DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Idm-E NO._____

DMEA NO. 4816

Application
- [ ] Denied
- [ ] Withdrawn

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

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

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments
- x BIDS (3)

Right Side

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

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

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

Additional Folders:

Left Side

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

Right Side

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

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

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

17963

Aug 17, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 20 1957

DATE	INITIALS	CODE

DMEA.
Department of the Interior
Washington 25, D. C.

Dear Sirs

Inclosed application for Aid in an Exploration Project.

If application are not Complete please advise.

Thanks You

Sam Packer
1523 1/2 East 9th South
Salt Lake City Utah.

Form MF–103
Revised Feb. 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED AUG 20 1957 D.M.E.A.

APPLICATION FOR AID IN AN EXPLORATION PROJECT

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

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

Sam Rachele Jr. et al
1523½ East 9th South
Salt Lake City, Utah

APPLICANT NOT TO USE THIS BLOCK

Docket Number: 4816
Date Received: 8/20/57
Government Participation %:
Region: III
Division Code: 700

BUSINESS ORGANIZATION (Check one)

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

State in which firm is organized: Utah

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

Name	Address	Title
Rudolph Rachele	775 No. 1st East, Price, Utah	
Guido Rachiele	1652 Cooper St., Lebanon, Oregon	
Henry Rachele,	Las Cruces, New Mexico	
Orlando Rachele	Roosevelt, Utah	
Raymond Rachele	40 Garden St., Helper, Utah	
John Bradley,	Helper, Utah	
Noah Potter Jr.,	Price, Utah	
Earl Alley,	Price, Utah	

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

Estimated Cost of Project: $ 19,533.75

LOCATION OF PROPERTY

Name	County	State
"Rachele" Claims	Emery	Utah

GENERAL INSTRUCTIONS

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

CERTIFICATION

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

August 8, 1957
Dated

Sam Rachele Jr.
BY (Signature)

Partner
Title

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

INFORMATION REQUIRED WITH THIS APPLICATION

1. *Applicant's Property Rights:*

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

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

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

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

2. *Physical Description:*

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

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

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

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

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

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

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

3. *Accessibility of Project:*

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

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

4. *The Exploration Project:*

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

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

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

5. *Experience:*

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

6. *Estimate of Costs:*

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

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

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

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

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

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

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

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

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

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

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

* * * * *

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

INFORMATION REQUIRED WITH APPLICATION FOR AID IN AN EXPLORATION PROJECT

1. (a) Thirty unpatented mining claims as follows:

Claim	Book	Page	Town	County	State
Dead End	J.34	332	Castle Dale	Emery	Utah
Rachiele No. 1	J.34	333	Castle Dale	Emery	Utah
Rachiele No. 2	J.34	334	Castle Dale	Emery	Utah
Rachiele No. 3	J.34	335	Castle Dale	Emery	Utah
Rachele West No. 1	J.35	141	Castle Dale	Emery	Utah
Rachele West No. 2	J.35	142	Castle Dale	Emery	Utah
Conglomerate Top No. 1	J.35	143	Castle Dale	Emery	Utah
Conglomerate Top No. 2	j.35	144	Castle Dale	Emery	Utah
Cedar Point	J.35	145	Castle Dale	Emery	Utah
East Dead End	J.35	146	Castle Dale	Emery	Utah
Rachele East No. 1	J.35	147	Castle Dale	Emery	Utah
Rachele East Nol 2	J.35	148	Castle Dale	Emery	Utah
Rachele East No. 3	J.35	149	Castle Dale	Emery	Utah
Rachele North No. 1	J.35	150	Castle Dale	Emery	Utah
Rachele North No. 2	J.35	151	Castle Dale	Emery	Utah
J. and R. Coon Spring	J.37	257	Castle Dale	Emery	Utah
P. and A. No. 1	J.40	40	Castle Dale	Emery	Utah
P. and A. No. 2	J.40	41	Castle Dale	Emery	Utah
P. and A. No. 3	J.40	42	Castle Dale	Emery	Utah
P. and A. No. 4	J.40	43	Castle Dale	Emery	Utah
P. and A. No. 5	J.40	44	Castle Dale	Emery	Utah
P. and A. No. 6	J.41	1	Castle Dale	Emery	Utah
P. and A. No. 7	J.41	350	Castle Dale	Emery	Utah
P. and A. No. 8	J.41	351	Castle Dale	Emery	Utah
P. and A. No. 9	j.41	352	Castle Dale	Emery	Utah
Uranium Vanadium Lode no. 1	J.60	309	Castle Dale	Emery	Utah
Uranium Vanadium Lode No. 2	J.60	310	Castle Dale	Emery	Utah
Uraniun Vanadium Lode Nol 4	J.60	311	Castle Dale	Emery	Utah
West Dead End	(in prodess of filing)				
Rachele No. 6	(in process of filing)				

(b) The 30 claims listed above are referred to collectively as the "Rachele Claims".

(c) Owners ✓

(d) None

2. (a) Enclosed is a sketch showing areas where some exploration has been done on the Dead End Claim. Two short tunnels have been dug on the west boundary of this claim, one about 10 feet and the other about 20 feet. (See Exhibit A)

(b) As owners of the property, we performed the work as stated in 2 (a)

(c) There has been no production from these properties.

(d) Ore reserves are not known.

(e) The area is located within the Cedar Mt. formation, the Dakota Sandstone, and the Brushy Basin member of the Morrison formation. Ore showings are in the Brushy Basin.

There are several anomalies in the Brushy Basin, and one prospect hole at the base of the Cedar Mt. formation. Structural features reveal a regional tectonic environment -- folding and faulting. There are several high-angle east-west normal faults running through the southern portion of the claims. At the Dead End Claim, several curved slippage surfaces are noted in mudstone which lies immediately under a conglomerate lense, which is apparently elongated in an east-west direction. This lense is cross-bedded and scoured into the mudstone.

It is within this bedded conglomerate and mudstone that uranium and vanadium is found on the Dead End Claim.

(f) Reasons for expecting to find ore:

1. Indications of ore channel
2. Geologic setting -- faults, folding, Morrison formation, carbonaceous material.
3. The presence of ore. The enclosed assay certificates are reports on samples taken from the dead End Claim. Samples were both cross-section and select.

(g) Assay certificates enclosed

3. (a) The DMEA representatives can meet Rudolph Hackele at 775 North 1st East, Price, Utah, or Sam Hackele, 1523 East 9th South, Salt Lake City, Utah to be taken to the properties.

The east boundary of the property is approximately 2 miles west of highway 50 and 6, at a point 35 miles south of Price, Utah. The north boundary of the claims is just a short distance from the Railroad town of Cedar.

A prominent landmark which is located on the south-east boundary is Coon Spring.

The Denver and Rio Grande Western Railroad runs through the claims in a NW and SE direction.

The prospect holes on the Dead End Claim are about 3 miles west of the highway, and are easily reached by auto on a recently bulldozed road.

(See exhibit A)

(b) The towns of Price and Greenriver, Utah are almost equidistant from the property, about 35 miles each.

4. (a) Approximately 7000 feet of drilling is contemplated. From an examination of topographic and geologic maps of the area as well as from an examination of the property, we anticipate the drilling depths to vary from 100 to 300 feet.

A more detailed mapping program will be conducted prior to drilling operations.

The enclosed geologic map (Exhibit B) shows some known anomalies. Isoreading probably will reveal others. It is proposed that initial drilling will be performed at the site of these anomalies. Remaining drill holes will be placed according to systematic gridding.

(b) No access road is required.

(c) Work probably can be started within one week after the contract has been executed.

(d) One of the contractors who has drilled near this same area estimates that approximately 125 feet of drilling per day can be completed. On the basis of the 7000 feet of drilling contemplated, it should take 56 days to complete the job.

5. I am a Geological Engineering student of 2½ years, and have had considerable experience in prospecting for, and exploring for uranium. During the summer of 1955 I assisted on a 40-claim gridding and drilling project, and in 1956 I supervised 2 such projects of my own in the Gas Hills and Copper Mt. Mining districts of Wyoming.

We propose to hire a Geological Engineer to assist in structural mapping of the area, and to act in an advisory capacity.

General supervision will be performed by myself.

6. Estimate of Costs:

(a) Independent contracts
  (1) $15,000.00 proposed for drilling. (Bids are enclosed)
  (2) Bulldozer operation
    @ $14.00 per hour for 2 days, plus transportation cost $350.00

(b) Personal services:
  (1) Geological Engineer at $75.00 per day. For 4 days, $300.00.
  (2) Supervision and geological work for 56 days at $50.00 per day, $2800.00.
  (3) Assistant to supervisor for 56 days at $12.50 per day, $700.00.

Technicians and employees are available.

(c) Operating supplies:
  (1) Gasoline and oil for transportation $100.00.

(d) Operating equipment
  (1) Probe and Counter rental $15.00 per day, $150.00.

(e) None

(f) None

(g) Miscellaneous.
  (1) Analytical work and accounting will be done by supervisor.
  (2) Assays $100.00
  (3) Employees' liability insurance $18.00.
  (4) Social security $15.75.

Total estimate of costs: $19,533.75.

7. Yes

(b) $2083.44 will be furnished by cash.
$2800.00 will be furnished by personal services as stated in items 5 and 6. (b) (2) above.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

1600 East 1st South
Salt Lake City 1, Utah

5/1/56

Rudolph Raikele
775 North 1st East
Price, Utah

RADIOACTIVE SAMPLE REPORT

Sample Reference No. UP-5789-1

Name and Location of Property:
Dead End Claim, T17, South Range 13E, Emery County, Utah

Nature and Analysis of Sample:

Radiometric analysis gave 0.18% U_3O_8 equivalent.

Sample is conglomerate and contains such substances as quartz, chalcedony, limonite, carbonaceous material, clay, collophane, and vanadium.

Examined by: R. G. Anderson
Petrographer

Signed Harold L. Gibbs
Harold L. Gibbs
Metallurgist (General)

Phone 249-R

U.S. Registered Certificate of Assay

Brown and Brown
Assayers and Chemists
P.O. Box 310
Eureka, Utah
Assay per ton of 2000 pounds

W.L. Brown
Managing Operator

Assayer W.L. Brown

Date 6/24/55

Description		U_3O_8 %	Co. %
Report called for on samples assayed on September 27,1954			
Rachele	1	0.12	0.17
Rachele	2	0.10	0.13
Rachele	3	0.05	none

These are the only samples that we assayed for Uranium & Cobalt for you

THE RACHELE URANIUM CLAIMS

TOWNSHIP 16 SOUTH RANGE 13 EAST S.L.M.

TOWNSHIP 17 SOUTH RANGE 13 EAST S.L.M.

ON TUESDAY APRIL 26, 1955 I LEFT PRICE UTAH AT 8:00 A.M. WITH MR. RACHELE AND RODE TO CEDAR SIDING IN EMERY COUNTY FOR THE PURPOSE OF LOOKING OVER THE CLAIMS OWNED BY THE RACHELE BROTHERS AND ASSOCIATES.

ON MY VISIT TO THE RACHELE CLAIMS I VIEWED THE EFFECTS OF AN EAST-WEST FAULT ROLL AND STEP UP ROLL.

APPARENTLY THE RACHELE CLAIMS COVER THE NORTH EAST EXPOSURE OF THE FAULT WHICH OBSCURE NEAR COON SPRINGS ON THE EAST.

ON MY TRIP I NOTICED A HIGH COUNT READING AT MANY DIFFERENT LOCATIONS OVER THE AREA.

THERE IS NO QUESTION THAT THIS PROJECT COMPLETES THE END OF A GREAT SYNCLINAL AXIS DEPRESSED FROM THE DEFINA TO UP LIFTS SURROUNDING IT.

THE DRAINAGE HAS BEEN GRADUAL, EXCEPT WHEN THE FOLDED STEP FAULT HAS DESPLACED THE STRATIFIED STRUCTURE.

THE ENTIRE AREA IS DEFINITELY LOCATED IN AN INTERESTING MINERALIZED AREA, THE LOWER LEVELS OF THE MORRISON FORMATION ARE IN OR NEAR AQUIO-IG-NEOUS OR ERUPTION ROCKS, AND THAT DEPOSITS ARE IN SEDIMENTARY ROCKS ADJACENT TO ERUPTIVE ROCKS, ALL OF WHICH MAY INDICATE SEVERAL LEADS ON THE SURFACE IN FACT THE SURFACE ROCKS CARRY CONSIDERABLE INDICATIONS FOR SILVER PROSPECTING ALSO. A NOTICEABLE VEIN SHOWS INDICATIONS OF RUBY SILVER OR PROUSTITE.

THE DRAINAGE SURFACE INDICATES GOOD UNDERGROUND PLUMBING. THE SURFACE INDICATIONS ARE AS PROMISING AS THAT FOUND IN MANY MINING DISTRICTS I HAVE SEEN.

I RECOMMEND THE INTERESTS THAT WOULD PROSPECT THE STRUCTURE BY CORE DRILLING AND A PROGRAM OF EXPLORATION USED AT FOUR CORNERS MINING DISTRICT

STATE URANIUM INSPECTOR OF UTAH

GEORGE B. JACKSON

6-303
(March 1947)

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Salt Lake City, Utah

No. 100

AEC No. 1108
Date to BOM 7/8/55

Report to Mr. E.E. Thurlow (RJM)

Date Reported 7/14/55

Chemical Laboratory Report
1095

Date received July 13,1955

Serial No.	Description	Lot No.	eU_3O_8	cU_3O_8
48333	ss (Rackele)	A5009	0.42	0.504

Taxpayer Sample

% eU_3O_8 (radiometric analysis) represents total radioactivity from all elements.
% cU_3O_8 (chemical analysis) represents actual Uranium content.

Signed Heber E. Peterson

PHONE ~~4126~~
ME-7-3094

KARL P. LILLY, MANAGER

POCAHONTAS CORE DRILLING COMPANY

DIAMOND DRILLING CONTRACTORS
SPECIALIZING IN TESTING COAL LANDS & PRE-GROUTING SHAFT SITES
EXPERIENCED WORKMEN • EXPERT SUPERVISION
~~GREEN RIVER,~~ UTAH

Wellington, Utah. June 15, 1957

Sam Rochele
1523½ E. 9 South
Salt Lake City, Utah.

Dear Sir:

My purposal for drilling at Ceder ,Utah in Emery County is as fillows.

Plug Drilling at $ 2.00 a ft

Core Drilling at 3.50 a ft

Stand by time $ 12.00 hr

OFFICIAL FILE COPY
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DATE	INITIALS	CODE

Mr. Karl P. Lilly
Pocahontas Core & Plug Drilling Co.
WELLINGTON, UTAH.
Box 113

PRESSURE GROUTING
MINERAL AND COAL INVESTIGATION

CORE DRILLING
URANIUM PROSPECTING

Mac Exploration Company

Core Drilling Contractors

Phones: 667 and 423
Box 287
SPANISH FORK, UTAH

May 11, 1957

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DMEA
RECEIVED AUG 29 1957

DATE	INITIALS	CODE

Mr. Sam Rachele
550 South 11th East
Salt Lake City, Utah

Subject: Proposal for Drilling in the San Rafael Swell, Utah

1. The Mac Exploration Company proposes to move the Core Drilling equipment and supplies on to your property in the above district and conduct a drilling program in accordance with the prices and schedule quoted below:

2. Mobilization all equipment, lump sum.....$300.00

	Dry	Wet	Core
0 feet to 200 feet	1.60	1.80	4.00
200 feet to 400 feet	2.20	2.40	4.50
400 feet to 600 feet	2.85	3.00	5.25

Demobilization all equipment, lump sum..... 50.00

3. Any work done after the $2,000.00 minimum has been accomplished will be given a discount of 5% discount. It is requested that a minimum of $2,000.00 be escrowed in the Bank of Spanish Fork at Spanish Fork, Utah to cover invoices for the above work, such invoice to be approved by your representative and myself before the monies can be withdrawn.

4. The Mac Exploration Company will require a two weeks notice before the actual date of starting this drilling program.

5. In the event of non-payment above the escrowed amount, after a 30-day period, the owner agrees to pay all costs of collecting including a reasonable attorneys fee.

ACCEPTED BY _____ SUBMITTED BY J. S. McBride

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RECEIVED AUG 29 1957

DATE	INITIALS	CODE

MAJORS' DRILLING COMPANY
3500 West 3800 South
SALT LAKE CITY, UTAH

AM 6-4721

June 1, 1957

Mr Sam Rachele
550 South, 11th East
Salt Lake City, Utah

Dear Mr Rachele:

The following bid is submitted for core and plug-bit drilling on your mining property near Woodside, Utah.

For standard AX diameter drilling. Unit cost per foot

Depth	Non-coring	Coring
0 to 100	$2.90	$3.10
100 to 200	3.20	3.80
200 to 300	3.90	4.75

Cementing and redrilling $3.00 per foot

This bid is subject to slight revision after a detailed inspection of your property.

Yours sincerely,

Forest H. Majors

Forest H. Majors
Mgr.

U. S. Government Messenger Envelope

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

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

NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM		NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM	
[redacted]	RUN / STOP		RUN / STOP
[redacted]	RUN / STOP		RUN / STOP
[redacted]	RUN / STOP		RUN / STOP
PRINTING SECTION Room 2651	RUN / STOP		RUN / STOP
Mr. Hakan Rm. 4456—DMEA	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP

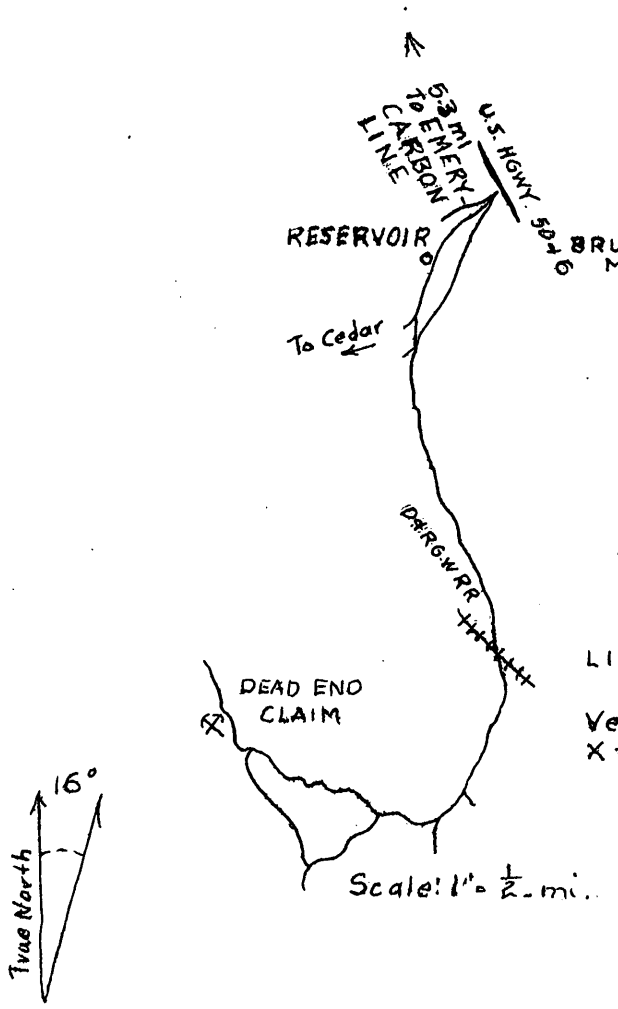
Send surplus envelopes to supply room for reissue.

Use other side

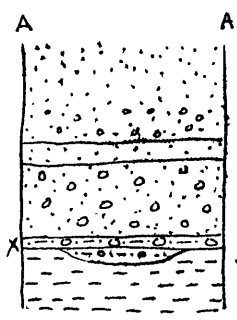
Use RUN and STOP only when messenger service between Government buildings in Washington is required. Your mail room has RUN and STOP information.

EXHIBIT A
DMEA-4816

LOCATION AND PLAN OF DEAD END CLAIM

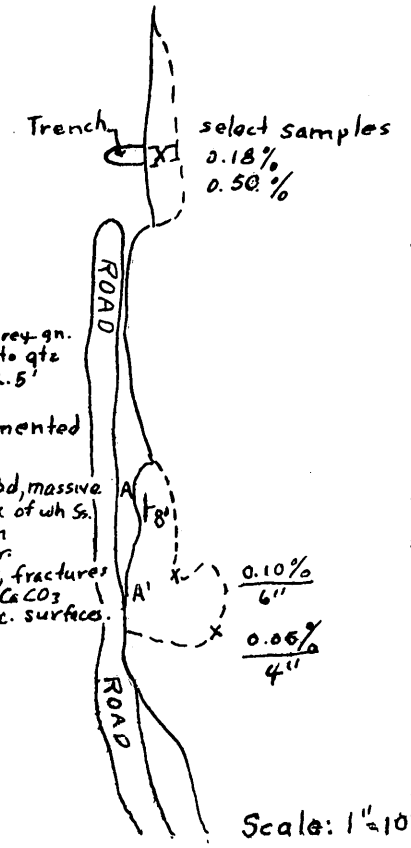


BRUSHY BASIN MBR. OF MORRISON FORM.



Ss, F grained, X bd, l. grey-gn. grading downward into qtz pebble cgl. Upper 2.5' weathers buff.
Qtz. Ss, poorly cemented buff to l. grey.
Cgl. qtz. pebble, X bd, massive gy-wh, with matrix of wh Ss.
Ss, cgl. + ms, ol-gn
Ss, cgl. + ms, dr. br.
Ms, pebs., ½-3" beds, fractures coated with lime + $CaCO_3$
R. w/gypsum on frac. surfaces.

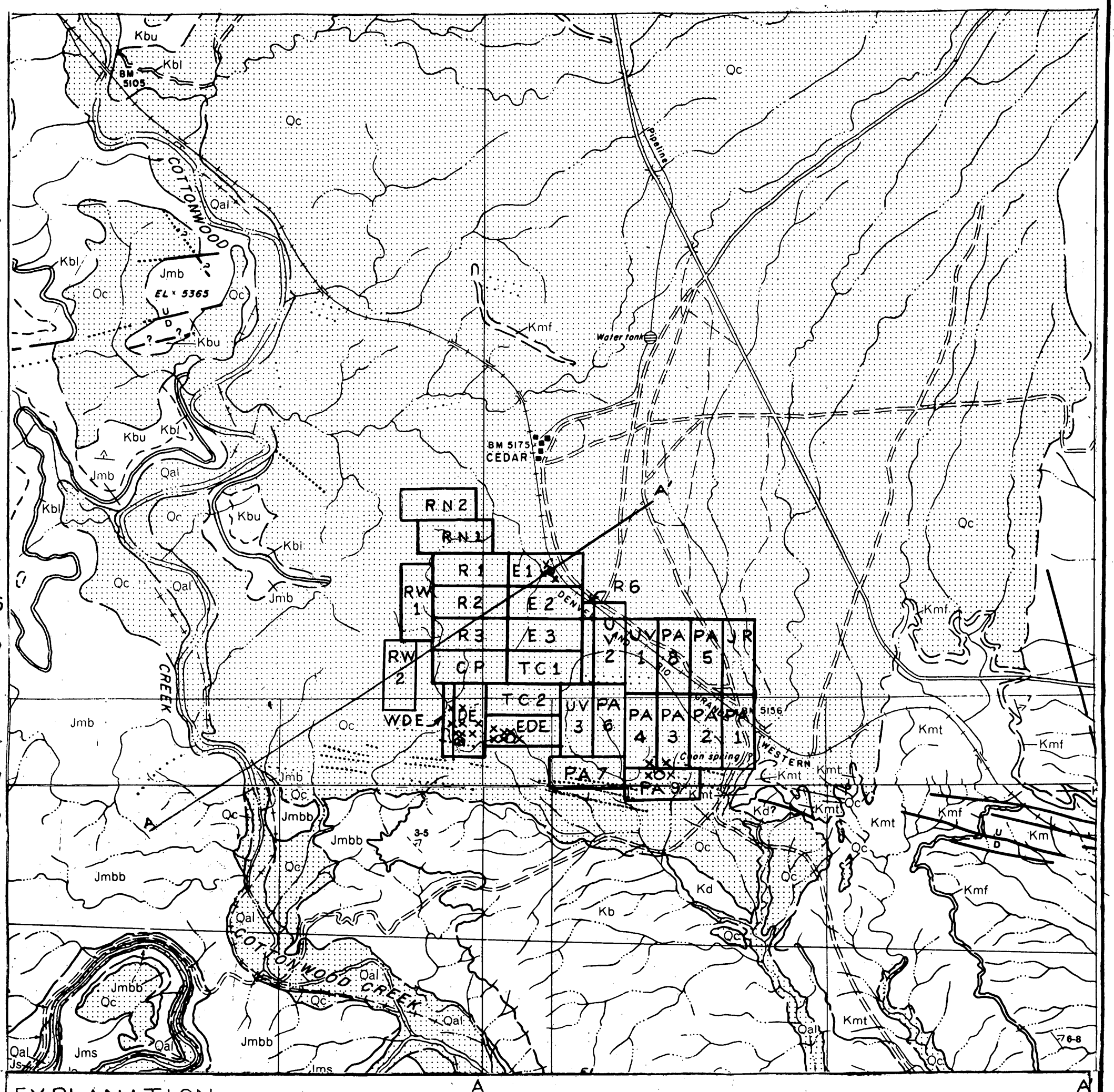
LITHOLOGIC SECTION
AT A-A'
Vertical Scale: 1" = 10'
X = Mineralized Horizon



PLAN OF
DEAD END CLAIM
Sec. 4, T 12 S, R. 13 E.,
EMERY CO., UTAH

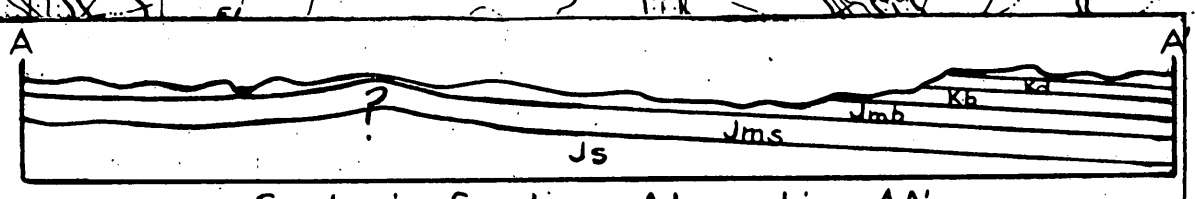
wrong
F. T. Report

Exhibit B
DMEA-4816



EXPLANATION

Qal	Quaternary Alluvium
Qc	Undifferentiated Covering
Km	Upper Cretaceous Mancos Shale
Kd	U & L Cretaceous Dakota Sandstone
Kb	Lower Cretaceous
Jmb	Brushy Basin Mbr. Of Morrison
Jms	Salt Wash Mbr. Of Morrison
Js	Summerville Formation



Geologic Section Along Line AA'

Known Anomolies ○
Exploration Holes ⊗
Proposed Drilling Locations ×

GEOLOGIC MAP OF RACHELE CLAIMS

Emery County, Utah

SCALE 1:24000

Taken From Woodside Photogeologic Quad. Nos. 4 & 5

Form 7
(-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/29	Knouse	700
10/29	[illegible]	[illegible]
10/30	Selfridge	130
"	Johnson	110
		100
10/30	Lamb	130
10/30	Williams	130
10/31	gb	200
		225

OCT 30 1957

Mr. Sam Rachele, Jr.
Sam Rachele, Jr., et al.
1523½ East 9th South
Salt Lake City, Utah

Re: Docket No. DMEA-4816 (Uranium)
Rachele, et al., Claims
Emery County, Utah

Dear Mr. Rachele:

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, although noting some uranium mineralization on your property, 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,

Frank E. Johnson

ACTING Administrator

FLKnouse/izm 10-29-57
cc: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
DMEA FT Reg. 3 (2)

8623

Docket

Knowlt
Ellis

October 29, 1957

Summary of Proposed Project

Object: Denial of application for exploration aid.

Commodity: Uranium

Docket No. DMEA-4816

Applicant: Sam Rachele, Jr., et al., a partnership
1523½ East 9th South
Salt Lake City, Utah

Property: Consists of 30 contiguous unpatented lode mining claims, referred to collectively as the "Rachele Claims" approximately in secs. 33 and 34, T. 16 S., R. 13 E., and secs. 3 and 4, T. 17 S., R. 13 E., SLM&B, Emery County, Utah. The claims are as follows: Dead End; Rachele Nos. 1, 2, and 3; Rachele West Nos. 1 and 2; Conglomerate Top Nos. 1 and 2; Cedar Point; East Dead End; Rachele East Nos. 1, 2 and 3; Rachele North Nos. 1 and 2; J & R Nos. 1 through 5; P & A Nos. 6 and P & A Nos. 7, 8 and 9; Uranium Vanadium Lode Nos. 1, 2 and 3; West Dead End; and Rachele No. 6.

Property Rights: Owner

Application date: August 8, 1957 (Recd. in Washington Aug. 20)

Amount of application: $19,533.75

Referred to Region III: August 30, 1957

Examination made: September 24, 1957

Field Team Report received in Division: October 24, 1957

Work Proposed: Consists of drilling four groups of holes on 200-foot centers to a depth of 100 to 500 feet, around four small areas of anomalous radioactivity, aggregating about 7,000 feet of non-core and core drilling in 21 holes. The objective being to explore for uranium mineralization in a conglomerate sandstone lense within the Brushy Basin member of the Morrison formation.

Estimated Cost:

Independent Contracts

7,000 ft. core & non-core drilling	$15,000.00
2 days bulldozing @ $14/hr., including transportation	350.00

Personal Services:

Geologist @ $75/day, 4 days	300.00
Supervisor @ $50/day, 56 days	2,800.00
Assistant supervisor @ $12.50/day, 56 days	700.00

Operating Supplies:

Gasoline & oil - transportation	100.00
Probe & counter rental @ $15/day	150.00

Miscellaneous:

Assaying	100.00
Payroll taxes & insurance	33.75

Total Estimated Cost of the Project $19,533.75
Government Participation @ 75% $14,650.31

Field Team Report - dated October, 1957, by N. L. Archbold, USGS, and H. F. Robertson, USBM:

The claims are situated on the north flank of the San Rafael swell where the sediments have a 2 to 5 degree regional dip to the north. In ascending order the formations exposed on the property are (1) Brushy Basin member of Morrison formation (Upper Jurassic); (2) Cedar Mountain formation (Lower Cretaceous); (3) Dakota sandstone (Lower and Upper Cretaceous); and (4) Mancos shale (Upper Cretaceous).

No significant uranium deposits are known in the vicinity of the property. The nearest significant deposits occur about 15 miles south of the property where small deposits are known in the Morrison and Cedar Mountain formations.

In the claim (Cedar Mountain) area, uranium-vanadium deposits occur in Salt Wash member of the Morrison formation. The Salt Wash member is not exposed on the property, but is extensively exposed along Price River - ½ to 1 mile south. The absence of significant deposits along Price River indicates the Salt Wash member underlying the claims is generally unfavorable for significant ore deposits. Deposits have been found that generally contain less than 200 tons. Near Cedar Mountain, small deposits have been found (200 ton and less) in the Brushy Basin member.

On the Dead End claim near the center of the Brushy Basin member in a thin lens of conglomerate sandstone there is some evidence of uranium-vanadium mineralization. The lens is 5 to 15 feet thick and exposed for a distance of 1,500 feet. Thin discontinuous layers of mineralized rock are exposed along the base of the lens. These mineralized

layers are up to several inches thick and several feet long. Selected samples of mineralized rock have shown U_3O_8 percentages ranging from 0.062% to 0.18%. Judging from the extent and thickness of the host rock and size of known Brushy Basin deposits, it is estimated that there is less than 200 tons of marginal grade ore on the Dead End claims.

The three additional radioactive anomalies on the property are randomly distributed in the geologic section associated with carbonaceous zones in the Dakota formation and in Brushy Basin member, and are not considered significant.

Therefore, it is estimated a maximum potential of less than 200 tons of low grade ore exists on the entire claim group.

Considering the general unfavorableness of the area for the occurrence of uranium ore bodies other than scattered, and small pods, participation in the proposed project is not justified, and the application should be denied.

Commodity Member's Comments:

USGS, W. P. Williams, October 25, 1957:

"Among other factors, the general area has a poor mining history; the applicant proposes to search for ore deposits in the Brushy Basin member and the Dakota formation, which are unfavorable ore zones; the nature of known deposits in a lens in the Brushy Basin is such that only about 200 tons of 'ore' are likely to be on the property; and the grade of the mineralized rock is marginal at best.

"There are too many unfavorable features about the property. For that reason the proposed project is inappropriate for DMEA purposes; and I recommend that the application be denied."

USBM, James Paone, October 25, 1957:

Agrees with the Field Team.

Div. of Rare & Misc. Metals, F. L. Knouse, October 29, 1957:

The examination of the property indicates that only scattered, small pods of marginal grade ore is likely to be found on the property, aggregating less than 200 tons. Since the probability of discovering a significant

deposit of uranium ore on the property does not justify Government participation in a program to explore the property, the application should be denied.

Conclusions:

A review of all our information relating to the proposed project indicates the probability of making a significant discovery on the property is poor. Therefore, the application for exploration assistance should be denied.

Ernest Wm. Ellis

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

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DMEA
IN REPLY REFER TO:
RECEIVED OCT 28 1957

DATE	INITIALS	CODE
10/28	C	220
10/28	FLR	700
	Complete	

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

October 25, 1957

Memorandum

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

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

Subject: Review of Field Examination Report, DMEA 4816 (uranium), San Rachele, Jr., Rachele claims, Emery County, Utah

The examining team report that geologic conditions on the applicant's property are not good for the presence of important uranium ore deposits.

Among other factors, the general area has a poor mining history; the applicant proposes to search for ore deposits in the Brushy Basin member and the Dakota formation, which are unfavorable ore zones; the nature of known deposits in a lens in the Brushy Basin is such that only about 200 tons of 'ore' are likely to be on the property; and the grade of the mineralized rock is marginal at best.

There are too many unfavorable features about the property. For that reason the proposed project is inappropriate for DMEA purposes; and I recommend that the application be denied.

W. P. Williams

W. P. Williams

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RECEIVED OCT 25 1957

DATE	INITIALS	CODE
10/25	C	220
"	FAK	700

October 25, 1957

DMEA Docket No. 4816
DMEA Contract No.
Commodity Uranium
Name of Applicant Sam Rachele, Jr.
Nature of Property Rachele, et al. claims
Location of Property Emery County, Utah
Estimated cost of Project $19,533.75

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee
From: James Paone, Bureau of Mines Member
Uranium Commodity Committee

Field Team Report

1. Date of Field Contact: Oct. '57 2. Date of Notice of Contact: 10/22/57

3. Did the applicant provide the information? Yes [ ] No [ ]

4. Does report on mining property have to be revised? Yes [ ] No [ ]

5. Is the project feasible as part of a program? Yes [ ] No [ ]

6. Do the engineers feel it is worthwhile? Yes [ ] No [ ]

7. Explain the reason you chose:

8. Recommendations:
a. Approve [ ]
b. Approve [ ]
c. Defer [ ]
d. Reject [ ]
e. Approve contingent [ ]
f. Alternate [ ]
g. Other [ ]
h. [illegible]

9. Senior officials
a. Obtain information from applicant [ ]
b. Refer to Field Team [ ]
c. Protest [x]
d. Agree with Field Team [x]
1. Consult with Mr. [illegible]
e. Disagree with Field Team [ ]
f. Suggest alternate plan [ ]
g. Request further consideration [ ]
h. Approve [ ]

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

October 15, 1957

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DMEA
RECEIVED OCT 18 1957

DATE	INITIALS	CODE
10/18	B	220
10/22	JB	130
10/24	C	220
10/24	FLK	700

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: DMEA Docket 4816 (Uranium) Sam Rachele, Jr., et al (Rachele, et al. claims) Emery County, Utah

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

The field examiners conclude that exploration on the subject property will not result in the discovery of significant deposits of uranium ore and they recommend that the application for exploration assistance be denied.

We concur with the conclusions and recommendations.

E. N. Harshman

E. N. Harshman
Acting Executive Officer

ON-SITE EXAM

Reviewed by
DMEA OPERATING COMMITTEE

10-23-57
(date)

FOR UNITED STATES GOVERNMENT USE ONLY

OCT 14 1957

U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

TRANSMITTED

OCT 15 1957

DMEA
DEPARTMENT OF THE INTERIOR
OCT 14 1957
REGION III
DENVER, COLORADO

DMEA 4816

SAM RACHELE, JR., ET AL

Rachele group of Claims
San Rafael Swell
Emery County, Utah

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DATE	INITIALS	CODE
10/23	263	130
		220

Uranium

Joint Engineering and Geologic Report

By

N. L. Archbold
Geologist
U.S. Geological Survey

H. F. Robertson
Mining Engineer
U. S. Bureau of Mines

October 1957

Reviewed by
DMEA OPERATING COMMITTEE
10-23-57
(date)

DMEA 4816

SAM RACHELE, JR., ET AL
Rachele group of Claims
San Rafael Swell
Emery County, Utah

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Joint Engineering and Geologic report — Page

Introduction and summary 1
Acknowledgments 2
Location, Topography, and Climate 2
History, Production, and Ownership 3
Present Status 4
  Exploration and development 4
Geology 5
Ore Deposits 6
  Mining equipment and other facilities 8
Proposed Exploration 8
Conclusions and recommendations 9

TABLES

1. Formations exposed on the Rachele group of claims — 5-A

ILLUSTRATIONS

Figure — Follows Page

1. Location Map, Rachele group, Sam Rachele, et al., Emery County, Utah 10

2. General geology in the vicinity of the Rachele group of claims, Sam Rachele, Jr., et al., Emery County, Utah 10

DMEA 4816

INTRODUCTION AND SUMMARY

Sam Rachele, Jr., et al., 1523½ East 9th South, Salt Lake City, Utah, submitted an application to the Defense Minerals Exploration Administration for aid in an exploration project on the Rachele group of claims. The program is intended to search for uranium on a contiguous group of 30 unpatented lode mining claims located at the north end of the San Rafael Swell in Emery County, Utah. The project would consist of a drilling program comprising 7,000 feet of core and non-core drilling at a total estimated cost of $19,533.75. Government participation at 75 percent would be $14,650.31.

A field examination of the property was made on September 24, 1957, by a DMEA examining team consisting of N. L. Archbold, U.S. Geological Survey and H. F. Robertson, U. S. Bureau of Mines. The team was accompanied by Rudolph Rachele, a partner in the company applying for assistance.

The applicant proposes to drill 21 holes around four small radioactive anomalies, three of which are in the Brushy Basin member of the Morrison formation; the other anomaly is in the Dakota formation. The examining team believes three of the so-called anomalies are merely areas of slightly higher radioactivity associated with carbonaceous material, and are not necessarily indications of nearby uranium deposits. One anomaly occurs in a local lens of conglomeratic sandstone in the Brushy Basin member of the Morrison formation. This anomaly probably represents a deposit containing a very small tonnage of marginal grade uranium-vanadium ore.

The examining team believes there are no significant uranium-vanadium deposits on the Rachele group of claims, and they recommend that the application for DMEA aid be denied.

ACKNOWLEDGMENTS

The Atomic Energy Commission was consulted for production and reserve information and other data pertaining to the area concerned by the subject application.

Information concerning the Cedar Mountain area, the uranium-producing area nearest the Rachele group of claims, was obtained from an unpublished U. S. Geological Survey report by H. S. Johnson, Jr.

LOCATION, TOPOGRAPHY, AND CLIMATE

The 30 unpatented lode mining claims comprising the Rachele group are located in an unsurveyed area. Projection of nearby land lines places the property approximately in sections 33 and 34, T. 16 S., R. 13 E., and sections 3 and 4, T. 17 S., R. 13 E., Salt Lake Meridian, Emery County, Utah (figs. 1 and 2). The subject area is easily accessible from paved U. S. Highway 6-50. The claims are reached over a 3-mile access road which makes a junction with U. S. Highway 6-50 about 40 miles northeast of Green River. Cedar, a group of railroad section houses, is a few hundred feet from the northern boundary of the claim group.

The property lies near the north end of the San Rafael Swell area. The terrain covered by the claims is typical of the Green River Desert topography. Low, rounded hills cut by narrow, winding draws and sparsely covered by pinion, cactus, and desert grasses are the most noticeable surface features of the claim area. The climate is semi-arid with the small annual precipitation occurring mostly as localized storms resulting in "flash" runoffs. Temperatures range from about 100° during the hot summer months to subzero during two or three of the winter months. There is a moderate amount of snowfall in late winter and early spring.

HISTORY, PRODUCTION, AND OWNERSHIP

The general area of the subject claims has been prospected for uranium since about 1950 but no commercial size ore bodies have been developed. The mines of Four Corners Uranium Corporation, about eight miles west of Green River, Utah and about 30 miles southeast of the applicant's property, are the nearest major producers of uranium from the Jurassic Morrison formation. Minor amounts of uranium have been produced from the Morrison formation in the Cedar Mountain area, about 15 miles south of the subject property. No ore has been produced in the vicinity of the Rachele group of claims.

The partnership is the owner of the group of 30 claims recorded at the Emery County courthouse in Castledale, Utah and listed as follows:

Claim	Recording data Book	Page
Dead End	J-34	332
Rachiele Nos. 1-3, incl.	J-34	333-335, incl.
Rachele West Nos. 1-2	J-35	141-142
Conglomerate top Nos. 1-2	J-35	143-144
Cedar Point	J-35	145
East Dead End	J-35	146
Rachele East Nos. 1-3, Incl.	J-35	147-149, incl.
Rachele North Nos. 1-2	J-35	150-151
J. & R. Coon Spring	J-37	257
P. & A. Nos. 1-5, Incl.	J-40	40-44, incl.
P. & A. No. 6	J-41	1
P. & A. Nos. 7-9, incl.	J-41	350-352, incl.
Uranium Vanadium Lode Nos. 1-3, incl.	J-60	309-311, incl.
*West Dead End	?	?
*Rachele No. 6	?	?

* Recording data on these claims were not available at the time of the examination.

PRESENT STATUS

Exploration and Development

No systematic exploration program has been attempted on the subject property. The two short adits on the Dead End claim (fig. 2) can probably be classed as exploratory because they attempt to follow small, thin seams of mineralized material from exposures on the rim. Other work, which might be classed as exploration, consists of two shallow, bulldozed trenches on P. and A. No. 9 and Rachele East No. 1. (fig. 2). All exposures are accessible for examination.

GEOLOGY

The Rachele group of claims is situated on the north flank of the San Rafael Swell where the sedimentary formations have a gentle (2 to 5 degrees) regional dip to the north.

In ascending order, the formations exposed on the property are: (1) The Brushy Basin member of the Morrison formation, Upper Jurassic in age; (2) the Cedar Mountain formation of Lower Cretaceous age; (3) the Dakota sandstone of Lower and Upper Cretaceous age; and (4) the Mancos shale of Upper Cretaceous age.

The formations are largely argillaceous and weather readily to form residual soils, consequently they are poorly exposed. Brief descriptions of the formations are given in table 1.

The regional dip of the formations is 2 to 5 degrees to the north; however, near the southern margin of the property there is a steep monocline where the formations dip 30 to 40 degrees southward (fig.2). Beds on the north side of the monocline are displaced upward approximately 100 feet, and a minor fault zone is associated with the fold. Several normal faults, with displacements of 10 to 30 feet, extend on to the property.

Table 1. -- Formations exposed on the Rachele group of claims

Age	Formation	Approximate thickness in feet	Description
Lower and Upper Cretaceous	Mancos	> 2000	Dark, calcareous, fossiliferous marine shale with minor sandstone layers.
	Dakota	50 ±	Light colored conglomerate and sandstone with interbedded coaly and carbonaceous shale layers.
			unconformity
Lower Cretaceous	Cedar Mountain	200 ±	Upper member consists of variegated red and gray mudstone
		40 ±	Buckhorn conglomerate with dark chert pebbles and local sandstone lenses,
			unconformity
Upper Jurassic	Morrison	300 ±	Brushy Basin member consists of variegated red and gray, bentonitic mudstone with thin lenses of conglomerate and sandstone.
		150 ±	Salt Wash member consists of interbedded lenticular sandstone and reddish brown mudstone; not exposed on the property.

ORE DEPOSITS

No significant uranium-vanadium deposits are known in the immediate vicinity of the Rachele group of claims. The nearest significant deposits occur in the vicinity of Cedar Mountain, about 15 miles south of the Rachele group of claims. Here, small uranium-vanadium deposits are known in the Morrison and Cedar Mountain formations.

In the Cedar Mountain area, uranium-vanadium deposits occur in the Salt Wash member of the Morrison formation. The Salt Wash member is not exposed on the Rachele group of claims, but is extensively exposed along the Price River, one and one-half miles south of the property. The absence of any significant uranium-vanadium deposits in the Salt Wash member along the Price River indicates that the Salt Wash member in the vicinity of the Rachele group of claims is generally unfavorable for the occurrence of ore deposits.

The Brushy Basin member of the Morrison formation contains a few small uranium-vanadium deposits in the vicinity of Cedar Mountain. Such deposits generally contain less than 200 tons of ore-grade material. On the Dead End claim (fig. 2) of the Rachele group there is some evidence of uranium-vanadium mineralization in a thin lens of conglomeratic sandstone near the center of the Brushy Basin member. This lens is 5 to 15 feet thick and exposed for a distance of about 1500 feet along the south side of the Dead End and East Dead End claims. The lens appears to pinch out about 500 feet south of the property; to the north the lens is

covered by overlying mudstone. On the Dead End claim thin, discontinuous layers of mineralized rock are exposed along the base of the lens. These mineralized layers are up to several inches thick and several feet long. Selected samples of the mineralized rock have shown U_3O_8 percentages ranging from 0.062 to 0.18. One sample, submitted for assay by the applicant, showed 0.50 percent U_3O_8. The applicant states he found this sample as a piece of float in an adjacent wash, and that he has been unable to find the source of this sample. The assay data indicates that the mineralized rock is mainly of marginal to submarginal ore grade. Considering the extent and thickness of the host conglomeratic sandstone and the size of known Brushy Basin deposits, it can be estimated there is likely less than 200 tons of marginal grade ore on the Dead End claim.

The applicant reports radioactive anomalies on the East Dead End, the P. and A. No. 9, and the Rachele East No. 1 claims. These three so-called anomalies are randomly distributed in the geologic section. In the opinion of the examining team these are not significant radioactive anomalies, rather they are localities of slightly higher radioactivity normally associated with carbonaceous zones in the Dakota formation and Brushy Basin member of the Morrison formation.

In the application, the applicant has mentioned the existence of a "vein" containing minor amounts of goldand silver. This so-called "vein" was visited by the examining team. It is a reddish brown layer, impregnated with iron-oxide in a Brushy Basin sandstone lens. The reddish-brown layer is about one inch thick and exposed for a distance of about

two feet. It probably represents a diagenetic accumulation of iron sulfide which subsequently was weathered to form hematite. Spectrographic analysis of the material shows traces of silver but fails to show the presence of gold. It has no economic potentiality.

Mining equipment and other facilities

The applicant had no mining or exploration equipment on the property as of the date of the field examination. The proposed exploration work would be done by an independent contractor.

Water for drilling and mining requirements is available from Coon Spring on P. and A. claim No. 1 (fig. 2). Domestic water would probably be hauled from Price, Utah, about 35 miles distant.

Supplies and equipment are available in Price or Salt Lake City, Utah.

The Denver and Rio Grande Western Railroad passes through the northeast part of the claim group.

PROPOSED EXPLORATION

The apparent intent of the proposed program, although not definitely stated in the application, is to explore for uranium mineralization in conglomeratic sandstone lenses within the Brushy Basin member of the Morrison formation. The applicant bases the uranium potentiality of the property on three factors which are:

(1) The presence of a channel, as evidenced by the thick conglomerate lens on the Dead End claims.

(2) Geologic features such as faults, folds, presence of Morrison formation, and carbonaceous material.

(3) The presence of ore-grade material.

The applicant proposes drilling four groups of holes (fig. 2) located on the Dead End, East Dead End, P. & A. No. 9, and Rachele East No. 1 claims. The drill holes in each group are spaced on about 200-foot centers around the four small areas of anomalous radioactivity. A total of about 7,000 feet of core and non-core drilling in 21 holes would be utilized in the proposed exploration project.

A summary of the costs of the applicant's proposed program is as follows:

(a)	Independent contracts	$15,350.00
(b)	Personal services	3,800.00
(c)	Operating supplies	100.00
(d)	Operating equipment	150.00
(e)	Initial rehabilitation	None
(f)	New installations	None
(g)	Miscellaneous	133.75
	Estimated total cost of project	$19,533.75

CONCLUSIONS AND RECOMMENDATIONS

The occurrence of significant bodies of uranium ore on the Rachele group of claims is a very remote possibility. Results obtained by geologic studies in the Cedar Mountain area have indicated that, although some mineralized material has been discovered in the Brushy Basin member of the Morrison formation of Jurassic age and the Cedar Mountain formation

of Cretaceous age, the strata in general contains no deposits of significant size. On this basis the examining team estimates a maximum potential of less than 200 tons of low-grade ore on the entire group.

The applicant's proposed exploration program is not based on sound geologic principles and the applicant apparently has no specific target in mind.

Considering the general unfavorableness of the subject area for the occurrence of uranium ore bodies other than scattered, very small pods, the examining team believes that DMEA participation in the proposed project is not justified and recommends denial of the application.

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
OCTOBER 1957
DOCKET 4816

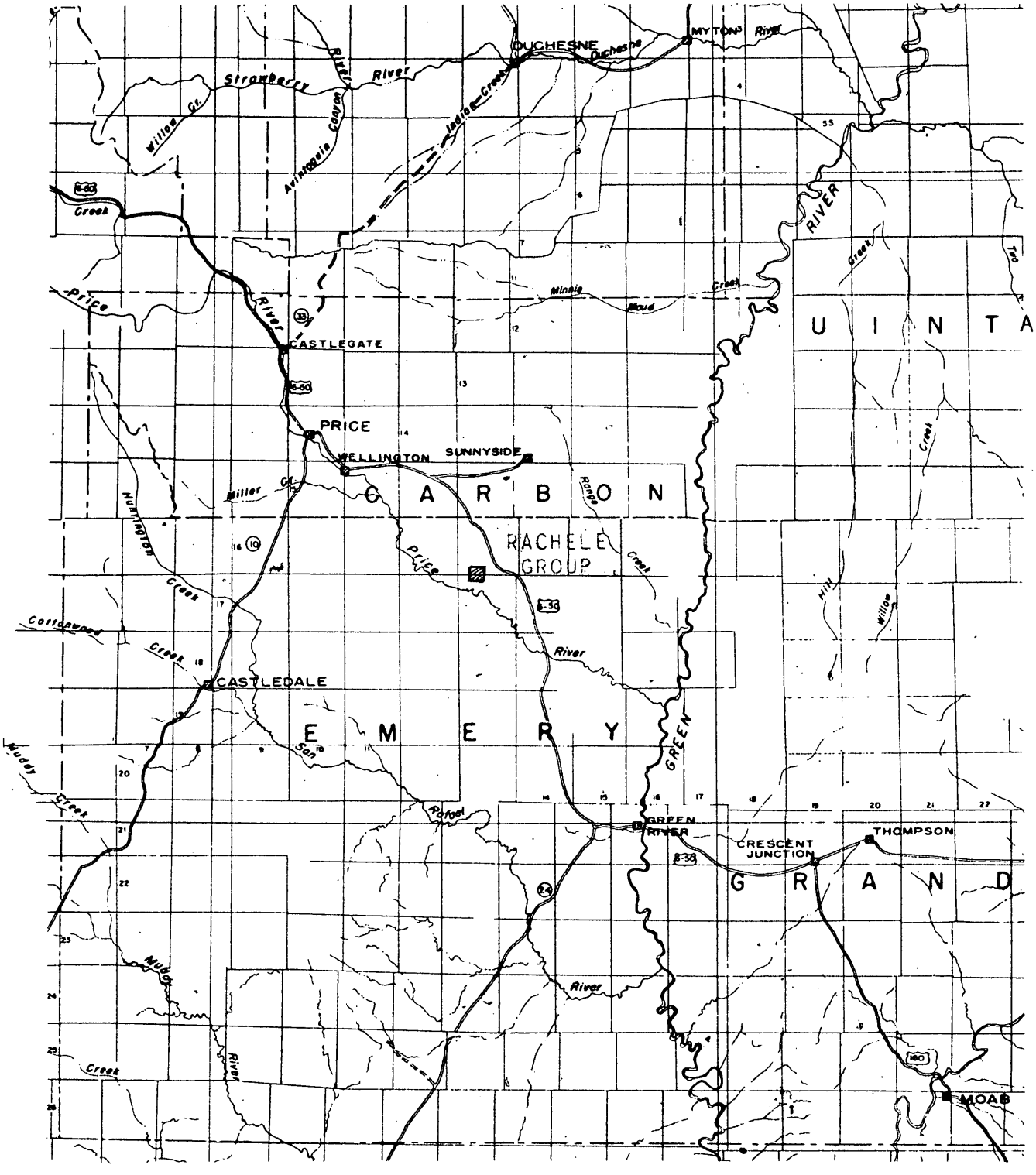

FIGURE 1.--LOCATION MAP, RACHELE GROUP, SAM RACHELE, ET.AL., EMERY COUNTY, UTAH.

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DATE	INITIALS	CODE

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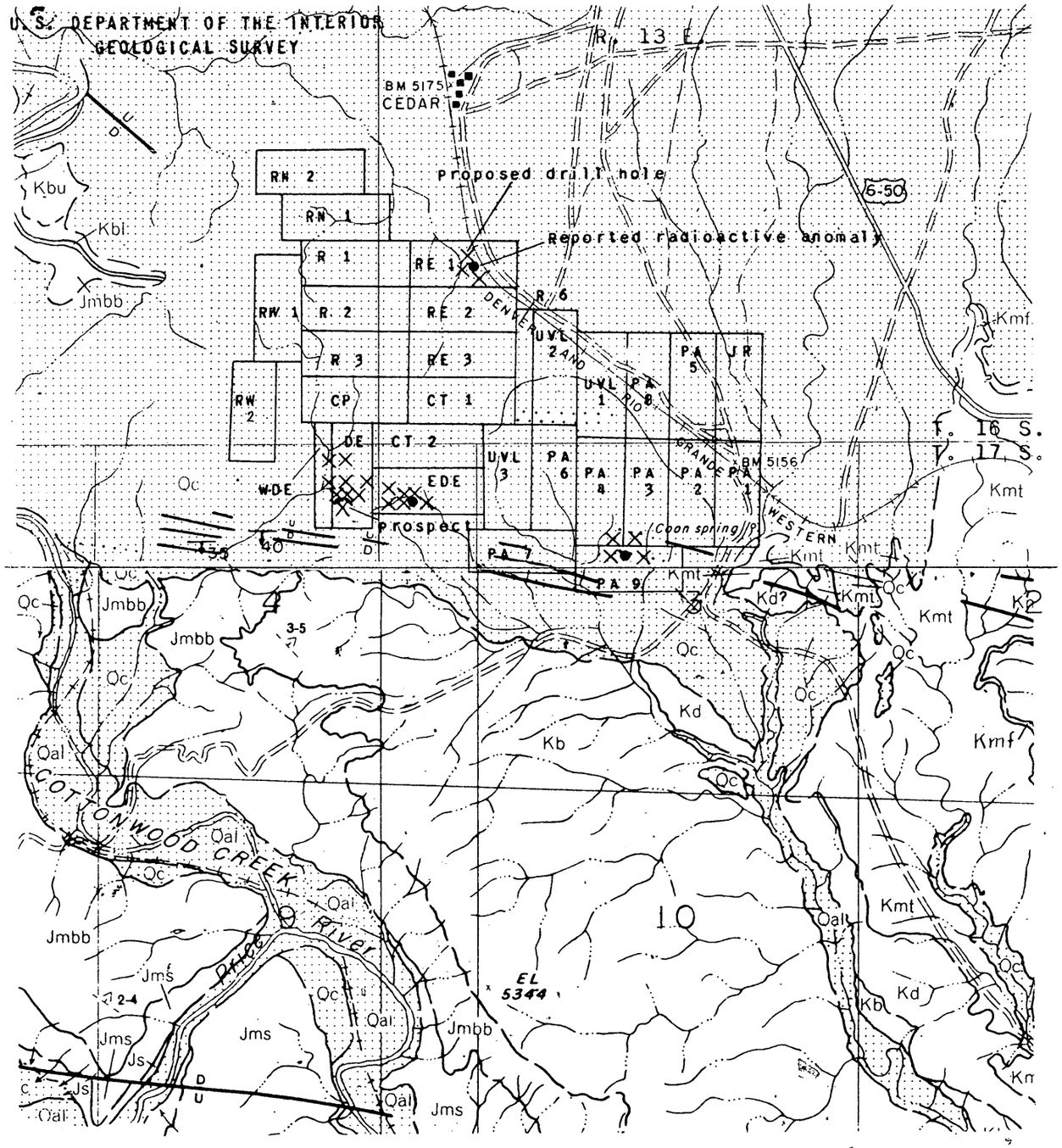
RECEIVED OCT 18 1957

DATE	INITIALS	CODE



DEFENSE MINERALS EXPLORATION ADMINISTRATION
OCTOBER 1957 DOCKET 4816

INDEX TO CLAIMS

R- RACHIELE
RN- RACHELE NORTH
RE- RACHELE EAST
RW- RACHELE WEST
DE- DEAD END
WDE- WEST DEAD END
EDE- EAST DEAD END
CT- CONGLOMERATE TOP
CP- CEDAR POINT
PA- P. AND A.
JR- J. AND R. COON SPRING
UVL- URANIUM VANADIUM LODE

N

2000 0 4000 FEET

Note: GEOLOGY FROM U.S. GEOLOGICAL SURVEY PHOTOGEOLOGIC MAPS OF WOODSIDE 4 AND WOODSIDE 5 QUADRANGLES. LOCATION OF CLAIMS, ANOMALIES, AND PROPOSED DRILL HOLES TAKEN FROM APPLICANTS MAP.

EXPLANATION

QUATERNARY

Qal | Qc

Alluvium and valley fill, Qal; covering deposits, undifferentiated, Qc

CRETACEOUS

Upper Cretaceous

Km
Kmf
Kmt

Mancos shale, upper part, Km; Ferron(?) sandstone member, Kmf; Tununk shale member, Kmt

Upper and Lower Cretaceous

Kd

Dakota sandstone

Lower Cretaceous

Kb | Kbu | Kbl

Probable equivalent of the Burro Canyon formation Undifferentiated, Kb; upper unit, Kbu; lower unit, Kbl

Jmbb
Jms

Morrison formation
Brushy Basin shale member, Jmbb; Salt Wash sandstone member, Jms

Js

Summerville formation

U / D
Fault
U, upthrown side; D, downthrown side

40
Strike and dip of beds

Contact, dashed where approximate

FIGURE 2.--GENERAL GEOLOGY IN THE VICINITY OF THE RACHELE GROUP OF CLAIMS, SAM RACHELE, JR. ET AL., EMERY COUNTY, UTAH.

EXTRA COPY
D M E A
RECEIVED OCT 15 1957

DATE	INITIALS	CODE

OFFICIAL FILE COPY
D M E A
RECEIVED OCT 18 1957

DATE	INITIALS	CODE

OFFICIAL FILE COPY
D M E A
RECEIVED SEP 9 1957
DATE 9/9/57 CONTROL 8 CODE 220 700

224 New Customhouse
Denver 2, Colorado

Memorandum September 4, 1957

To: J. W. Hasler) W/enclosures, Items 1-5 Below
DMEA/G. Jct.) " " " "

From: DMEA Field Team, Region III

Subject: Docket DMEA 4816 (Uranium) Sam Rachele, Jr., et al. (Rachele, et al., Claims) Emery County, Utah

Enclosed is the following material relating to the subject docket:

1. Copy of application for Government assistance in exploration work under the DMEA program.
2. Memorandum of Review by James Paone, USBM.
3. Memorandum of Review by W. P. Williams, USGS.
4. Letter of transmittal of the foregoing to this office, dated August 30, 1957, from the Chairman, Operating Committee, DMEA.
5. Routing Control Sheet.

A field examination of the property and a joint report of findings and recommendations pertaining to the Applicant's work proposal are requested.

If the field examiners recommend Government participation in the proposed exploration program, please submit eleven extra copies of each map used in the joint report which show the land to be subordinated and the location and extent of recommended work, relative to property boundaries.

The Bureau of Mines' copy of the application should <u>not</u> be returned to this office, but is to be kept for the Examining Engineer's file. The Routing Control Sheet, however, is to be completed, detached from the application, and forwarded to the Executive Officer with the Joint Examination Report. The Survey's copy of the application is to be returned to Mr. Harshman's office.

Enclosures
MHM:eh
cc: Sec. Op. Comm. (2)
Harshman, Items 2-4
DMEA/DFC (2)
Docket
Chron.

E. N. Harshman

E. N. Harshman
Acting Executive Officer

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/30	Kingsse	700
8/30	Ellis	700
8/30	[illegible]	130
"	Johnson	110
"	Mittendorf	100
8/30	C	220
		700

AUG 30 1957

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

Re: Docket No. DMEA-4816 (Uranium)
Sam Rachele, Jr., et al.
Rachele, et al., Claims
Emery County, Utah

Dear Mr. King:

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 August 22 and 26, 1957, from W. P. Williams, USGS, and James Paone, USBM, respectively, relating to the proposed project. Also enclosed, for use of the Field Team, are two extra copies of the application and three copies of the Applicant's letter of August 28, enclosing three drilling bids.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

O. M. Bishop (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

FLKnouse/izm 8-30-57
cc to: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/30	Kingsley	700
8/30	Ellis	700
8/30	Bisbee	130
"	Brown	110
"	Mittendorf	100
		340
8/30	Gilsegaard	130
		220
		700
8/30	Selfridge	(130)

AUG 30 1957

Mr. Sam Rachele, Jr.
Sam Rachele, Jr., et al.
1523½ East 9th South
Salt Lake City, Utah

Re: Docket No. DMEA-4816 (Uranium)
Rachele, et al., Claims
Emery County, Utah

Dear Mr. Rachele:

This will acknowledge receipt of your letter of August 28, 1957, enclosing three drilling bids. The application for assistance in exploring your property, under the captioned docket number, has been reviewed by the Division of Rare and Miscellaneous Metals of the Defense Minerals Exploration Administration. It has been referred to:

Mr. William H. King
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 (for)

Administrator

FLKnouse/izm 8-30-57
cc to: Mr. Knouse
Admr.'s Reading File

DMEA FT Reg. 3 (2)

8623

OFFICIAL FILE COPY DMEA RECEIVED AUG 29 1957		
DATE	INITIALS	CODE
8/29	C	220
"	FLE	700

1523½ East 9th South
Salt Lake City, Utah
August 28, 1957

Division of Rare and Muscellaneous Metals
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D.C.

Dear Sirs:

Enclosed are three bids which should have been submitted with my application for DMEA loan.

My application was dated August 8, 1957 and was assigned Docket Number 4816.

Yours truly,

Sam Rachele

Sam Rachele Jr.

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 27 1957

DATE	INITIALS	CODE
8/27	C	220
"	~~[illegible]~~	700
	PLK	

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

Date August 26, 1957

DMEA Docket No. 4816
DMEA Contract No.
Commodity Uranium
Name of applicant Sam Rachele, Jr.
Name of property Rachele Claims
Location of property Emery County, Utah
Estimated cost of project $19,533.75

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

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

1. Date of subject document: 8/8/57. 2. Date received by reviewer: 8/26/57

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

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

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

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

7. Explain items marked yes above:

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

9. Action advised:
   a. Obtain information from applicant ☐
   b. Refer to Field Team ☒
   c. Denial ☐
   d. Agree with Field Team ☐
      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) Upon review of additional information on the subject docket, referral to field team recommended.

IN REPLY REFER TO:

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

August 22, 1957

Memorandum

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

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

Subject: Review of application, DMEA 4816, (uranium), Sam Rachele, Jr., Rachele Claims, San Rafael Swell, Emery County, Utah

The applicant proposes to explore for uranium ore deposits on thirty mining claims located at the north end of the San Rafael Swell. The proposed project would consist of a total of 7,000 feet of drilling at a total estimated cost of $19,534.

To the best of my knowledge, great amounts of ore have not been produced from the vicinity of the applicant's claims. The applicant states that no ore has been mined from the property.

Past work on the claims appears to consist of two very short adits on one claim. The adits, presumably, were barren.

A geologic examination of the outcrops on the claims would be the best way to evaluate the application. The Geological Survey in Grand Junction very likely has information about the property from past work in the area. I propose that the application be sent to the Field Team for review, possible field examination, and report.

~~The application is incomplete in that maps were not submitted showing geologic contacts, sample points, past and proposed work, and claim boundaries and exact location of property.~~ WPW

W. P. Williams

W. P. Williams

ORIGINAL FILE COPY
DMEA
RECEIVED AUG 23 1957
DATE | INITIALS | CODE
8/23 | Q | 220
" | EWK | 700

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 21 1957

DATE	INITIALS	CODE
8/21	C	220
8/22	[illegible]	700
	Kaoume	

Washington 25, D. C.

Date August 20, 1957

Application No. 4816
DMEA Control No.
Commodity Uranium
Name of Applicant Sam Rachele, Jr.
Name of Property Rachele Claims
Location of property Emery County, Utah
Estimated amount of reserves 19,533.75

From: Ernest William Ellis, DMEA Member
Uranium Commodity Committee
James Paone, Bureau of Mines Member
Uranium Commodity Committee

Subject: Review of Application

1. Date of subject report: 8/8/57 2. Date received by DMEA: 8/20/57

3. Prior reports on this property: Yes [ ] No [ ]

4. Prior reports on other properties in vicinity: Yes [ ] No [ ]

5. Information available on mine production: Yes [ ] No [ ]

6. Other pertinent reports here to reviewed: Yes [ ] No [ ]

7. Explain items checked yes above:

8. Factors needing special case consideration:
   a. Location [ ]
   b. Ownership [ ]
   c. Evidence of encouragement on [ ]
   d. Geology [ ]
   e. Proposed exploration method [ ]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. [ ]

9. Action advised:
   a. Obtain information from applicant [x]
   b. Refer to Field Team [ ]
   c. Denial [ ]
   d. Agree with Field Team [ ]
      1. Consult with Mr. at MPS office
   e. Disagree with Field Team [ ]
   f. Suggest alternate plan [ ]
   g. Request routine orientation [ ]
   h. Approval [ ]

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

The applicant proposes to explore on the basis of one sample. Request information on geology, proposed exploration plan, maps, etc.

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

August 20, 1957

Mr. Sam Rachele, Jr.
1523½ East 9th South
Salt Lake City, Utah

Subject: DMEA 4816

Dear Mr. Rachele,

Your application for exploration assistance, dated August 8, 1957 submitted to our office at Washington, D.C. has been assigned Docket Number 4816 and referred to the Division of Rare & Miscellaneous Metals in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to:
Region III