY 1957 DOCKET 4682



EXPLANATION

DRILL HOLES

- BARREN
- WEAKLY MINERALIZED
- ORE BEARING (0.10% U_3O_8 OR HIGHER, 1 FOOT OR MORE THICK)
- ORE BODY
- BOUNDARY OF APPLICANT'S CLAIMS

NOTE: CLAIM LINES AND COMPANY HOLES FROM APPLICANT'S MAP.

600 0 600 1200 FEET

Figure 2. SKETCH MAP OF SECTION 32, T. 13 N., R. 9 W., N.M.P.M. SHOWING EXISTING DRILL HOLES AND APPLICANT'S CLAIMS, FOUR CORNERS EXPLORATION COMPANY, McKINLEY COUNTY, NEW MEXICO.

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U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
MAY 1957
DOCKET 4682

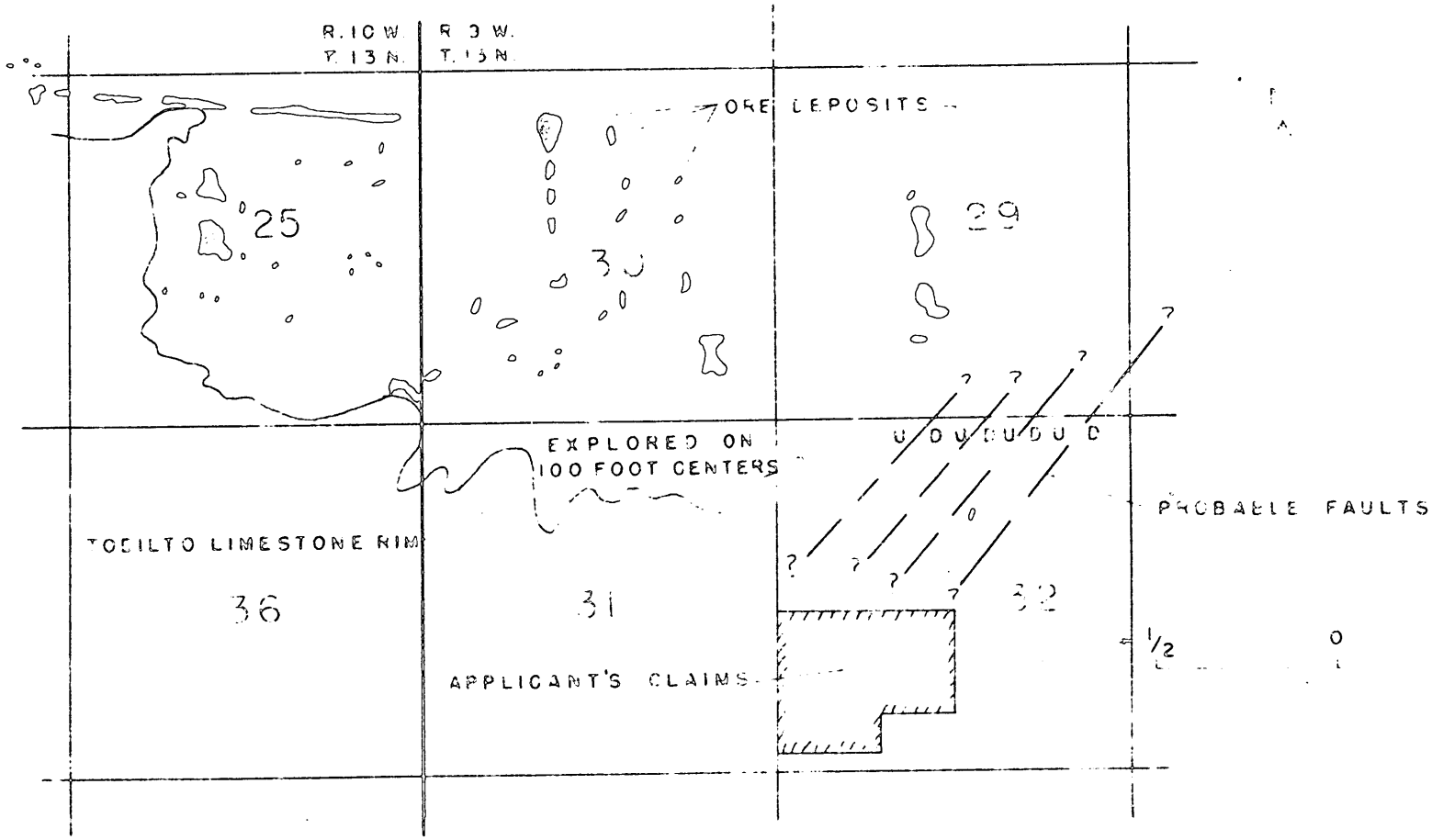

FIGURE 3. SKETCH MAP SHOWING KNOWN ORE DEPOSITS IN THE TODILTO LIMESTONE IN THE VICINTY OF THE APPLICANT'S PROPERTY, FOUR CORNERS EXPLORATION COMPANY, McKINLEY COUNTY, NEW MEXICO.

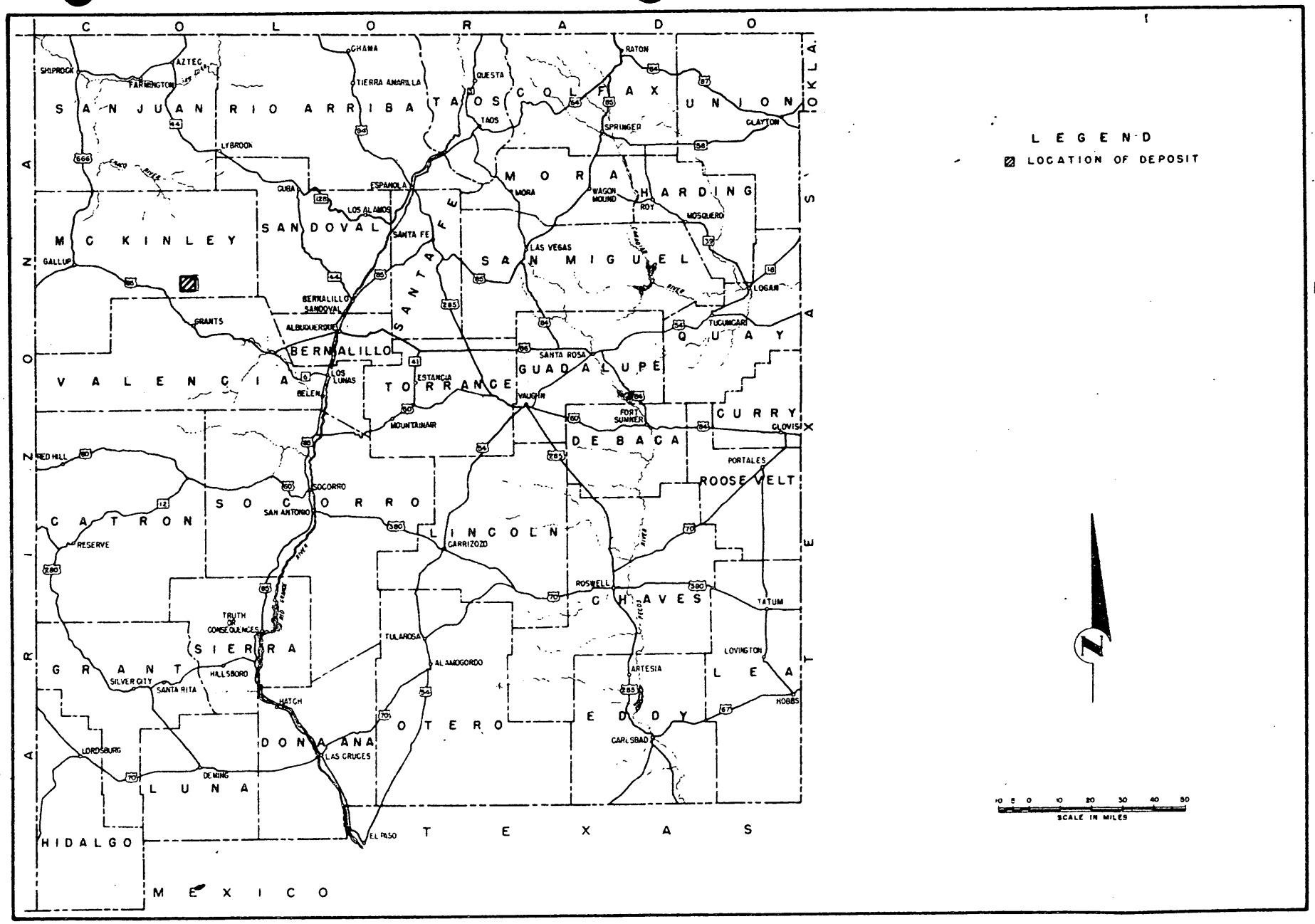

FIGURE 1 - LOCATION MAP, FLAT CLAIMS, FOUR CORNERS EXPLORATION COMPANY, McKINLEY COUNTY, NEW MEXICO. DMEA 4682

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DATE	INITIALS	CODE

DMEA
DEPARTMENT OF THE INTERIOR

APR 4 - 1957
REGION III
DENVER, COLORADO

April 4, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Reg. III

From: Superintendent, Denver Experiment Station Reg. III

Subject: Docket DMEA 4682 (Uranium) Four Corners Exploration Co., (Flat claims) McKinley County, New Mexico

The application for Four Corners Exploration Company, Docket DMEA 4682, in the amount of $47,657.50, was received in this office on April 4, 1957.

A field examination will be made and suitable report prepared by an engineer from the Denver or Grand Junction office.

W. H. King

cc: Executive Officer (2)
E. H. Harshman
M. K. Salsbury
J. W. Hasler
J. F. Shaw

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" Murphy 700

WO (2)

OFFICIAL FILE COPY
DMEA
RECEIVED APR 5 1957

DATE		CODE
4/5	C	220
4/11	Maple	700

224 New Customhouse
Denver 2, Colorado

April 2, 1957

Memorandum

To: W. H. King, (w/enclosures 1-5 inclusive)
E. N. Harshman, (w/enclosures 2, 3 and 4)

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

Subject: Docket MF-4682 (Uranium) Four Corners Exploration Company, (Clay claim) McKinley County, New Mexico

Enclosed is the following material relating to the subject docket:

1. Copy of application for Government assistance in exploration work under the MEA program.

2. Memorandum of Review dated March 19, 1957 by John W. Crawford, BLM.

3. Memorandum of Review dated March 20, 1957 by W. P. Williams, USGS.

4. Letter of transmittal of the foregoing to this office, dated March 27, 1957 from the Chairman, Operating Committee, MEA.

5. Routing control sheet.

You are requested to submit a joint report of recommendations based on available information, or to examine the property and submit a joint report of the findings and recommendations.

If the examiners view the proposal favorably they are to instruct the applicant to submit to this office bids from three independent drilling contractors for the proposed drilling.

If Government assistance is to be recommended, twelve extra copies are required of each map used in the joint report which show the

land to be subordinated, and the location and extent of the recommended work in relation to the property boundaries.

The Bureau of Mines copy of the application is to be returned to this office with the joint report of examination. The U. S. G. S. copy of the application is to be returned to Mr. Harshman's office.

Original signed by
J. W. TOWNSEND
J. W. Townsend

Enclosures

JWC:hh

cc: Sec. Op. Comm. (2)
Hasler)
King, extra copy) w/enclosures
Docket-4682) 2, 3 and 4
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/25	Murphy	700
"	Elia	700
3/27	Selfridge	130
"	Johnson	110
"	Butterfield	100
3/28		220

Wilsgard
Lamb

MAR 27 1957

Four Corners Exploration Company
Box 116
Grants, New Mexico

Re: Docket No. DMEA-4682 (Uranium)
Flat Claims
McKinley County, New Mexico

Gentlemen:

The application for assistance in exploring your claims, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred to:

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

The Regional Office will contact you in regard to your project if additional information is required.

Sincerely yours,

C. O. Mittendorf

Administrator

FMMurphy/gla
3-25-57
cc to: Admr.'s Reading File
Code 700, Mr. Murphy
DMEA Field Team, Region III (2)

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/25	Murphy	700
"	Ellis	700
3/27	Selfridge	130
"	Johnson	110
"	Matthews	100
		220

MAR 27 1957

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

Re: Docket No. DMEA-4682 (Uranium)
Four Corners Exploration Company
Flat Claims
McKinley County, New Mexico

Dear Mr. Harshman:

The captioned application is referred to Region III Field Team for investigation, a field examination if deemed advisable, and recommendations.

Enclosed are copies of memoranda, dated March 19 and 20, 1957, by J. E. Crawford, USBM, and L. F. Williams, USGS, respectively, relating to the application. We note that you have retained an extra copy of the application.

Your comments regarding the lack of certain data in the application are also noted. However, as the Applicant states the holes will average 144.3 feet in depth, and the proposed second stage holes are to further explore structures encountered by previous drilling, it appears that the essential data has been submitted.

In the event the Field Team believes a project to explore the subject claims is warranted, it should advise the Applicant that we will require copies of bids from three independent contractors for the proposed drilling, even though the Applicant may wish to do the drilling with its own equipment and personnel.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GLB)

Enclosures

FMMurphy/gla
3-25-57
cc to: Admr.'s Reading File
Operating Committee
Code 700, Mr. Murphy
T. H. Kiilsgaard, 5224

APPROVED:

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

Thor H. Kiilsgaard (GLB)
Member, Geological Survey

8623

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

March 20, 1957

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	~~Ellis~~	700
	Comments	
	Complete	

Memorandum

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

From: W. P. Williams, U. S. Geological Survey

Subject: Review of application, DMEA 4682, Four Corners Exploration Company, Flat claims, McKinley County, New Mexico, (uranium)

The applicant proposes to explore for uranium ore deposits on the Flat claims, comprising a quarter section in the productive Grants district.

The applicant has drilled 18 non-core holes on the property, none of which appear to have penetrated ore although eight are mineralized.

The property seems to be fairly well located with regard to proximity of producing areas. Inasmuch as there are no outcrops on the claims, possibly the best means of evaluating the property would be through careful study of drill logs (which have not been submitted) and any bit cuttings that might be available.

The Acting Executive Officer, Region III, has noted other deficiences in the application such as lack of a firmer proposal for Stage II and III, lack of drilling bids, and location data, although legal subdivision and county recordation data are given.

Referral to the Field Team is indicated; however, the applicant should probably be asked to supplement the application first.

W. P. Williams

W. P. Williams

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"	Ellis	700
✓		

March 19, 1957

DMEA Report No. 4682
DMEA Contract No.
Commodity Uranium
Name of applicant Four Corners Exploration Co.
Name of property Flat Claims 1-6
Location of property McKinley Co., New Mexico
Estimated cost of project $47,657.50

Ernest William Ellis, DMEA Member
Uranium Commodity Committee
John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Application
(Application, Field Exam Report,)

Date project started 3/5/57. Date rec'd by DMEA 3/18/57

Is data on the property known to exploration: Yes [ ] No [ ]

Is data on similar properties known to exploration: Yes [ ] No [ ]

Information available on post production: Yes [ ] No [ ]

Other significant factors known to exploration: Yes [ ] No [ ]

Explain items marked yes above:

Factors entering special consideration:
a. Location [ ]
b. Geology [ ]
c. Evidence of mineralization [ ]
d. Geology [ ]
e. Proposed exploration method [ ]
f. Alternate exploration method [ ]
g. Costs [ ]
h. [ ]

Action official:
a. Obtain information from applicant [ ]
b. Refer to Field Team [X]
c. Reject [ ]
d. Agree with Field Team [ ]
e. Disagree with Field Team [ ]
f. Suggest alternate plan [ ]
g. Request another examination [ ]
h. Approval [ ]
i. Consult with Mr. _____ at _____ AEC office.

Remarks: (Use back of page if necessary)
Appears to be prospecting

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

March 14, 1957

Four Corners Exploration Company
Box 116
Grants, New Mexico

Subject: DMEA-4682
Re: Exploration Assistance

Gentlemen:

Your application for exploration assistance, dated March 5, 1957 submitted to our office at Denver, Colorado has been assigned Docket Number DMEA-4682 and referred to the Rare & Miscellaneous Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

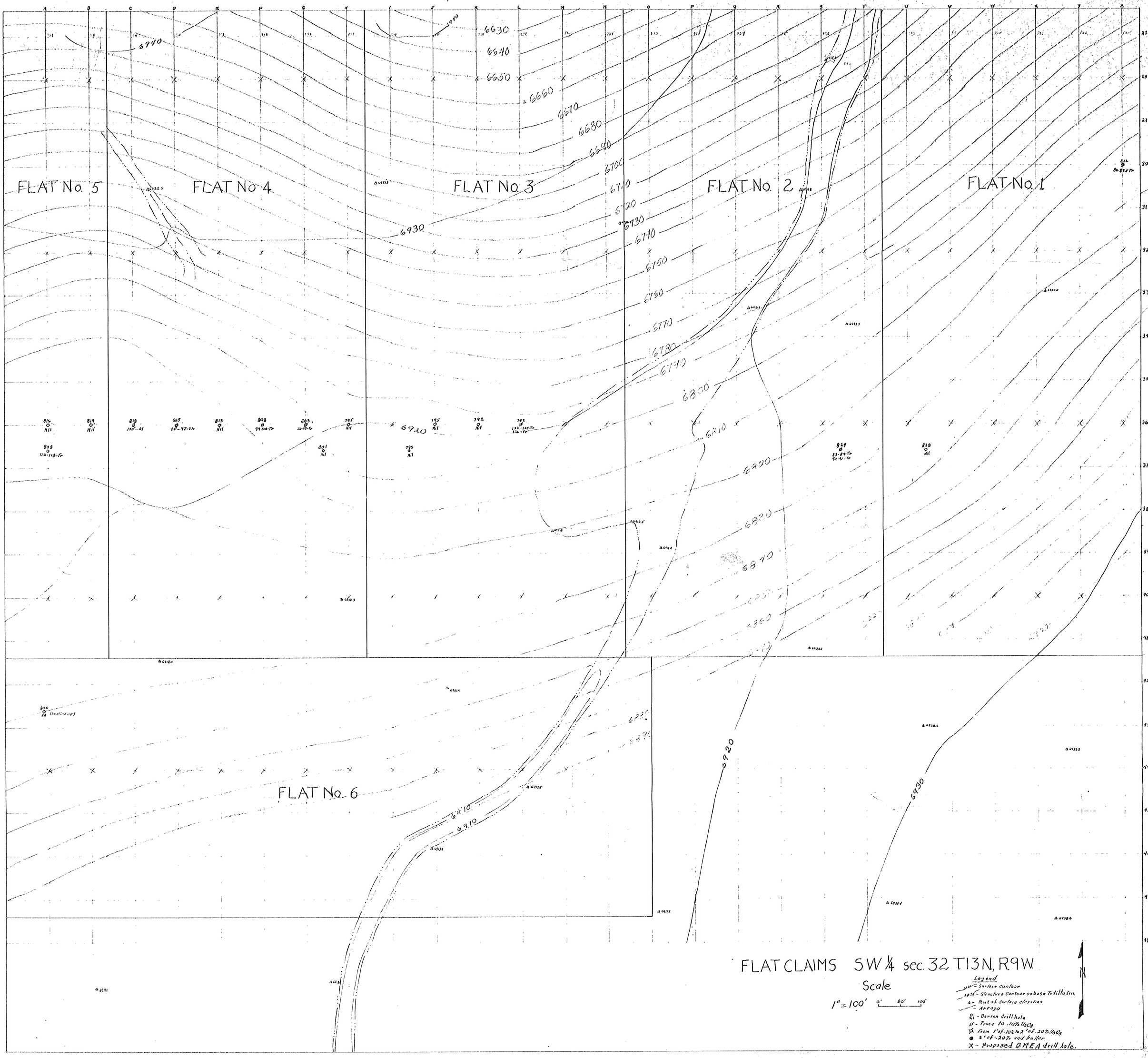
Allen S. Dakan, Chief
Operations Control and
Statistics Division

Copy to: Region III

3571

EQUIT 157 HOWARD ST.
SPOKANE 4, WASHINGTON

Mr. George C. Selfridge
Chairman, Operating Committee
Defense Minerals Explor. Admin.
Department of the Interior
Washington 25, D. C.



FLAT CLAIMS SW 1/4 sec. 32 T13N, R9W.

Scale

1" = 100'