700

FILE COPY

Surname:
Murphy
Kiilsgaard
Yorke
Mattson
Zimmerman

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

JUN 19 1956

Great Western Minerals Company
Bass Building, Box 1188
Enid, Oklahoma

Re: Docket No. DMEA-4316 (Uranium)
Polecat Claims
Grand County, Utah

Gentlemen:

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

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 to us that the probability of disclosing significant ore reserves on your property 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. However, this denial is made without prejudice. If future limited drilling on your or adjacent properties reveals evidence which could materially alter this opinion, be assured we will be pleased to consider a new application.

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

Sincerely yours,

G. O. Mittendorf

Administrator

FMMurphy/izm 6-18-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
DMEA Field Team, Reg. III (2)
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

Docket Copy

700

Summary of Proposed Project

June 18, 1956

Object: Denial of application for exploration aid.

Docket No.: DMEA-4316

Applicant: Great Western Minerals Company
Bass Building, Box 1188
Enid, Oklahoma

Property: Lessee of Polecat claims 1 through 11, situated in secs. 4, 8, 9, 16, and 17, and Utah State Mineral Lease No. 5147 covering the N½ of sec. 16, all in T. 25 S., R. 20 E., S.L.B.M., Grand County, Utah

Date of Application: May 11, 1956 (received May 25)

Amount of Application: $6,750.00

Field Team Report: May 25, 1956, recommended denial of application without a field examination.

Work Proposed: Drill 11 holes totaling an estimated 2,750 feet, to ascertain whether or not the Moss Back member of the Chinle formation exists in the area covered by the property.

Estimated Costs:

2,750 ft. of core & non-core drilling at an average of $1.60/ft.	$4,400.00
Supervision, 30 days @ $20/day	600.00
Consultant, 7 days @ $100/day	700.00
Road building, bulldozer, 1 day	100.00
Surveying, 1 day @ $100/day	100.00
Gasoline	50.00
Contingencies	150.00
Drill Hole Probe Assembly (Purchase Price)	650.00
TOTAL	$6,750.00

Excerpts from Memorandum, May 22, 1956, to Executive Officer from F. M. Byers, Jr., USGS, in which denial without prejudice is recommended:

> The Moss Back member of the Chinle formation is the potential uranium-bearing unit in the area, however, on the subject claims it is covered by the Wingate and Kayenta members. The proposed holes are located in the bottom of a canyon where erosion has lessened the drill hole depth required to reach the inferred Moss Back member.

A hole, drilled by Hunt Oil Company about one mile west of the Polecat Nos. 1 and 3 claims, collared in Wingate, was 614 feet deep, showing weakly radioactive carbon at 517 feet.

Mr. Byers concludes that because of the complete lack of detailed geologic information or knowledge of mineralized ground on or adjacent to the Applicant's property, the proposed drilling would be strictly prospecting, and therefore recommends denial of the application without prejudice. Mr. Byers, also recommends that the Applicant be advised that his application would be reconsidered if further drilling on or adjacent to his property should disclose the presence of mineralized ground or geologic favorable host rock.

The Field Team concur in recommending a denial without prejudice.

Commodity Members' Comments:

USBM, J. E. Crawford, May 31, 1956:

Mr. Crawford agrees with Mr. Byers that the proposed work is prospecting and concurs in the recommendation to deny the application without prejudice.

USGS, N. E. Nelson, June 13, 1956: Agrees with Mr. Byers, and concurs in this recommendation to deny the application without prejudice.

F. M. Murphy, Rare & Miscellaneous Metals, Div., June 18, 1956:

For the reasons stated above this Division concurs in the Field Team's recommendation.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

6-15-56

IN REPLY REFER TO:

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

RECEIVED
JUN 15 1956

June 13, 1956

Re: DMEA 4316
Great Western Minerals Co.,
Polecat Claims and N½
School Sec. 16
Grand Co., Utah
$6,750.00 - Uranium

Memorandum

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

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

Subject: Review of application

In a memorandum dated May 22nd, 1956, Mr. Byers of the Grand Junction office recommended denial of the subject application without a field examination.

The reasons for denial appear ample. No outcrops of radioactive materials occur on the claims and the Moss Back member of the Chinle formation, if present, is about 250 feet below the surface in the floor of the canyon, the scene of the deepest natural erosion.

General similarity of conditions here and those at mines and prospects down canyon prompts the belief that ore may be found on the referenced lands and is advanced in support of the application.

Drilling by the applicant to prove the presence of the Moss Back member may be justifiable, but, as the target is very general, should be considered prospecting.

I consider the reasons for denial of the application without an examination sufficient and concur with the recommendation to that effect.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

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

RECEIVED
JUN 1 1956

June 13, 1956

re: DC 4316
Great Western Minerals Co.,
Element Claims and Sch
School Sec. 16
Grand Co., Utah
$6,750.00 - Premium

Memorandum

To: [illegible] Mills, Defense Minerals Exploration Administration

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

Subject: Review of application

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W. S. Nelson

Wmelusnibtr
0 6/13/56

cc: J. A. Crawford
J. D. Hosted
Director's reading file
Branch reading file
DC 4316 (3)
Chron. file
Pocket file

W. S. Nelson

IN REPLY REFER TO:

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

RECEIVED
JUN 1 5 1956

June 13, 1956

re: DOF A316
Great Western Minerals Co.,
Element Claims and N½
School Sec. 16
Grand Co., Utah
$6,750.00 - Uranium

Memorandum

To: . . Ellis, Defense Minerals Exploration Administration

From: H. . Nelson, U. . Geological Survey

Subject: Review of application

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I consider the reasons for denial of the application without an examination sufficient and concur with the recommendation to that effect.

N. S. Nelson

N. Nelson:btr
G 6/13/56

cc: J. . Crawford
J. O. Hosted
Director's reading file
Branch reading file
DMA (3)
Chron. file
Docket file

H. . Nelson

IN REPLY REFER TO:

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

RECEIVED
JUN 1 5 1956

June 13, 1956

Re: DMEA 4316
Great Western Minerals Co.,
Select Claims and Sch
School Sec. 16
Grand Co., Utah
$6,750.00 - Uranium

Memorandum

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N. E. Nelson

N. Nelson:btr
G 6/13/56

N. . Nelson

cc: J. . Crawford
J. Q. Hosted
Director's reading file
Branch reading file
DMEA (3)
Chron. file
Docket file

6-1-56

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

May 31, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

Subject: Application for Assistance, DMEA Docket 4316, Great Western Minerals Company, (Polecat claims and N½ School Section 16, T. 25 S., R. 20 E.), Grand County, Utah

I have reviewed the attached application for assistance, DMEA Docket 4316, Great Western Minerals Company, (Polecat claims and N½ School Section 16, T. 25 S., R. 20 E.), Grand County, Utah, dated May 11 and received in this office May 29, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant is desirous of exploring for uranium on 11 claims near Moab, Utah, by 2,750 feet of core and non-core drilling at a total estimated cost of $6,750.

As presented, the program is a prospecting venture inasmuch as little is known about the subsurface geology of the claims.

We concur in the recommendation that the application be denied without prejudice.

John E Crawford
John E. Crawford

Attachment

RECEIVED
MAY 31 1956

May 31, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

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John E. Crawford

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MAY 31 1956

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To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

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As presented, the program is a prospecting venture inasmuch as little is known about the subsurface geology of the claims.

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John E. Crawford

Attachment

RECEIVED
MAY 31 1956

5/28

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

RECEIVED
MAY 28 1956

May 25, 1956

224 New Customhouse
Denver 2, Colorado

DMEA-4316

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Great Western Minerals Company, (Polecat claims and N½ School Section 16, T. 25 S., R. 20 E., Grand County, Utah

Enclosed are two copies of the subject application in the amount of $6,750.00. Also enclosed is the only copy of the Lease Agreement and the Assignment of the Lease on the subject property.

This application was submitted to the Grand Junction office, and it is assumed that they kept one copy of the application. One copy of the application is being retained in our file.

Also enclosed are the original and three copies of a review of the application by members of the Grand Junction office. They recommend that this application be denied without a field examination. They further recommend that the Applicant be informed that his application would be reconsidered if further drilling on or adjacent to his property should disclose the presence of a mineralized target area or favorable geologic host rock.

The review of this application by members of the Grand Junction office, DMEA, indicates that there has been previous correspondence regarding these claims or this area between Thor H. Kiilsgaard and H. S. Johnson. We have no knowledge of this previous correspondence and have no alternative than to concur with the recommendations of the field.

DMEA Field Team, Region III

Enclosures

J. W. Townsend

By J. W. Townsend
Acting Executive Officer

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 360
Grand Junction, Colorado

May 22, 1956

RECEIVED
MAY 28 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman DRM for ENH
J. F. Shaw JFS
J. William Hasler JWH

From: F. M. Byers, Jr.,

Subject: Recommendation for denial without field examination, DMEA docket 4316 (Uranium), Great Western Minerals Co., Polecat claims and N½ School sec. 16, T. 25 S., R. 20 E., Grand County, Utah.

The subject application proposes a drilling program on ground whose eastern boundary is 2.2 miles southwesterly up Seven Mile Canyon from U. S. Highway 160 at the Dead Horse Point turn-off about 12 miles north of Moab, Utah.

The property is underlain by Wingate, Kayenta, and Uppermost Chinle formations on the southwest flank of the Moab anticline.

Mr. Robert L. Rock, mining engineer representing the applicant, states in the application that the potential uranium-producing bed, the Moss Back member of the Chinle formation, is not exposed on the property and that consequently any drilling undertaken would be quite speculative. He proposes, however, an initial or first-stage drilling program consisting of drill holes collared in the Chinle formation on parts of the Polecat Nos. 1 and 3 claims in order to test whether or not the Moss Back is present.

Such a proposal has merit on strictly geologic grounds, and a similar proposal has already been made by H. S. Johnson of the Geological Survey in a memorandum dated January 16, 1956, to Thor H. Kiilsgaard. In the reply to Johnson, dated March 7, 1956, Kiilsgaard indicated that more subsurface drilling information would be needed on which to base an exploration program, rather than geologic theory based on analogy with other districts. The nearest drill hole, according to Johnson (personal communication May 16, 1956), is in the north fork of Seven Mile Canyon about one mile west of the Polecat Nos. 1 and 3 claims where the applicant proposes initial drilling. This hole, drilled by Hunt Oil Company, was collared in Wingate formation, was 614 feet deep, and penetrated 345 feet of Chinle containing sandstone from 505 to 542 feet with weakly radioactive carbon at 517 feet. This drill hole, presumably too far away, would

probably not have much bearing on the possibility of mineralized rock underlying the applicant's property.

Because of the complete lack of detailed geologic information or knowledge of mineralized ground on or adjacent to the applicant's property, the proposed drilling would be strictly prospecting. It is therefore recommended that the applicant's proposal for drilling with DMEA assistance be denied without a field examination. However, it is further recommended that the applicant be informed that his application would be reconsidered if further drilling on or adjacent to his property should disclose presence of mineralized ground or favorable geologic host rock.

Three copies of the application and accompanying maps are forwarded herewith.

F. M. Byers Jr. by JWA.
F. M. Byers, Jr.,
Geologist

FMB/mlr

Enclosures

May 28, 1956

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 - 4316 Great Western Minerals Co.

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

May 28, 1956

Great Western Minerals Co.
Bass Bldg. Box 1188
Enid, Oklahoma

Subject: DMEA-4316
Re: Exploration Assistance
Polecat Claims

Gentlemen

The receipt of your application dated May 11, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4316 and referred to the Rare & Misc. 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.

[redacted]

RECEIVED

May 25, 1956 MAY 28 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Great Western Minerals Company, (Polecat claims and N½ School Section 16, T. 25 S., R. 20 E., Grand County, Utah

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DMEA Field Team, Region III

Enclosures

By J. W. Townsend
Acting Executive Officer

MINERAL DEPOSITS
IN REPLY REFER TO:
DMEA
RECEIVED
MAY 23 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO
DMEA
Date Rec'd.
MAY 24 1956
BUREAU OF MINES
Denver, Colorado

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

RECEIVED
MAY 28 1956

May 22, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman DMM for ENH
J. F. Shaw JFS
J. William Hasler JWH

From: F. M. Byers, Jr.,

Subject: Recommendation for denial without field examination, DMEA docket 4316 (Uranium), Great Western Minerals Co., Polecat claims and N½ School sec. 16, T. 25 S., R. 20 E., Grand County, Utah.

The subject application proposes a drilling program on ground whose eastern boundary is 2.2 miles southwesterly up Seven Mile Canyon from U. S. Highway 160 at the Dead Horse Point turn-off about 12 miles north of Moab, Utah.

The property is underlain by Wingate, Kayenta, and Uppermost Chinle formations on the southwest flank of the Moab anticline.

Mr. Robert L. Rock, mining engineer representing the applicant, states in the application that the potential uranium-producing bed, the Moss Back member of the Chinle formation, is not exposed on the property and that consequently any drilling undertaken would be quite speculative. He proposes, however, an initial or first-stage drilling program consisting of drill holes collared in the Chinle formation on parts of the Polecat Nos. 1 and 3 claims in order to test whether or not the Moss Back is present.

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Because of the complete lack of detailed geologic information or knowledge of mineralized ground on or adjacent to the applicant's property, the proposed drilling would be strictly prospecting. It is therefore recommended that the applicant's proposal for drilling with DMEA assistance be denied without a field examination. However, it is further recommended that the applicant be informed that his application would be reconsidered if further drilling on or adjacent to his property should disclose presence of mineralized ground or favorable geologic host rock.

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F. M. Byers, Jr. by JLH
F. M. Byers, Jr.,
Geologist

FMB/mlr

Enclosures

IN REPLY REFER TO:

MINERAL DEPOSITS
DMEA
RECEIVED
MAY 23 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
MAY 28 1956

GEOLOGICAL SURVEY
DENVER, COLORADO

P. O. Box 360
Grand Junction, Colorado

May 22, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman ENH for ENH
J. F. Shaw
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F. M. Byers, Jr. by DLB
F. M. Byers, Jr.,
Geologist

FMB/mlr

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd
MAY 24 1956
BUREAU OF MINES
Denver, Colorado

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

RECEIVED
MAY 28 1956

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-4316
Metal or Mineral URANIUM
Date Received 5/28/56
Estimated Cost $6,750.00
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:

Great Western Minerals Co.
Bass Bldg. Box 1188
Enid, Oklahoma

(*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. Oklahoma

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

(*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 supplementary sheet

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

(*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.

(*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. see supplementary sheet

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

(*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. see geologic report

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

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

16—66551-1

See supplementary sheet

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

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

(c) The work will start within 15 days and be completed within 2 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. see supplementary sheet

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

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

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(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)? 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 May 11, 1956, 195__

Keith M. Hensel
(Applicant)

By Great Western Minerals Co.

Keith M. Hensel, sec. treas.

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

GEOLOGIC REPORT OF THE POLECAT CLAIM GROUP, SEVEN MILE CANYON, GRAND COUNTY, UTAH

RECEIVED
MAY 28 1956

By: Robert L. Rock
Mining Engineer

24 April 1956

The Polecat claim group belonging to the Great Western Minerals Corporation was recently examined by myself. The 11 claims comprising the group are located in the South Fork of Seven Mile Canyon, Grand County, Utah.

In addition to these claims, the Great Western Minerals Corporation holds a 10 year lease on the north half of school section 16, T25S, R20E, which is contiguous with the claims on the south. (see accompanying claim map) The property is accessible by traveling only two miles west of U. S. Highway 160 from the Dead Horse Point turn-off. The property is 12 miles north of Moab, Utah and about 20 miles south of Crescent Junction, Utah.

Four of the claims are located in the bottom of the south fork of Seven Mile Canyon, where drilling would be comparatively shallow. The canyon cuts down into the Chinle Formation on the Polecat No. 3 claim and on the northeast half of the Polecat No. 1 claim. The Wingate Formation is exposed by the canyon on Polecate No. 4, 5 and 2 claims. The remainder of the claimed and leased area is surfaced by the Jurassic Kayenta Formation. (See accompanying drill proposal map)

The potential uranium producing bed, the Mossback Member of the Chinle Formation, is not exposed on the property so any drilling undertaken will be quite speculative. It must be remembered, however, that many of our largest producing ore bodies were discovered by theoretical geology in

conjunction with speculative drilling.

The general structure of the area is similar to that of nearby ore bodies, namely, the Thornburg deposit 4 miles to the northeast. Both areas are on the upthrown block of the Moab Fault and on the southwest flank of the Moab Anticline. The Moab Anticline influences the bedding on the Polecat property to dip about 3 degrees to the southwest.

I recommend an initial exploration drilling program in the shallow ground to test for the presence of the Mossback Member. The holes, as laid out on the accompanying map, will average about 250 feet in depth and will utilize about 2,750 feet of drilling. If the Mossback member is present and shows favorable characteristics, the initial drilling should be supplemented by tightening the pattern to seek localizing channels and possible ore bodies.

Should the Mossback member not be present in this shallow ground, I would consider the remainder of the property economically immune to exploration in lieu of more tangible ore guides.

Drill sites for the recommended project can be easily built from the roads which now exist.

Core should be taken from critical sections in the initial stage of drilling to insure that advantage is taken of all the lithologic information obtainable. By closely comparing elevations of the basal Mossback contact with the underlying Moenkopi Formation, between holes it may be possible to recognize a subsurface channel. Core will afford a much better opportunity for selecting contacts and for lithologic logging than would cuttings.

Water for drilling is available from a spring at the north end of the property.

Respectfully submitted,

Robert L. Rock

RLR:dj

Robert L. Rock, Mining Engineer

SUPPLEMENTARY SHEET
TO DMA FORM NO 103

C O P Y

1 (c) J. Morgan Harris, President..2777 F.Road Grand Junction,Colo.
Dr. A.S.Kincade, 1st.Vice Pres. 120½ No. Indep. Enid, Okla.
John R. Miller, 2nd Vice Pres. Caldwell, Kansas
Keith M. Hensel, Sec. Treas. Bass Bldg. Enid, Okla.

3 (f)

Polecat #	1,	book	9N	Page	364	Grand	County,	Utah
"	2,	"	9N	"	365	"	"	"
"	3,	"	9N	"	366	"	"	"
"	4,	"	9N	"	367	"	"	"
"	5,	"	9N	"	368	"	"	"
"	6,	"	28N	"	266	"	"	"
"	7,	"	56	"	169	"	"	"
"	8,	"	56	"	170	"	"	"
"	9,	"	56	"	171	"	"	"
"	10,	"	56	"	226	"	"	"
"	11,	"	56	"	227	"	"	"

SUPPLEMENTARY SHEET
TO DMEA FORM MF 103

3 (a) Area enclosed by metes and bounds from:

SE Corner of Sec. 9T25S, R20E of SL.B and M. 2040' West to point of beginning; thence 1500' North; thence 2930' West; thence 180' N44°16'W; thence 1500' N 44°44'E; thence 300' N44°16'W; thence 600' N88°27'E; thence 1360' N45°41'E; thence 1500' N31°50'E; thence 630' N44°16'W; thence 1500' S31°50'W; thence 1360' S45°41'W; thence 600' S88°27'W; thence 1200' S44°16'E; thence 1500' S44°47'W; thence 1500' S22°10'W; thence 1200' S44°16'E; thence 210' N22°10'E; thence 3130' East to point of beginning.

SUPPLEMENTARY SHEET
TO DMEA FORM MF 103

4. (a) No mining operations have been conducted on the property. Only a few shallow holes have been drilled to fulfill assessment requirements. These holes were too shallow to reach the horizon of the Mossback Member of the Morrison Formation.

(b) No production has been realized from the property and no reserves are known.

(c) See Geologic Report.

(d) The property is two miles west of US Highway 160 at a point 20 miles south of Crescent Junction. The property is only 12 miles from Moab, Utah where the uranium mill is located. Supply and residential areas are also located in Moab.

(e) Manpower, materials, supplies and equipment are available in Moab, Utah. Water is available from a spring at the northeast margin of the property. Electrical power is available on US 160, 2 miles east of the property.

5. (d) The Great Western Minerals Company owns property on Tenderfoot Mesa, Mesa County, Colorado and has been actively participating in uranium speculation for over a year. Mr. Robert Rock, writer of the geologic report contained in this application, has five years experience in uranium mining and exploration and will be available to supervise the project.

6. Costs:

2,750 feet of contract drilling at an average of $1.60/foot for core and non-core drilling	$4,400.00
Supervision, 30 days @ $20/day	600.00
Consultant, 7 days @ $100/day	700.00
Road Building (Contract) 1 day@$100/day	100.00
Surveying, 1 day @ $100/day	100.00
Gasoline	50.00
Contingencies	150.00
Drill Hole Probe Assembly (Purchase Price)	650.00
Total - - - - - - - -	$6,750.00

Book 660, Page 294 Recorded at 2:25 o'clock P.M., Sept 12, 1955
Reception No. 646676 Annie M. Dunsten, Recorder.

LEASE AGREEMENT

THIS AGREEMENT made and executed by and between RICHARD E. COWGER, party of the first part, and ARDIS S. KINCADE AND KEITH M. HENSEL, parties of the second part, WITNESSETH:

That first party claims the right and possession of eleven (11) certain unpatented mining claims, known as Polecat Nos. 1 to 11, situate in Sections 4, 8, 9, 16 and 17 in Township 25 South, Range 20 East, SLB & M, and is the owner of Utah State Mineral Lease No. 5147, covering the North Half of Section 16, Township 25 South, Range 20 East, SLM; that said lease is executed by the State Land Board of Utah to Queen Mary Mines, and Queen Mary Mines is a trade name used and owned by first party herein,

AND, WHEREAS second parties desire to lease all of first parties right, title and interest in said claims, and secure a sub-lease of the said Mineral Lease No. 5147,

NOW THEREFORE, in consideration of the payment of $1500.00 by second parties to first party, the receipt whereof is hereby acknowledged, and in further consideration of the agreements and payments between the parties, and to be made by second parties, it is agreed as follows, to-wit:

1. First party grants to second parties a lease for a period of ten years from the date hereof, and as long thereafter as ore is produced, on Polecat Nos. 1 to 11 inclusive, and sub-leases all of First Parties' right, title and interest in and to Utah State Mineral Lease No. 5147; made and entered into with the State Land Board of Utah, together with all subsequent extensions and renewals thereof, subject to the provisions and conditions hereinafter set out, to be performed by second parties.

2. Second parties agree, during the term of said lease, that they will annually perform all necessary and required assessment work on said claims, and each of them, and in apt time file proper affidavits of labor as are required by the Federal Laws and the State of Utah. Second parties further agrees that if, at any time, they should determine to surrender this lease, that they will either perform the assessment work and file affidavits for the year ending July 1st following such surrender, or, make such surrender and give written notice thereof to first part, addressed at Grand Junction, Colorado, not less than 60 days prior to said July 1st.

3. Second parties agree to comply with all the terms of said Utah State Lease, and make such annual payments to the State of Utah as may be required, and from all ore receipts from said State Lease Land to pay to the State of Utah the required 12-1/2% royalty; and First Parties hereby agree to furnish second parties with a copy of said lease.

4. Second parties further agree that if, at any time, they should desire to surrender such State Lease, they will notify first party of their intention at least 60 days before such surrender, in order that first party may protect his ownership in said lease.

5. Parties of the second part agree to make such exploration on the above described mining claims as they shall determine to be advisable, and to make a minimum of exploration and improvement on said State Lease Land as required by law to reserve said Lease.

6. In the event that ore shall be found in commercial quantity on the above named mining claims, second parties agree to pay first party a 15% royalty thereon. Said royalty is more definitely defined as being 15% of the receipts from all ore sold, and 15% of all bonus payments, but shall not include haulage or development allowances.

7. In the event commercial ore shall be mined from the said State Lease, second parties agree to pay to first party a 2-1/2% royalty on all ores sold and all bonus payments, but not to include haulage or development allowances, in addition to the 12-1/2% royalty that second parties agree to pay to the State of Utah.

8. Second parties agree to take out, carry and maintain full Industrial Insurance with the Utah Industrial Commission, for any and all persons employed in or upon said premises by second parties, and to conduct all operations so as to comply fully with the laws of the State of Utah relating to mining safety regulations, and in every other res

RECEIVED
MAY 28 1956

and to comply with all State and Federal Laws, and to pay all taxes of every kind or nature levied against the said property or the ores produced therefrom, including specifically, but without limitation, all production and severance taxes.

9. Second parties further agree that in the event said property, or any part thereof, is mined, that all mining shall be done in a good, minerlike fashion, in an effort to diligently take out so much ore as can reasonably be produced, and protect said property from loss or damage by improper operation, and upon the termination of this lease by a lapse of time, or by cancellation, to leave said property in good, first-class condition, and second parties shall be entitled to remove all machinery and equipment belonging to second parties, but shall not remove any interior structures reasonable necessary for the protection and further operation of said mine or mines.

10. Second parties agree to furnish first party, from time to time, as compiled and prepared, copies of all maps, reports and other data resulting from the examination and investigation of such mines, mining claims and mining property, and to allow first party, or his agent, from time to time, to enter into and upon said mining claims and mining property for purpos s of inspection, sampling and general investigation.

11. Second parties agree to install and maintain complete books of account covering all phases of development and operation of the mines, mining claims and mining property, which shall be open to the inspection of first party at any and all reasonable times, and during such period or periods as mine or mines shall be operated upon said premis s; to furnish first party a monthly report of all operations and to pay, or cause to be paid to first party monthly, by the ore purchaser, such royalties as shall be payable under the terms hereof.

12. It is agreed that upon violation of any covenant or covenants hereinafter reserved this lease, at the option of first party, shall expire, and first party or his agent may thereupon after 30 days due notice by registered mail in writing to second parties, addressed to second parties at Grand Junction, Colorado, or to such other address as may later be furnished in writing by second parties, and provided the deficiency complained of in said notice have not been cured within said 30 day period, first party may enter upon said premises and dispossess all persons occupying the same, and first party, in case of such cancellation, shall retain all considerations theretofore received by him as liquidated damages for non-performance, provided second parties shall have the right to remove their machinery and equipment during the period of 60 days after such determination, without the right, however, to remove interior mining structures of any nature, exterior ore bins or other improvements of a permanent nature.

13. Second parties warrant that they have performed all acts and filed all instruments necessary to validate their rights in and to the aforenamed claims and lease and that they have the right to lease said claims and assign said lease.

This lease shall be binding upon the heirs, executors, administrators, and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals on this 12th day of September, 1955

/s/ R. E. Cowger
First Party
/s/ Keith M. Hensel
Ardis S. Kincade
Second Parties

State of Colorado, County of Mesa, ss:

On this 12th day of September, 1955, before me, the undersigned, personally appeared Richard E. Cowger, and acknowledged to me that he executed the above lease freely and voluntarily , for the uses and purposes therein set forth. In Witness Whereof, I have hereunto set my hand and affixed my official seal the day and year first above written.

/s/ James W Macksley Notary Public

My commission expires: April 26, 1958
(SEAL)

Copy

ASSIGNMENT OF LEASE

Copy

COPY

RECEIVED
MAY 28 1956

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, Keith Hensel, Ardis Kincade, Grant Hensel, John Miller, Wayman Matlock, and Morgan Harris, for and in consideration of the issuance of Two Hundred Seventy-two Thousand Three Hundred (272,300) shares of the capital stock of the Great Western Minerals Co., an Oklahoma corporation with its principal place of business in Enid, Oklahoma, receipt of which is hereby acknowledged, have granted, assigned, and transferred, and by these presents do grant, assign, and transfer unto the said Great Western Minerals Co., its successors, trustees, and assigns, all of our right, title, and interest in and to the lease executed by Richard E. Cowger, dated the 12th day of ~~August~~ September 1955, and recorded in Book 660 of Records, at Page 294, records of Mesa County, Colorado, and also recorded in Book ___ of _____, at Page ____, records of _____ County, State of Utah, said lease covering the following described real property, to-wit:

> Polecat Nos. 1 through 11, inclusive, situate in Sections Four (4), Eight (8), Nine (9), Sixteen (16) and Seventeen (17), in Township 25 South, Range 20 East, SLB&M, State of Colorado, and
>
> Utah State Mineral Lease No. 5147 covering the North Half (N/2) of Section Sixteen (16), Township 25 South, Range 20 East, SLM, State of Utah.

WE do hereby assign all of our estate, right, title and interest in and to said lease to Great Western Minerals Co., an Oklahoma corporation.

TO HAVE AND TO HOLD the said leased property and the appurtenances thereunto belonging, unto the said Great Western Minerals Co.,

its successors, trustees and assigns, for the residue of the term mentioned in said lease, the said Great Western Minerals Co., an Oklahoma corporation, to pay all rentals and perform all covenants named in said lease.

WITNESS our hands this _____ day of _____, 19____.

_____
Keith Hensel

_____
Ardis Kincade

_____
Grant Hensel

_____
John Miller

_____
Wayman Matlock

Morgan Harris
_____
Morgan Harris

State of Oklahoma)
)ss:
County of Garfield)

Before me, a notary public within and for the said County and State, on this _____ day of _____, 19_____, personally appeared Keith Hensel, Ardis Kincade, Grant Hensel, John Miller, Wayman Matlock, and Morgan Harris, to me known to be the identical persons 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.

Witness my hand and official seal the day and year above set forth.

_____ Notary Public

My commission expires:

_____

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Form Approved
Budget Bureau No. 25-R2.

RECEIVED
MAY 24 1956
MAY 28 1956
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-4316
Metal or Mineral URANIUM
Date Received 5/28/56
Estimated Cost $6,750.00
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:

Great Western Minerals Co.
Bass Bldg. Box 1188
Enid, Oklahoma

(*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. Oklahoma

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

(*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 supplementary sheet

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

(*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.

(*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. see supplementary sheet

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

(*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. see geologic report

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

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

16—66551-1

See supplementary sheet

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

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

(*c*) The work will start within 15 days and be completed within 2 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. see supplementary sheet

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[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 May 11, 1956, 195__

Keith M. Hensel
(Applicant)

By Great Western Minerals Co.

Keith M. Hensel, sec. treas.

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

GEOLOGIC REPORT OF THE POLECAT CLAIM GROUP, SEVEN MILE CANYON, GRAND COUNTY, UTAH

RECEIVED
MAY 28 1956

By: Robert L. Rock
Mining Engineer

24 April 1956

The Polecat claim group belonging to the Great Western Minerals Corporation was recently examined by myself. The 11 claims comprising the group are located in the South Fork of Seven Mile Canyon, Grand County, Utah.

In addition to these claims, the Great Western Minerals Corporation holds a 10 year lease on the north half of school section 16, T25S, R20E, which is contiguous with the claims on the south. (see accompanying claim map) The property is accessible by traveling only two miles west of U. S. Highway 160 from the Dead Horse Point turn-off. The property is 12 miles north of Moab, Utah and about 20 miles south of Crescent Junction, Utah.

Four of the claims are located in the bottom of the south fork of Seven Mile Canyon, where drilling would be comparatively shallow. The canyon cuts down into the Chinle Formation on the Polecat No. 3 claim and on the northeast half of the Polecat No. 1 claim. The Wingate Formation is exposed by the canyon on Polecate No. 4, 5 and 2 claims. The remainder of the claimed and leased area is surfaced by the Jurassic Kayenta Formation. (See accompanying drill proposal map)

The potential uranium producing bed, the Mossback Member of the Chinle Formation, is not exposed on the property so any drilling undertaken will be quite speculative. It must be remembered, however, that many of our largest producing ore bodies were discovered by applying theoretical geology in

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Water for drilling is available from a spring at the north end of the property.

Respectfully submitted,

Robert L. Rock

RLR:dj

Robert L. Rock, Mining Engineer

S[illegible]MARY SHEET
T[illegible] [illegible] 103

COPY

1 (c) J. Morgan Harris, President..2777 F.Road Grand Junction,Colo.
Dr. A.S.Kincade, 1st.Vice Pres. 120½ No. Indep. Enid, Okla.
John R. Miller, 2nd Vice Pres. Caldwell, Kansas
Keith M. Hensel, Sec. Tres. Bass Bldg. Enid, Okla.

3 (f)

Polecat	# 1,	book	9N	Page	364	Grand	County,	Utah
"	2,	"	9N	"	365	"	"	"
"	3,	"	9N	"	366	"	"	"
"	4,	"	9N	"	367	"	"	"
"	5,	"	9N	"	368	"	"	"
"	6,	"	28N	"	266	"	"	"
"	7,	"	56	"	169	"	"	"
"	8,	"	56	"	170	"	"	"
"	9,	"	56	"	171	"	"	"
"	10,	"	56	"	226	"	"	"
"	11,	"	56	"	227	"	"	"

SUPPLEMENTARY SHEET
TO DMEA FORM MF 103

3 (a) Area enclosed by metes and bounds from:

SE Corner of Sec. 9T25S, R20E of SL.B and M. 2040' West to point of beginning; thence 1500' North; thence 2930' West; thence 180' N44°16'W; thence 1500' N 44°44'E; thence 300' N44°16'W; thence 600' N88°27'E; thence 1360' N45°41'E; thence 1500' N31°50'E; thence 630' N44°16'W; thence 1500' S31°50'W; thence 1360' S45°41'W; thence 600' S88°27'W; thence 1200' S44°16'E; thence 1500' S44°47'W; thence 1500' S22°10'W; thence 1200' S44°16'E; thence 210' N22°10'E; thence 3130' East to point of beginning.

SUPPLEMENTARY SHEET
TO DMEA FORM MF 103

4. (a) No mining operations have been conducted on the property. Only a few shallow holes have been drilled to fulfill assessment requirements. These holes were too shallow to reach the horizon of the Mossback Member of the Morrison Formation.

(b) No production has been realized from the property and no reserves are known.

(c) See Geologic Report.

(d) The property is two miles west of US Highway 160 at a point 20 miles south of Crescent Junction. The property is only 12 miles from Moab, Utah where the uranium mill is located. Supply and residential areas are also located in Moab.

(e) Manpower, materials, supplies and equipment are available in Moab, Utah. Water is available from a spring at the northeast margin of the property. Electrical power is available on US 160, 2 miles east of the property.

5. (d) The Great Western Minerals Company owns property on Tenderfoot Mesa, Mesa County, Colorado and has been actively participating in uranium speculation for over a year. Mr. Robert Rock, writer of the geologic report contained in this application, has five years experience in uranium mining and exploration and will be available to supervise the project.

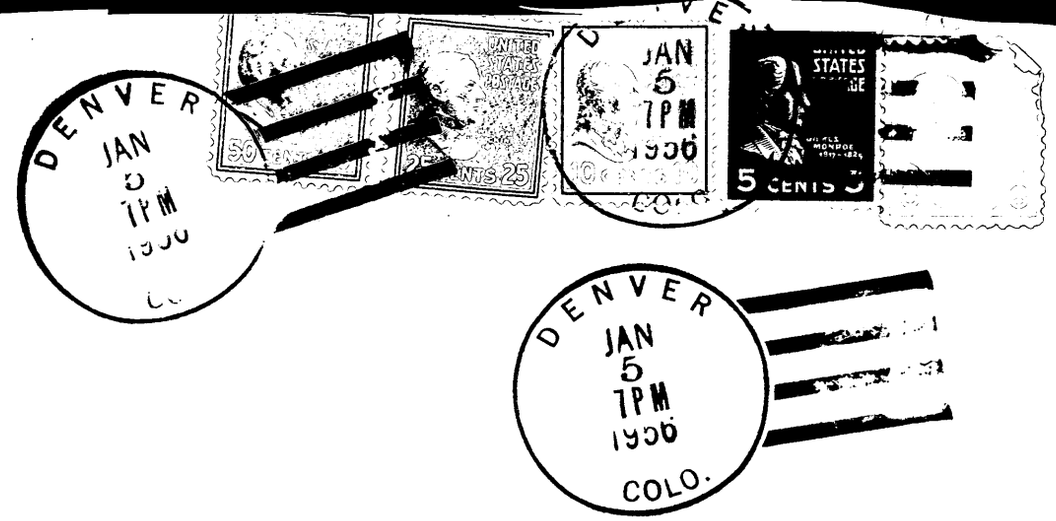
6. Costs:

2,750 feet of contract drilling at an average of $1.60/foot for core and non-core drilling	$4,400.00
Supervision, 30 days @ $20/day	600.00
Consultant, 7 days @ $100/day	700.00
Road Building (Contract) 1 day@$100/day	100.00
Surveying, 1 day @ $100/day	100.00
Gasoline	50.00
Contingencies	150.00
Drill Hole Probe Assembly (Purchase Price)	650.00
Total - - - - - - - -	$6,750.00

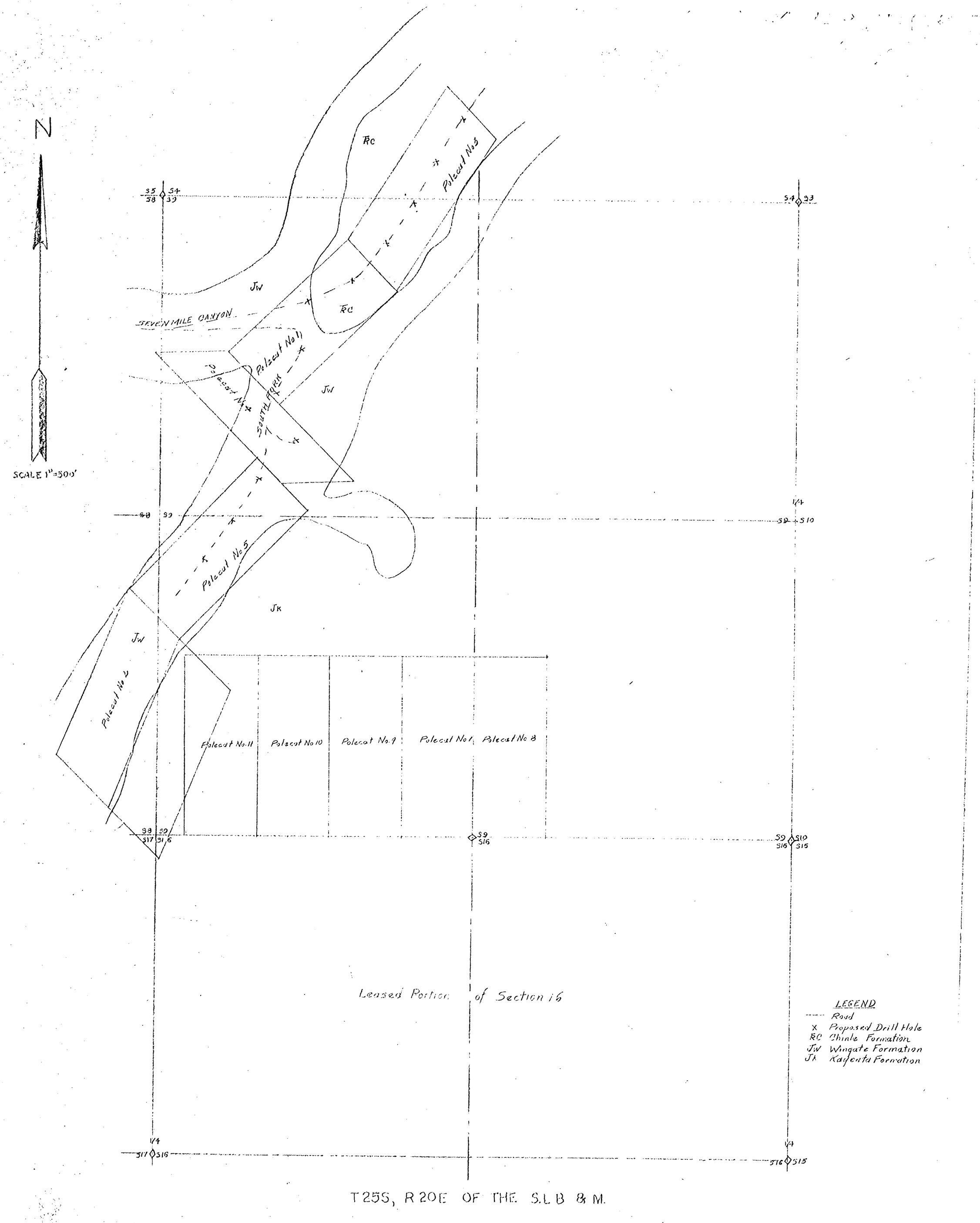
F THE INTERIOR
OF MINES

BUSINESS

USTOMHOUSE
COLORADO

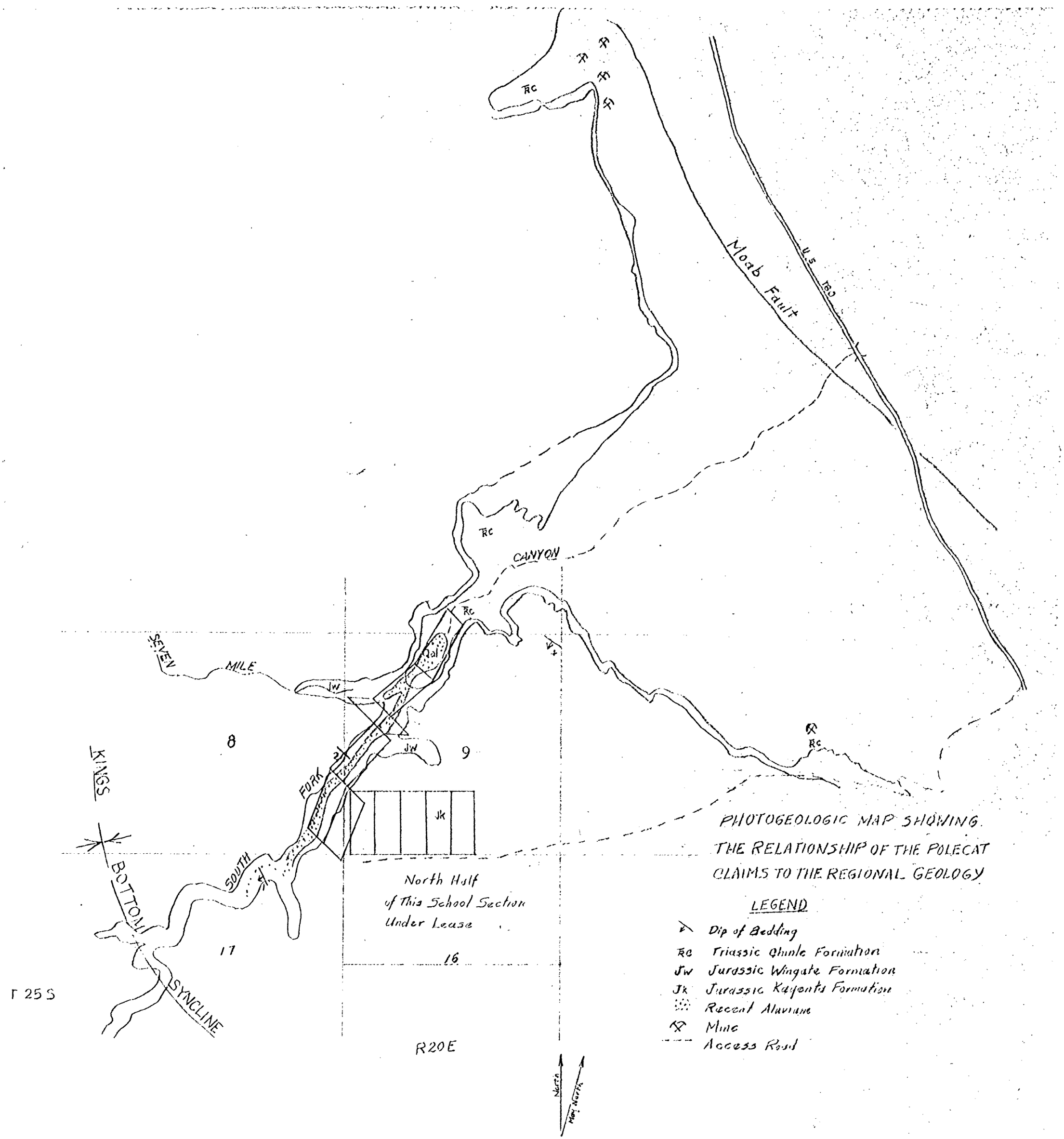


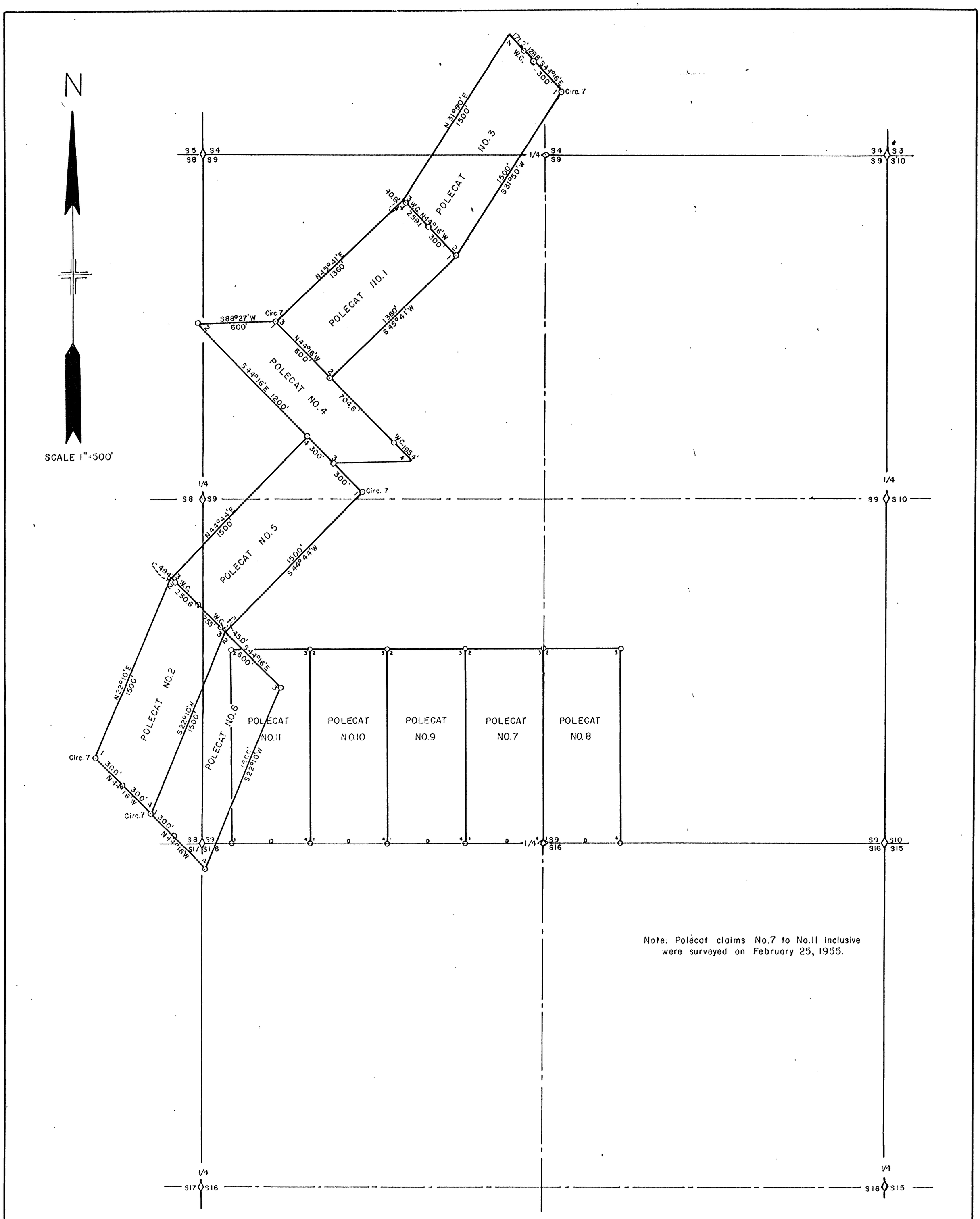
Defense Minerals Exploration Administration
U. S. Department of the Interior
Interior Building
Washington 25, D. C.



PROPOSED DRILLING FOR
POLECAT GROUP
GRAND COUNTY, UTAH

11 Holes @ 250' Ave Depth or 2,750 ft.


Rc
Moab Fault
U.S. 160
Rc
CANYON
Rc
Qal
SEVEN
MILE
Jw
Jw
8
9
KINGS
FORK
Jk
BOTTOM
SOUTH
North Half
of This School Section
Under Lease
17
16
T 25 S
SYNCLINE
R20E
Rc
PHOTOGEOLOGIC MAP SHOWING
THE RELATIONSHIP OF THE POLECAT
CLAIMS TO THE REGIONAL GEOLOGY
LEGEND
Dip of Bedding
Rc Triassic Chinle Formation
Jw Jurassic Wingate Formation
Jk Jurassic Kayenta Formation
Recent Alluvium
Mine
Access Road
North
Mag. North
SCALE: 1 INCH = 2000 Feet



I, Richard J. Mandeville, do hereby certify that this map was plotted from notes of an actual field survey made under my supervision on May 26, 1954.

Richard James Mandeville
Registered Engineer & Land Surveyor

WESTERN ENGINEERS
CLAIM MAP
POLECAT GROUP
GRAND COUNTY, UTAH

SURVEYED C.J.B.
DRAWN R.J.M.
Grand Junction, Colorado May 28, 1954 2-6-1

Revised 3/2/55