IMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

DMEA NO. 4669

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(~~Withdrawn~~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

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

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

Left Side

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

Right Side

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

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

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

Left Side

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

Right Side

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

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

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

9775

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

March 5, 1957

ORIGINAL FILE COPY
DMEA
RECEIVED MAR 7 1957

DATE	INITIALS	CODE

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Application for DMEA Aid (Urnaium) D & R Uranium Corporation (D & R Claim Group) San Juan County, Utah

Enclosed are the original and one copy of the subject application. One copy is being forwarded to the Grand Junction Office and one copy is being retained in our file.

The applicant proposes to drill 100 holes averaging 850 feet in depth at an unspecified cost per foot, but at a total project cost of $112,770.00. No drilling bids were submitted with the application.

DMEA Field Team, Region III

E. N. Harshman

By E. N. Harshman
Acting Executive Officer

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DMEA

DEPARTMENT OF THE INTERIOR
MAR 4 1957
REGION [illegible]
DENVER, COLORADO

Not to be filled in by applicant

Docket No. 4669
Metal or Mineral Uranium
Date Received 3-7-57
Estimated Cost $112,770.00
Participation (Government %)

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

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: D & R Uranium Corporation, a Nevada corporation, 555 San Pablo Dr., Las Vegas, Nevada; President, W. D. Petty, 555 San Pablo Dr., Las Vegas, Nev.; Vice Pres. Homer Durham, Box 618, Moab, Utah; Vice Pres. Joseph E. Rambo, Box 593, Moab, Utah; N. L. Petty, Secy-Treas., 8013 Mammoth Ave., Van Nuys, California

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

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

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

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

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

(*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 Owner

(*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.

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

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

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

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

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

RECEIVED
MAR 7 1957
D.M.E.A.

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

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

(*c*) The work will start within 45 days and be completed within 8 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

☐ Money ☒ Use of equipment owned by you ☒ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated March 1, 1957

D & R Uranium Corporation
(Applicant)

By W. D. Gatty Pres.

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

INSTRUCTION NO. 3

3. (a) The land to be explored is approximately 200 acres consisting of claims numbers apex 1, 2, and 3, as outlined in blue on map attached as Exhibit 1, directly back of D & R claim No. 14. Claims numbers D & R 13 and 14 inked and claims numbers D & R 1, 2, 3, 4, 7, 8, 9, and 10. All claims described above will be located within boundary shown inked on map. However, definite benefits will be realized by the balance of the D & R property outlined on map in red, approximately 1100 acres.

All claims are located about center of the Colorado plateau, the richest uranium area known. Approximately 30 air line miles south and west from Moab, Utah, about three air line miles north of where the Green and Colorado Rivers meet, in San Juan County, Utah. Government survey of the area has not been made. Reference is made to the maps attached as Exhibits 1 and 2. All the mining claims of D & R Uranium Corporation are more fully described by the recorded location notice as shown under 3(f).

(b) Refer to 3(f).

(c) All the claims are owned outright by D & R Uranium Corporation.

(d) Not applicable.

(e) There are no liens or encumbrances on the property.

(f):	Date of location	Date of recording	Book	Pages
D & R #1 - 6 incl.	7-1-55	7-15-55	34	148-151 incl.
D & R #7 to 8 incl.	7-18-55	7-27-55	42	157
D & R #9 - 12 incl.	7-21-55	7-27-55	42	158-159
D & R #13 & 14	10-7-55	10-13-55	72	347-348
D & R #31, 32 & 33	10-16-55	11-9-55	80	246-247
D & R Apex #1,2,3,4	10-16-55	11-9-55	80	244-245
D & R 7A & 8A	10-16-55	11-9-55	80	235
D & R 9A & 10A	10-16-55	11-9-55	80	236
D & R 11A-24A incl.	10-11-55	11-9-55	80	237-243 incl.
D & R 19 - 30	--	--	74	162-167 incl.
D & R 34 - 36	--	--	74	168 and 169
D & R 1A - 6A	--	--	74	158-160 incl.

INSTRUCTION NO. 4

4. (a) The D & R Uranium Corporation built and constructed a road into the D & R property during 1956, a distance of approximately seven miles, from a point known as the White rim to D & R claim #4 shown on map, at a cost of $31,000.00. Two test holes have been drilled, at a cost of $5,600.00. One on D & R claim #13, approximately 100 feet back from the river escarpment, near the north boundary line of

D & R claim #13, and one on D & R claim #14, approximately 300 feet back from the river escarpment, near the north boundary line of D & R claim #14. Results shown, as per attached assays, conducted by Crismon and Nichols at Sale Lake City, December 3, 1956, an old long-established, reliable firm, and Smiths Laboratory of Moab, Utah. It is my understanding the latter firm has conducted more uranium assays than any other chemist. Both test holes were drilled to a depth of approximately 600 feet.

Following is a scintilator instrument reading, probing test hole drilled on D & R claim #13:

Depth	Reading	Depth	Reading
212 ft.	.13	218 ft.	.15
215 ft.	.10	219 ft.	.15
216 ft.	.12	220 ft.	.13
217 ft.	.17	222 ft.	.12

All readings showed below .10 from 223 ft. to 244 ft.

245 ft.	.14	270.5 ft.	.13
251 ft.	.12	271 ft.	.13
253 ft.	.12	271.5 ft.	.16
267 ft.	.13	272 ft.	.24
268 ft.	.12	272.5 ft.	.40
269 ft.	.10	273 ft.	.25
269.5 ft.	.10	273.5 ft.	.25
270 ft.	.12	274.5 ft.	.15
		275.5 ft.	.10

The probing of test hole on D & R claim #14 has not been completed, due to weather conditions.

All the above work was done and performed in the interest of the D & R Uranium Corporation.

The fact a road has been built into the D & R Uranium Corporation property, all holdings are accessible for examination purposes by the use of a jeep. Jeep owned by the D & R Uranium Corporation and available at the D & R mining camp at the White rim.

Enclosed find engineer's report on test hole drilled on D & R claim #13 compiled by J. E. Patterson, November 29, 1956.

Production facilities consist of one uranium ore reduction plant located at Moab, Utah, approximately 75 miles. This new mill started operation during October 1956, and is considered one of the most modern mills in the industry, with a daily capacity of 1500 to 2000 tons.

(b) No past or current production. However, referring to Mr. J. E. Patterson's (Professional Engineer) report, Mr. Patterson estimates a quantity of approximately 198,000 to 250,000 tons of low-grade uranium-bearing ore. This estimate is based on the first hole drilled on D & R claim #13 only. No estimate from Mr. Patterson has been received from the results of the second test hole drilled on D & R claim #14. Referring to the Engineer's report, Mr. J. E. Patterson, dated November 29, 1956, please note that the estimate is based only on a seven-foot vein. Actually the surface outcropping of the vein measures approximately 13 feet. However, using the same basis as a comparison on the second test hole drilled on D & R Claim #14, approximately 300 feet back from the river escarpment, as compared to approximately 100 feet on the first test hole drilled on D & R Claim #13, reveals the fact there should exist from 600,000 to 750,000 tons of low-grade ore available for extraction on the two D & R claims #13 and #14, 300 feet back from the river escarpment.

(c) The only geological reports are those compiled by Mr. Wm. Nault, Moab, Utah (copy attached) and Mr. J. E. Patterson, c/o Ohio Uranium & Mining Co., Inc., Moab, Utah (copy enclosed). Both Messrs. Nault and Patterson are recognized engineers and geologists, considered authentic in the industry.

The exposed uranium-bearing vein is visable on the face of the Green River Channel, approximately 260 feet down from the top. The thickness of this vein varies from about 12 feet to 30 feet, starting on the north line of D & R claim #14, extending south to the southern boundary line of D & R claim #4. Surface assay attached, conducted by Crismon & Nichols, Salt Lake City, January 24, 1956. It is to be noted on this surface assay that the first three assays are those of the Cutler sand stone formation, consisting of the 12-foot to 30-foot vein. The last figure is that of a limestone formation (referred to in Mr. Nault's report showing a thickness of from 18 inches to 3 feet) embedded directly below the huge sandstone vein. This limestone vein also extends across the entire length of the property.

While the surface assay of .092, as shown in the bottom figure of Crismon & Nichols assay, January 24, 1956, is low, there have been samples extracted from this limestone vein on D & R claim #4 that had readings as high as 11% uranium, from a drift of only 6 feet deep. It is our firm belief that all the assays tests, reports and

drilling, point to a tremendous body of uranium-bearing ore that further exploratory work, we feel certain, will prove to exist.

(d) The D & R Uranium Corporation property is located approximately 30 airline miles south and west of the township of Moab, Utah, reached via road or roads as follows: (Refer to road map enclosed) U.S. Highway #160 from Moab, Utah, north 8 miles, to junction of Utah State Highway. Turn left for a distance of approximately 33 miles. This portion of the State road graveled and well maintained. From this point south approximately 25 miles to D & R Uranium Corporation property, considered a secondary, unimproved road. However, this secondary road will accommodate loaded trucks. This secondary road must be maintained by the users at present. County will eventually maintain after hauling operations start. Road through property is, and will continue to be, user's responsibility. This portion of the road, referred to under 4(a) consists at present of a jeep road only. However, the road will accommodate the transportation of drilling equipment and supplies into the property for exploratory purposes. Before actual hauling can start, additional work of 45 to 60 days will be required, in order to accommodate loaded trucks, as per Mr. Patterson's report dated November 29, 1956, enclosed.

There are also two landing strips built, at a cost of $2,500.00, one on D & R claims numbers 11 and 12, and one approximately 3 miles north of the D & R Camp located on the White rim. Either landing strip will accommodate small planes, such as 2-place Piper Cubs. The total distance to transport the ore is to Moab, Utah, approximately 75 miles, where a uranium reduction mill is now in operation. This new mill started operation about October 1956, and has a capacity of 1500 to 2000 tons daily. It is my understanding that this plant is considered one of the best and most modern in the industry. We have been assured that our entire production will be processed by the mill. This statement was made to me the latter part of November 1956, by the management of the mill.

Supplies, in most cases, are available at Moab, Utah, approximately 75 miles. In the event certain items are not available at Moab, Utah, these items can be obtained from Salt Lake City, Utah, a distance of 260 miles, with over-night shipping service. Rarely, if ever, will this be the case, because Moab, Utah is considered the Uranium

Capitol of the world, and for this reason large supplies of all kinds are carried in stock at Moab, Utah, in order to accommodate the uranium mining business trade. This community is 30 miles from the railroad, but is served twice daily by the Garrett Truck Lines, one of the West's most reliable truck transportation companies.

Resident points and addresses is that of Moab, Utah, approximately 75 miles.

(e) Manpower available in desirable quantities at Moab, Utah. Due to the fact that Moab, Utah is considered the Uranium Capitol of the world, a selection of trained personnel, experienced in the uranium-mining field, is available at this point.

Materials and supplies available in desired quantities at Moab, Utah, for the same reasons as stated under manpower, as well as set forth under 4(d).

Equipment, in most cases, is available in desired quantities at Moab, Utah. The majority of the well-known equipment dealers maintain branch stores at Moab, Utah, because of the tremendous activities at Moab, Utah, created by the great number of uranium-producing mines in the Moab area. Charley Sterns, as one example. However, if needed equipment is not available at Moab, Utah, over-night shipment can be obtained from Salt Lake City, Utah, or Denver, Colorado.

Water for commercial use available in desired quantities from the Green River that flows the entire distance of the D & R Uranium property bordered on the west. Water for culinary purposes must be transported from Moab, Utah, a distance of approximately 75 miles, or the construction of a filtering system in order to use the water from the Green River for this purpose. It is considered that hauling culinary water from Moab, Utah, is the wise thing to do, rather than a filtration process, because the ore truck returning to the property from Moab, Utah, will be traveling empty and can carry one or two drums of water, as needed, without extra cost to the Corporation.

Power--any and all power needed must be generated by a portable plant. The nearest power line is located at Moab, Utah, approximately 75 miles

INSTRUCTION NO. 5

5. (b) It is our plan to drill 100 test holes to the river bed, approximately 860 feet deep, on the following claims:

10 test holes on D & R Claim #14
5 test holes on Apex Claim #1
5 test holes on Apex Claim #2
15 test holes on D & R Claim #13
10 test holes on D & R Claims #3 and #9
15 test holes on D & R Claims #2 and #8
10 test holes on D & R Claims #1 and #7
30 test holes on D & R Claims #4 and #10

This plan was conceived after a thorough study by engineers and management, based on the surface assays as shown on the assay report (enclosed) from Crismon & Nichols, Salt Lake City, Utah, dated January 24, 1956. The approximate location of the two test holes drilled, as referred to under 4(a), is indicated in red on the map. The approximate location of the proposed test holes to be drilled is indicated on the map in blue ink. These surface areas, as indicated, show the richest assays and should be explored back from the surface, to determine the thickness and richness of the exposed vein, as well as to determine the possibilities of more deposits deeper in the earth. The fall-off on the surface comes, in most cases, to the exposed sandstone vein that runs in thickness from 12 feet to approximately 30 feet. At present it is not known if any existing ore bodies lie below this point. However, it is the opinion that more uranium-bearing ore does exist at a lower strata, due to the test hole drilling done by the Ohio Uranium & Mining Co. on their property south of the D & R Uranium property, near where the Green and Colorado Rivers meet. The test holes drilled on the Ohio property revealed two 13-foot uranium-bearing ore veins existed below our exposed vein.

(d) Engineer J. E. Patterson will be Consultant of the exploration work. Mr. Patterson is a recognized engineer and geologist, having had wide experience in not only the United States, but Europe, Africa, South America and Asia, with such companies as Anaconda Mining Co., Standard Oil Co., Felps Dodge and many others.

Homer Durham, age 55, Vice President of D & R Uranium Corporation, will be in direct charge of the work to be performed. Having spent the past 25 years self-employed in the mining and construction field, operating heavy equipment and the maintenance of same, on such jobs as the Conscious Canal water project out of Tucumcari, New Mexico, the Bull Scholes Dam, Oklahoma, and many other big projects, making him well-qualified for this position.

C. W. Durham (son of Homer Durham) will be the assistant to Homer Durham. C. W. Durham has been associated with his father for the past 15 years, in the mining and construction business, being familiar and fully-versed on heavy equipment, its operation and maintenance.

W. D. Petty, age 55, President of D & R Uranium Corporation, will supervise and oversee the entire operation. With the B. F. Goodrich Co. 20 years, last position held was that of sales supervisor, Denver, Colorado; resigned 1948. Organized the Wilkerson Corp., Denver, Colorado, manufacturers of pneumatic commercial filters. Established distribution nationally. This firm has now grown to a middle 6-figure corporation and recognized as a leader in the commercial pneumatic filtration business. Resigned from Wilkerson, and established own distribution business for Wilkerson products for the states of California, Arizona and Nevada. Built this operation to the outstanding pneumatic filtration firm in California. Sold this business to the E. H. Mintie Co. for a sum in five figures, in order to organize the D & R Uranium Corporation.

INSTRUCTION NO. 6

6. Estimate of total cost of project--$112,770.00

6. (a) None

(b)	1 Driller @ $600 per month	$ 4,800.00
	1 Assistant Driller at $500 per month	4,000.00
	1 Mechanic @ $480 per month	3,840.00
	4 Laborers @ $350 per month each	11,200.00
	1 Truck Driver @ $450 per month	3,600.00
	Supervision	9,600.00
	Consultants (Engineer and Geologist)	8,000.00
		$ 45,040.00
(c)	Power--See 6(d)	
	Water--See 6(d)	
	Fuel (Gas, oil, diesel)	$ 6,587.00
(d)	1 Drilling rig	$ 17,500.00
	900 feet drilling pipe @ $4.50	4,050.00
	100 Drill bits @ $16.50	1,650.00
	1 Diamond drill bit	1,900.00
	1 Tank Truck	7,149.00
	1 D-311, 30 KW light plant	4,260.00
	1 Water pump, pipe, fittings, etc.	2,770.00
	Repair parts to carry on hand	1,500.00
		$ 40,779.00

Furnished; owned by operator (amounts not included in total estimate):

1 International Tractor	$ 12,000.00
1 5HP compressor	4,800.00
2 Jack hammers, couplings, etc.	1,350.00
1 Jeep	500.00
Miscellaneous hand tools, shovels, picks, bars, instruments	375.00
Buildings on camp site	300.00
Dozer blade	190.00
New air hose on hand	230.00
Gas pump, tanks and drums	350.00
Drill bits, steel, etc.	211.00
	($ 20,306.00)

6. (e) Repairs to movable equipment:

Tractor	$ 1,550.00
Compressor	675.00
Jeep	170.00
Jack Hammers	240.00
	$ 2,635.00

(f) None

(g) Repairs to Drill bits	$ 575.00
Analytical work	1,000.00
Accounting	2,000.00
Workmen's Compensation	1,351.00
Liability Insurance	1,200.00
Payroll taxes	1,351.00
	$ 7,477.00
(h) Contingencies not included above--10%	$ 10,252.00

INSTRUCTION NO. 7

7. (a) Yes

(b) Use of equipment present Value ---------- $ 20,306.00

The construction of approximately 7 miles of road at a cost of $31,000.00. This work was, or would be, necessary before equipment could be transported onto the property. The fact that this work has already been done should be figured in the cost of the project and as our share of the total cost, even though our cost runs considerably above the 25%. The actual minimum amount of money needed from Defense Minerals Exploration Administration is the amount shown on Schedule 6(a)--$112,770.00, in order to carry out the project.

Smith's Laboratory

CHEMIST AND ASSAYER

MOAB, UTAH

D & R Uranium

Feb. 8, 1957

Sample Description	% U_3O_8	% V_2O_5	%	%	%	%			
Sample # 1	0.088								
# 2	0.026								
# 3	0.054								

TOTAL CHARGES $ 9.00

Exhibit "3"

J. Earl Smith

CHEMIST

R. R. CASTO P. M. C[illegible]ON ORRIN FISHE[illegible] HAROLD E. CULVER

Surface

CRISMON & NICHOLS

ASSAYERS AND CHEMISTS

229-231 SOUTH WEST TEMPLE STREET

PHONE 3-7417 P. O. Box 1708

REPORT OF ASSAY

SALT LAKE CITY, UTAH January 24, 1956

W. D. Petty

WE HAVE ASSAYED YOUR four SAMPLES AND FIND them TO CONTAIN AS FOLLOWS:

DESCRIPTION	NO.	PERCENT URANIUM OXIDE (U_3O_8)	PERCENT VANADIUM OXIDE (V_2O_5)			
Claim	13	0.381				
	14	0.747				
South of 13	2-3	0.539				
Lower Vein	[illegible]4	0.092				

REMARKS:

CHARGES $ 20.00

CRISMON & NICHOLS

BY [signature]

R. R. CASTO P. M. CRISMON ORRIN FISHER HAROLD E. CULVER

Claim #13

CRISMON & NICHOLS

ASSAYERS AND CHEMISTS
PHONE EM 3-7417 229-231 SOUTH WEST TEMPLE STREET P. O. Box 1708

REPORT OF ASSAY

SALT LAKE CITY, UTAH December 3, 1956

W. D. Petty

WE HAVE ASSAYED YOUR one SAMPLES AND FIND it TO CONTAIN AS FOLLOWS:

DESCRIPTION	NO.	PERCENT URANIUM OXIDE (U_3O_8)	PERCENT VANADIUM OXIDE (V_2O_5)			
D & R		0.126				

REMARKS:

CHARGES $ 5.00 Paid

CRISMON & NICHOLS
By [signature]

Exhibit "4"

OHIO URANIUM & MINING CO., INC.

34 S. Pleasant St.
FAIRBORN, OHIO

L. E. AUGENSTEIN, Pres.
L. PARRIMAN, V. Pres.
M. E. McCAULEY
G. R. PARRIMAN
G. ESSELMAN

C. W. ELLIOT, Sect.
L. H. MOSES, Treas.
H. L. ADAMS
R. A. SCHWIETERMAN
J. E. PATTERSON

Moab, Utah.
Nov. 29, 56.

Mr. W. A. Petty. Pres. D&R. Uranium Corp.
Las Vegas, Nevada.

RE: Exploritory
Drilling - D&R # 13
San Juan County, Utah.
(REPORT NO. 1)

Dear Sir:

Acting under your instruction and in accordance with existing drilling contract, the following Well Log, together with related information is submitted for your file and records.

Drilling site is situated on the north side centre line of Claim #13, and aproximately 85 ft. North east of the Green river escarpment. Rig elevation aprox. 860 ft. above river stage and 260 ft above the cutler sand stone formation in the lower strata of the Kaibab, and aproximately 310' above the Coconino Shale and conglomerate.

Drilling equipment was moved into location Nov. 23, and rigged up for spudding on the 24th. The first formations encountered were, Red, yellow and grey, hard sand stone all of river deposition. the first radio active reading of interest was found at 260' in the cutler formation. a core was taken from 260' to 280'. the ore bearing strata is of grey, Green conglomerate, medium soft, with an estimated assay (on Scintilator instrument) of from .14% to .18% U_3O_8 Uranium. the ore bearing rock at this point was five feet in thickness all of which

(2)

OHIO URANIUM & MINING CO., INC.

34 S. Pleasant St.
FAIRBORN, OHIO

L. E. AUGENSTEIN, Pres.
L. PARRIMAN, V. Pres.
M. E. McCAULEY
G. R. PARRIMAN
G. ESSELMAN

C. W. ELLIOT, Sect.
L. H. MOSES, Treas.
H. L. ADAMS
R. A. SCHWIETERMAN
J. E. PATTERSON

has a fair sesting of low grade ore. However, the most interesting fact is that from this point of exploration to the known out crop deposits along the face, there should be a large deposit extending approximately 100' back into the hill and a distance of 800' to 1000' along the exposed surface, this is predicated up on present findings and a minimum tonage known to exist in the immediate area. Some exposed areas show a highly interesting outcrop of more than 18 feet in hight and actually assaying .74% concentrate. other ore bearing deposits are expected from 300' to 350' this is based on test hole drilled on the far south area of the Ohio Company who have tested approximately 13 feet of low grade ore back from the river 350' North. Based on an estimated area of 80' X 7' X 1000' to 1200' from claim no. 12 to claim No. 15, and taking into account only a minimum possible deposit in this partly proven area, I would estimate approximately 198,000 to 250,000 tons of low grade ore, and could actually be processed for transportation with a tramway system, or 60 days road building.

for a more comprehensive study of these formations and test drilling please refer to detached Drill Log.

Yours, very truly.

J. E. Patterson Prof Eng.

Engineer's Geological Information Compiled by Wm. Nault, Moab, Utah. Old sea channel apro. 70 D. Out crops show width 3000 ft. Formation Cutler. Prop remenent of Cedar Mesa Cutler. Top horizon 2-3 prob. Arkose formation. High count .825 Chem. 1.1. .50 plus body average. 4'- 20' probably average 12 ft. Diabase or sandstone, decimated high count. Somewhat Carbonized. Showing some Zirconium, very recptive material. Lower horizon or base 18" to 3 ft. limestone. High count probably .04 and up. 3 ft. Mudstone or red shale similar to Moenkopi, doesn't carry to any depth. Some showing of Zuenerite U 308, Material average .93 as A. E. C. chemical analysis.

Exhibit "5"

Denied

ORIGINAL FILE COPY
DMEA
RECEIVED NOV 25 1957

DATE	INITIALS	CODE
11/25	gb	220
~~11/25~~	~~JM~~	~~200~~
		225

224 New Customhouse
Denver 2, Colorado

November 21, 1957

Mr. Edward K. Olson, Jr.
1014 Villa
Porterville, California

Re: Docket DMEA-4669 (Uranium)
D & R Uranium Corporation
(D & R Claim group)
San Juan County, Utah

Dear Mr. Olson:

This will acknowledge receipt of your undated letter, received in this office November 20, 1957, requesting information on the D & R Claim group.

We note that the Inter-River Corporation plans to further explore the D & R claims in the near future. Should this work you plan to do on these claims, at your expense, reveal additional geologic information which, in your opinion, would warrant further exploration, you may submit an application for DMEA aid.

Enclosed are five copies of Form MF-103, Application for Aid in an Exploration Project, DMEA Order-1 Revised, and a booklet of "Questions and Answers" on the DMEA program.

Should you have further questions regarding the DMEA program, we shall be happy to answer them.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

Enclosures
HMC:jy
cc: Sec. Op. Comm. (2))
Harshman) w/copy of ltr.
Docket 4669) undtd.
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
NOV 20 1957
REGION III
DENVER, COLORADO

INTER-RIVER CORPORATION
555 San Pablo Drive
Las Vegas, Nevada

Subject: DMEA Loan -
Ref. D& R Uranium Corp.

U. S. Bureau of Mines
224 New Courthouse Building
Denver 2, Colorado

Dear Sirs:

The Inter-River Corporation has just recently leased the D & R Uranium Companies claims about 70 miles south-west fo Moab, Utah. There are 60 claims involved in this lease and theyare found between the Green and Colorado rivers. I was informed by the D & R Uranium Corp. that they had applied for a DMEA loan last spring and at the time they were refused the Loan.

We plan to improve these claims and do a program of exploration in the comming months. Personally we feel that the area warrents further exploration over the amount done by D & R. The D & R company drilled two exploratory holes in the area besides the work done on the outcropings on the Green River side of the claims. D & R. didn't seem to know whynthey were turned down on the loan application. We feel that you have a report in your office on this property that could answer this question. The reason for wanting to know the reason for the loan not being granted is that we are considering applying for a like loan in the future if our findings warrent it.

I would like an opinion from your office on whether there would be a possibility of getting a loan in the future on this propery or if because of the reseach done at the time of the D & R application it would never be possible to get a loan in this area. Any information you can give me on the D & R application and the reasons for its refusal would help us very much in planning our program for the future.

If there is the possibilty of obtaining a loan on this property in the future would you please send me the information needed to make a formal application for a DMEA loan.

Thanking you for a prompt reply.

Yours truly

Edward K. Olson Jr.

Edward K. Olson Jr.
Sec.-Treas. Inter-River Corp.

Please mail the answer to this letter to me at the following address:
Edward K. Olson Jr.
1014 Villa, Porterville, California

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/28	Ellis	700
5/28	Murphy	700
5/31	Selbert	130
5/29	McMahon	130
5/29	Kiilsgaard	130
6/3	Richardson	100
		220

JUN - 3 1957

Mr. W. D. Petty, President
D & R Uranium Corporation
555 San Pablo Drive
Las Vegas, Nevada

Re: Docket No. DMEA-4669 (Uranium)
D & R Group
San Juan County, Utah

Dear Mr. Petty:

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 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. Such denial, however, is made without prejudice to the property. In the event further work on your part discloses new and more favorable evidence of ore deposition on the property, we shall be pleased to consider a new application.

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

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

FMMurphy/izm 5-28-57
cc to: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
DMEA FT Reg. 3 (2)

DOCKET COPY

May 28, 1957

Murphey
Ellis

Summary of Proposed Project

Object: Denial of application for exploration aid.

Docket No.: DMEA-4669

Commodity: Uranium

Amount of application: $112,770.00

Applicant: D & R Uranium Corporation
555 San Pablo Drive
Las Vegas, Nevada

Property: Owner: 60 contiguous claims (D & R) in unsurveyed area but appear to lie in T. 30 S., R. 18 E., S.L.B.M., San Juan County, Utah.

Date of application: March 1, 1957
Referred to Region III: March 21, 1957
Field Examination made: April 16, 1957
Field Team report received: May 22, 1957

Work Proposed: Drill 100 holes on 12 selected claims to explore for uranium in sandstone and limestone beds of the Pennsylvanian and Permian (?) Rico formation and the upper limestone beds of the Pennsylvanian Hermosa formation. The average depth of the holes is estimated to be 860 feet.

Labor, supervision, consultants	$45,040.00
Materials and supplies	6,587.00
Operating equipment	40,779.00
Rehabilitation and repairs	2,635.00
Miscellaneous	7,477.00
Contingencies	10,252.00
Total	$112,770.00

Excerpts from Field Team report:

The Applicant proposes to furnish his share of the total cost of the project by use of corporation-owned equipment and by including the cost of a previously built access road. It appears that DMEA is expected to contribute the total estimated cost (shown above).

The few known ore deposits in the area are generally small and scattered. The extensive work of the AEC in this area (between the Green and Colorado Rivers) has resulted in an inferred ore reserve of 8,000 tons.

The mineralized material of main interest on the property is a brown arkosic sandstone that immediately underlies the Shafer limestone at the top of the Rico Formation. The bed ranges from 15 to 20 feet thick and on fresh surface is a light orange color. From a few inches to as much as a foot thick at the base is a reddish brown conglomeritic arkose that carries most of the uranium mineralization. Upward from this zone, the color grades to light orange and the sand size becomes medium-grained. Mineralization decreases upward with the color and grain size change. Three samples taken by the examiners bear out the apparent decrease:

Basal reddish conglomerate		0.078% U_3O_8
One foot above	"	0.020% "
Two feet "	"	0.014% "

The brown sandstone outcrop was examined over a distance of about 3500 feet. Ore-grade material was indicated as being extremely spotty and mostly in less than 2 to 3-inch thickness.

A very limited amount of exploration, consisting of two drill holes and shallow rim workings, has been done on the claims. Information concerning the two holes is not detailed enough to use in evaluating the property. Cores and cuttings were not available to the examining team.

The outcrop of the "Brown Ledge" has been thoroughly prospected by the Applicant and small cuts made when spotty mineralization was noted on the surface. These shallow rim-workings did not indicate that the sandstone bed was more strongly mineralized at depth and no ore-grade material was stockpiled or shipped from the workings.

The occurrence is similar to others in the Rico that are known to be uneconomic.

The Field Team recommended that the application be denied without prejudice.

Commodity Members' comments (excerpts):

U. S. Geological Survey - N. E. Nelson, May 24, 1957

Mr. Nelson summarizes the field examiners' report and concurs in the Field Team's recommendation to deny the application without prejudice.

U. S. Bureau of Mines, James Paone, May 24, 1957

Mr.Paone concurs in the Field Team's recommendation.

Rare and Miscellaneous Metals Division - F. M. Murphy,
May 28, 1957

The proposed drilling project cannot be justified according to the information submitted by the field examiners. Drilling holes averaging 860-feet in depth does not appear to be the cheapest method to find out if the mineralization noted on the outcrop increases inward. A prospect drift would serve this purpose; however, the examiners apparently could find no evidence of ore trend or channeling on the outcrop, so the location of a drift would be a hit-or-miss proposition.

Conclusion and Recommendation:

A review of the Field Team report indicates that no specific target, other than the thin mineralized base of a brownish sandstone bed, is evident on the property. This Division agrees with the conclusions of the field examiners and concurs in the Field Team's recommendation that application DMEA-4669 should be denied without prejudice.

Ernest Wm. Ellis

Ernest Wm. Ellis

OFFICIAL FILE COPY DMEA RECEIVED MAY 27 1957		
DATE	INITIALS	CODE
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"	FMM	700
Complete		

[illegible]
[illegible]
Bureau of Mines
Washington 25, D. C.

Date May 24, 1957

DMEA Docket No. 4669
DMEA Contract No.
Commodity Uranium
Name of applicant D & R Uranium Corp.
Name of property D & R Claim Group
Location of property San Juan County, Utah
Estimated cost of project $112,770.00

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

Field TEam Report
(Application, Hold Item Report, etc.)

1. Date of report does [illegible]: 5/57 2. Date received by reviewer: 5/23/57

3. [illegible] on this property known to reviewer: Yes ☐ No ☐

4. [illegible] on nearby properties known to reviewer: Yes ☐ No ☐

5. Information available on part 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 Hold Item ☐
- c. Denial ☒
- d. Agree with Field Team ☒
- e. Disagree with Field Team ☐
- f. Suggest alternate plan ☐
- g. Request another examination ☐
- h. Approval ☐
- i. Consult with Mr. _____ at _____ AEC office.

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

IN REPLY REFER TO:

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DMEA
RECEIVED MAY 27 1957

DATE	INITIALS	CODE
5/27	C	220
4	FMM	700

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

May 24, 1957
Re: DMEA 4669
D & R Uranium Corp.
D & R Claims
San Juan County, Utah
$112,770 - Uranium

Memorandum

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

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

Subject: Review of Field Team Report

The applicant requested assistance in exploring a 60-claim group of claims near the confluence of the Green and Colorado Rivers, underlain by rocks of the Rico formation (Pennsylvanian? Permian?) and the Hermosa (Pennsylvanian) formation. The average depth of the proposed 100 holes is 860 feet.

Low-grade uranium mineralization is found in a brown weathering sandstone, near the top of the Rico formation and about 950 feet below in the Hermosa formation. Six places showing mineralization in the Rico formation were examined. At none of them was the mineralization more than 2 - 3 inches thick.

Experience in the area indicates the usual favorably regarded criteria are missing and as miles of outcrop have been examined, roughly and in detail, none are to be expected.

Because the occurrences seen are uneconomic and are similar to others in the Rico formation that are known to be uneconomic, the examiners and the Field Team recommend that the application be denied without prejudice.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

May 20, 1957

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DMEA
RECEIVED MAY 22 1957

DATE	INITIALS	CODE
5/22	[illegible]	220
		130
5/27	[illegible]	220
"	FMM	700

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 4669, (Uranium) D & R Uranium Corporation (D & R Claim Group) San Juan County, Utah

Enclosed are the original and three copies of the Joint Report of Examination on the subject property by H. F. Robertson, USBM, and Howard F. Albee, USGS.

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

E. N. Harshman

E. N. Harshman
Acting Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
5-24-57
(date)

ON-SITE
F.T. Report

DMEA
DEPARTMENT OF THE INTERIOR
MAY 17 1957
REGION III
DENVER, COLORADO

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

IN REPLY REFER TO:

MINERALS DEPARTMENT
DMEA
RECEIVED
MAY 17 1957
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

May 14, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 22 1957

DATE	INITIALS	CODE
		1302
	EWH	
	ash	220

Memorandum

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

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

From: J. William Hasler

Subject: Transmittal of joint engineering and geologic report, DMEA 4669 (Uranium), D&R Uranium Corporation (D&R claim group), San Juan County, Utah

Enclosed are 12 copies of a joint engineering and geologic report by Howard F. Albee, U. S. Geological Survey, and H. F. Robertson, U. S. Bureau of Mines, on the D&R claim group.

The D&R Uranium Corporation applied for DMEA assistance to explore their D&R group of claims, located in the inter-river area about three miles north of the confluence of Green and Colorado rivers in San Juan County, Utah. The applicant proposes to explore for uranium deposits on a block of sixty contiguous mining claims.

The application was referred to the field and the property was examined on April 16, 1957 by the examining team, who were accompanied by Mr. Homer Durham, Vice President of the D&R Uranium Corporation.

The program proposed by the applicant would explore for uranium ore deposits in the sandstone member of the Rico formation of Pennsylvanian and Permian (?) age and limestone beds in the Hermosa formation of Pennsylvanian age. The thick sandstone bed (locally known as the Brown Ledge) immediately underlies the Shafer sandstone member. Sparse uranium mineralization occurs as a film on joint planes in the lower part of the sandstone layer.

The Atomic Energy Commission has done considerable geologic mapping in the area and, although uranium occurs in the Cutler and Rico members where known, the potential of the area as a significant uranium producer is considered almost nil. Because of these facts, it is deemed advisable that the application for a DMEA loan be denied.

Reviewed by
DMEA OPERATING COMMITTEE
5-24-57
(date)

TRANSMITTED
MAY 17 1957

DMEA 4669 5/14/57

Enclosed are 12 copies of figures 1, 2, and 3 to accompany the report.

The AEC was consulted relative to the property. I concur with the conclusions and recommendations of the examining team.

J. William Hasler

J. William Hasler,
Geologist

JWH/mlr

Enclosures

Report, 12 copies
Figs. 1, 2, 3 - 12 copies
Brochure

FOR UNITED STATES GOVERNMENT USE ONLY

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

DMEA 4669

D & R Uranium Corporation

D & R claim group

San Juan County, Utah

Uranium

Joint Engineering and Geologic Report

by

Howard F. Albee
U. S. Geological Survey

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

May 1957

DMEA OPERATING COMMITTEE
5-24-57
(date)

TRANSMITTED
MAY 17 1957

DMEA 4669
D & R URANIUM CORP.
D & R CLAIM GROUP
SAN JUAN COUNTY, UTAH

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Joint Engineering and Geologic Report

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ILLUSTRATIONS

Figure		Follows Page
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2.	Geologic Map showing area of proposed exploration, D & R Uranium Corp., San Juan County, Utah	15
3.	Generalized profile of strata on the D & R group of claims, D & R Uranium Corp., San Juan County, Utah	15

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DMEA
RECEIVED MAY 22 1957

DATE	INITIALS	CODE

DMEA 4669
D & R URANIUM CORP.
D & R CLAIM GROUP
SAN JUAN COUNTY, UTAH

INTRODUCTION AND SUMMARY

D & R Uranium Corporation, 555 San Pablo Drive, Las Vegas, Nevada, applied, on March 1, 1957, for DMEA assistance in the exploration of their D & R group of claims located in the inter-river area about 3 miles north of the confluence of the Green and Colorado Rivers in San Juan County, Utah.

The applicant proposes to explore for uranium ore deposits on a block of 60 contiguous mining claims. The project would apparently consist of 100 test holes drilled on 12 selected claims which the applicant considers the most promising of the group. The estimated average depth of the holes is 860 feet.

An examination of the property was made on April 16, 1957, by a DMEA examining team consisting of Howard F. Albee, U. S. Geological Survey, and H. F. Robertson, U. S. Bureau of Mines. The examining team was accompanied by Mr. Homer Durham, vice-president of the D & R Uranium Corporation.

The program proposed by the applicant would explore for ore deposits in a sandstone member of the Rico formation of Pennsylvanian and Permian(?) age and limestone beds in the Hermosa formation of Pennsylvanian age.

The thick sandstone bed, locally known as the "Brown Ledge", immediately underlies the Shafer limestone member. Sparse uranium mineralization occurs as a film on jointing planes in the lower part of the sandstone layer. Only one occurrence of uranium disseminated in the host rock was noted.

A large amount of geologic study and mapping has been done in the subject area by the AEC and, although the uranium occurrences in the Cutler and Rico members were known, the potential of the area as a significant uranium producer is considered almost nil.

On consideration of information from previous work in the area and the field examination of the subject property, the examining team recommends denial without prejudice of the property.

ACKNOWLEDGMENTS

The Atomic Energy Commission was consulted for pertinent data on the inter-river area, including production and reserve information. Memoranda from W. P. Williams, USGS, and J. E. Crawford, USBM, relating to the subject application, were noted.

The examining team was accompanied by Homer Durham, vice-president of the D & R Uranium Corporation.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The D & R group of claims are located in an unsurveyed area but, by projection of established land lines, appear to lie in T. 30 S., R. 18 E., Salt Lake Base and Meridian, San Juan County, Utah. The property covers rugged canyon topography between the Green and Colorado Rivers, about 3 miles north of the confluence of the two rivers. Altitudes range from the river level - about 3,880 feet - to the top of the Cutler formation averaging about 5,200 feet. The terrain is cut by many deep, steep-walled canyons thus making road-building a very expensive and difficult operation. The surface of the high areas behind the rim of the river canyons is relatively smooth rock with very thin soil cover and sparse vegetation.

A poor access road, seven miles in length, winds from a bench about 900 feet above the river level to the D & R camp. A fair access road, 30 miles in length, leads from the camp to the Shafer trail, an all-weather road which, 40 miles to the northeast, connects with U. S. Highway 160 at a point nine miles north of Moab, Utah, and 30 miles south of the Denver and Rio Grande Western Railroad at Thompsons, Utah. Traveling time from the property to Moab is four hours.

Labor, materials, and supplies can be obtained in Moab, and uranium ore can be shipped to the Moab uranium processing plant.

HISTORY AND PRODUCTION

The area between the Green and Colorado Rivers has been prospected for uranium minerals since about 1951. Much of the more inaccessible areas along the river, have been prospected by boat. The D & R group of claims were located during 1955 on the basis of mineralized showings high on the river canyon walls.

The few known uranium deposits in the area are generally small and scattered. The extensive work of the AEC in the inter-river area has resulted in an inferred ore reserve estimate of only 8,000 tons. The applicant's estimate of the potential ore body on the D & R group (600,000 to750,000 tons of "low-grade" ore) is completely out of line as it is apparently based on one drill-hole about 300 feet back from the rim and mineralized showings on the outcrop. The weak, spotty uranium mineralization seen on the outcrop does not justify the assumption that a body of ore of such magnitude exists in the sandstone bed.

There has been no production from the D & R claims nor any significant production from within 10 miles of the property. Small pods of uranium ore have been mined from the Moss Back member of the Triassic Chinle formation about 8 miles north of the subject claims but these mines are very small, one- or two-man operations. Uranium deposits have been found in the Permian Cutler formation in the Indian Creek area, about 10 miles east and these have also been small, scattered occurrences.

OWNERSHIP AND EXTENT

The property consists of 60 unpatented lode mining claims in the inter-river area in San Juan County, Utah. All claims, with the exception of the D & R Nos. 19 thru 30, 34 thru 36, and 1A thru 6A, were located by Homer Durham and Joseph Rambo, officers of the D & R Corporation. The 21 excepted claims were located by Homer Durham and David Dougherty. The applicant states that there are no liens or encumbrances on the property. The location notices are recorded in the office of County Recorder, San Juan County, Utah, as follows:

Name of Claim	Locators	Recording Data		
		Date	Book	Page
D & R 1-6 incl.	Durham/Rambo	7-15-55	34	148-151 incls.
D & R 7-12 "	" "	7-27-55	42	157-159 "
D & R 13 and 14	" "	10-13-55	72	347-348
D & R 19-30 incl.	" /Dougherty	10-20-55	74	162-167 "
D & R 31-33 "	" /Rambo	11-9-55	80	246-247
D & R 34-36 "	" /Dougherty	10-20-55	74	168-169
D & R Apex 1-4 incl.	" /Rambo	11-9-55	80	244-245
D & R 1A-6A "	" /Dougherty	10-20-55	74	158-160 "
D & R 7A-24A "	" / Rambo	11-9-55	80	235-243 "

No conflicting locations were noted during the field examination and the claim map submitted by the applicant appears to indicate that various locators in the immediate vicinity have agreed on claim boundaries where overlaps occur.

GEOLOGY

The property lies in the southernmost part of the area between the Green and Colorado Rivers where the exposed formations consist largely of Pennsylvanian and Permian rocks. The only structure in the area is a gentle regional dip of from 2 to 3 degrees northwesterly.

Strata exposed in ascending order from the level of the Green River are those of the Hermosa formation of Pennsylvanian age, the Rico formation of Pennsylvanian and Permian (?) age, and the lower part of the Cutler formation of Permian age.

The part of the Hermosa formation that crops out is composed of interbedded gray weathering limestone, white to gray sandstone, and a minor amount of purplish red arkose. The color of the exposed beds as a whole is a light gray in contrast to the purplish red beds of the overlying Rico. About 250 feet of Hermosa is exposed above the river level and, in general, is cliff forming.

The Rico formation is composed of alternating beds of arkose and arkosic sandstone, with subordinate limestone and shale. The beds are dominantly purplish red, grading upward from gray beds near the Hermosa through the purplish red zone to the upper brown weathering sandstone and bluish gray limestone beds at the top. The Rico weathers mostly as a steep slope with the upper sandstone bed and the enclosing limestone beds forming a cliff.

The top of the Rico is placed at the highest fossiliferous limestone which, regionally, is not the same limestone bed and which laterally may be at different stratigraphic positions above the base of the formation. At the place of examination, the highest limestone is probably the Shafer limestone which is prominent at Shafer dome about 16 miles airline, northeast of the property. On the property, the limestone is a dense, bluish gray, fossiliferous bed about 40 feet thick, and immediately overlies a 15 to 20 foot thick arkosic sandstone that weathers to a brown color and generally forms a vertical cliff. This sandstone is immediately underlain by a 2 to 3 foot thick bed that, in places, is a bluish gray limestone which laterally changes to a marl, thence to a mudstone bed.

The Rico formation is about 575 feet thick where it was measured about 4 miles southeast by J. B. Reeside, Jr.[1/]

1/ Baker, A. A., and Reeside, J. B., Jr., Correlation of the Permian of southern Utah; northern Arizona; northwestern New Mexico, and southwestern Colorado: Am. Assoc. Petroleum Geologists Bull., vol. 13, pp. 1413-1448, 1929.

The base of the Rico is conformable and gradational with the underlying Hermosa and the top is conformable with the overlying Cutler. Where the fossiliferous limestone is not present the contact with the Cutler is not discernible or may only be picked arbitrarily.

The Cutler formation of the area has been described as including three members by earlier writers. The upper unit consists of chocolate brown muddy sandstone with a maximum thickness of about 130 feet. Recently this unit has been shown to correlate with strata in the Moenkopi formation to the northeast of the area, and has been proposed as the Hoskinnini member of the Moenkopi formation. 2/

2/ Stewart, John H., Some Stratigraphic relations of the Hoskinnini member of the Moenkopi formation (New Usage) on the Colorado Plateau (in press).

The White Rim sandstone, according to the proposed usage, is the uppermost member of the Cutler and is about 60 feet thick in the area. It is of interest because it crops out as a vertical cliff over large parts of the area and forms a formidable barrier over which access to the claims must be gained.

To the north and northeast of the area, the Cutler comprises Organ Rock member type red beds of arkose and arkosic sandstone. Most of the beds are muddy in texture and the finer grained beds contain abundant mica. To the south of the area, the laterally equivalent Cedar Mesa member strata consist of thick,yellowish-white sandstone beds with high-angle, large-scale cross laminations. The property lies in the area where the arkosic red-bed facies is changing laterally to

the Cedar Mesa sandstone facies of probable eolian deposition. The gradation southward from the Organ Rock facies to the Cedar Mesa facies has developed, in the area of the claims, as beds of yellowish-gray sandstone alternating with the red beds of arkosic sandstone, and is about 825 feet thick in the vicinity of the property. This alternation of rock types erodes to an extremely rough topography of ragged walled canyons separated by steep-walled ridges, making access to the area extremely difficult.

ORE DEPOSITS

The mineralized material of main interest on the property is in the brown weathering arkosic sandstone that immediately underlies the Shafer limestone at the top of the Rico formation. This sandstone bed ranges from 15 to 20 feet thick and on fresh surface is mostly a light orange color. From a few inches to as much as a foot thick at the base is a reddish brown conglomeratic arkose that carries most of the uranium mineralization. Upward from this reddish brown zone, the color grades irregularly to light orange and the sand size becomes medium-grained. Mineralization decreases upward with the color and grain size change.

The outcrop was examined at six places in a distance of about 3,500 feet. At other places it was in a cliff and inaccessible. A similar relation of uranium mineralization with lithology and color, as described above, was noted at each point of examination. One notable

difference from place to place was the lateral facies change in the 2 to 3 foot bed immediately underlying the mineralized zone. This bed changed laterally from limestone to marl to mudstone. Where the mudstone underlies the mineralized zone, the fractures in the mudstone contain small sparse patches of a green uranium mineral that resembled torbernite, but where the marly material underlies the mineralized zone, no uranium was noted in it, and where limestone underlies the mineralized zone, the fractures contain a yellow uranium mineral, possibly tyuyamunite.

Most of the places examined showed only an incrustation of a yellow secondary uranium mineral, sparsely distributed on the surface and in fractures of the arkosic sandstone. At one place, a small amount of uranium was disseminated through about 2 inches of the base of the reddish brown, conglomeratic arkose. Where observable uranium minerals were present, the rock indicated possibly ore-grade material by geiger counter. Where uranium minerals were not seen, the counter indicated the rock to be barren or only slightly above background.

Several occurrences of mineralized material in the Rico formation have been reported a few miles east of the property by AEC personnel (personal communication), but none has proved to be more than a prospect.

Many occurrences of uranium mineralization are known in the Cutler formation along the Colorado River in the area. Many of them have been investigated by drilling behind the outcrop without finding any mineralization.

Mineralized material also is present on the property in an upper Hermosa limestone unit. This occurrence is reported to be only local in extent and lower in grade than the mineralization found in the Rico. Because of the applicant's lack of interest in the occurrence and the amount of time that would be required to visit it, the outcrop was not observed.

None of the commonly used favorableness criteria, such as channels, green mudstones, or carbonaceous material were seen. Coarse-grained and conglomeratic sandstone with abundant hematite characterizes the basal few inches of the brown weathering sandstone. Mineralization appeared to have a definite correlation with this basal material but at no place was there a thickening of the zone or an association with channels or carbonaceous material. At one place, it overlies a mudstone with a mottled red and green color. Red is predominant with the minor green enclosing fractures and bedding planes that contain sparse coatings of uranium minerals.

Three samples were taken from a site shown on figure 2. Sample D and R 1 was taken from the basal reddish brown conglomeratic arkose zone, sample D and R 2 was taken one foot above the arkose, and sample D and R 3 was taken in the light orange sandstone about 2 feet above the arkose. The assay results bear out the apparent decrease in mineralization upward from the base of the sandstone bed. Following are the assay results:

Sample	% U_3O_8
D and R 1	0.078
D and R 2	0.020
D and R 3	0.014

PRESENT STATUS

Exploration and Development

A very limited amount of exploration, consisting of two drill holes, has been done on the subject property. Information concerning the two holes is not detailed enough for use in evaluating the property. Cores and cuttings were not available to the examining team.

The outcrop of the "Brown Ledge" has been throughly prospected by the applicant and small cuts made when spotty mineralization was noted on the surface. These shallow rim-workings did not indicate that the sandstone bed was more strongly mineralized at depth and no ore-grade material was stockpiled or shipped.

Mining Equipment and Other Facilities

Equipment on the property when examined consisted of a few small tools and supplies. The heavy equipment owned by the applicant is stored at Moab.

Other facilities consisted of two small but well-built tent houses and the access road from the camp to the working area on D & R claim Nos. 4 and 10.

PROPOSED EXPLORATION

The applicant proposes to drill 100 test holes on 12 selected claims which he considers the most favorable of the group of 60 claims. The average depth of hole is estimated to be 860 feet. The program is designed to explore for uranium in sandstone and limestone beds of the Pennsylvanian and Permian (?) Rico formation and the upper limestone beds of the Pennsylvanian Hermosa formation.

A summary of the estimated costs of the applicant's proposal is as follows:

(a) Independent Contracts None

(b) Labor, Supervision, Consultants

1 driller @ $600/mo.	$4,800.00	
1 driller-helper @ $500/mo.	4,000.00	
1 mechanic @ $480/mo.	3,840.00	
4 laborers @ $350/mo. each	11,200.00	
1 truck driver @ $450/mo.	3,600.00	
Supervision @ $1,200/mo.	9,600.00	
Consultants @ $1,000/mo.	8,000.00	
Sub-total		$45,040.00

(c) Operating Materials and Supplies		
Fuel (gas, oil, diesel)		$ 6,587.00
(d) Operating Equipment		
1 drilling rig	$17,500.00	
900 ft. drilling pipe @$4.50/ft	4,050.00	
100 drill bits @ $16.50 each	1,650.00	
1 diamond core bit	1,900.00	
1 tank truck	7,149.00	
1 D-311, 30-KW light plant	4,260.00	
1 water pump,pipe,fittings,etc.	2,770.00	
Repair parts	1,500.00	
Sub-total		40,779.00
(e) Rehabilitation and Repairs		
Tractor	1,550.00	
Compressor	675.00	
Jeep	170.00	
Jackhammers	240.00	
Sub-total		2,635.00
(f) New buildings, improvements, etc.	none	
(g) Miscellaneous		
Repairs to drill bits	575.00	
Analytical work	1,000.00	
Accounting	2,000.00	
Workmen's Compensation	1,351.00	
Liability Insurance	1,200.00	
Payroll taxes	1,351.00	
Sub-total		7,477.00
(h) Contingencies (10 percent)		10,252.00
Estimated overall cost of project		$112,770.00
Government participation at 75 percent		$ 84,577.50
Estimated time for completion		8 months

The applicant proposes to furnish his share of the total cost of the project by use of corporation equipment and by including the cost of the previously built access road. It appears that DMEA is asked to contribute the total estimated cost of the proposed project ($112,770.00). Government participation in previously incurred costs is, of course, not permissible under present DMEA policy.

No modifications of the proposed program are submitted by the examining team as denial of the application will be recommended.

CONCLUSIONS AND RECOMMENDATIONS

The brown weathering sandstone near the top of the Rico formation contains thin and low-grade mineralization at six places examined over a distance of about 3,500 feet. Ore grade material was indicated as being extremely spotty and mostly in less than 2 to 3 inches thicknesses.

Similar occurrences of mineralized material in the Rico has been reported a few miles to the east but investigation by private parties has shown them to be only prospects.

The property lies in an extremely remote and topographically rugged area, and as the mineralization is thin, spotty, and low-grade, and because the occurrence is similar to the others in the Rico that are known to be uneconomic, denial without prejudice of the property is recommended.

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
APRIL 1957
DOCKET 4669

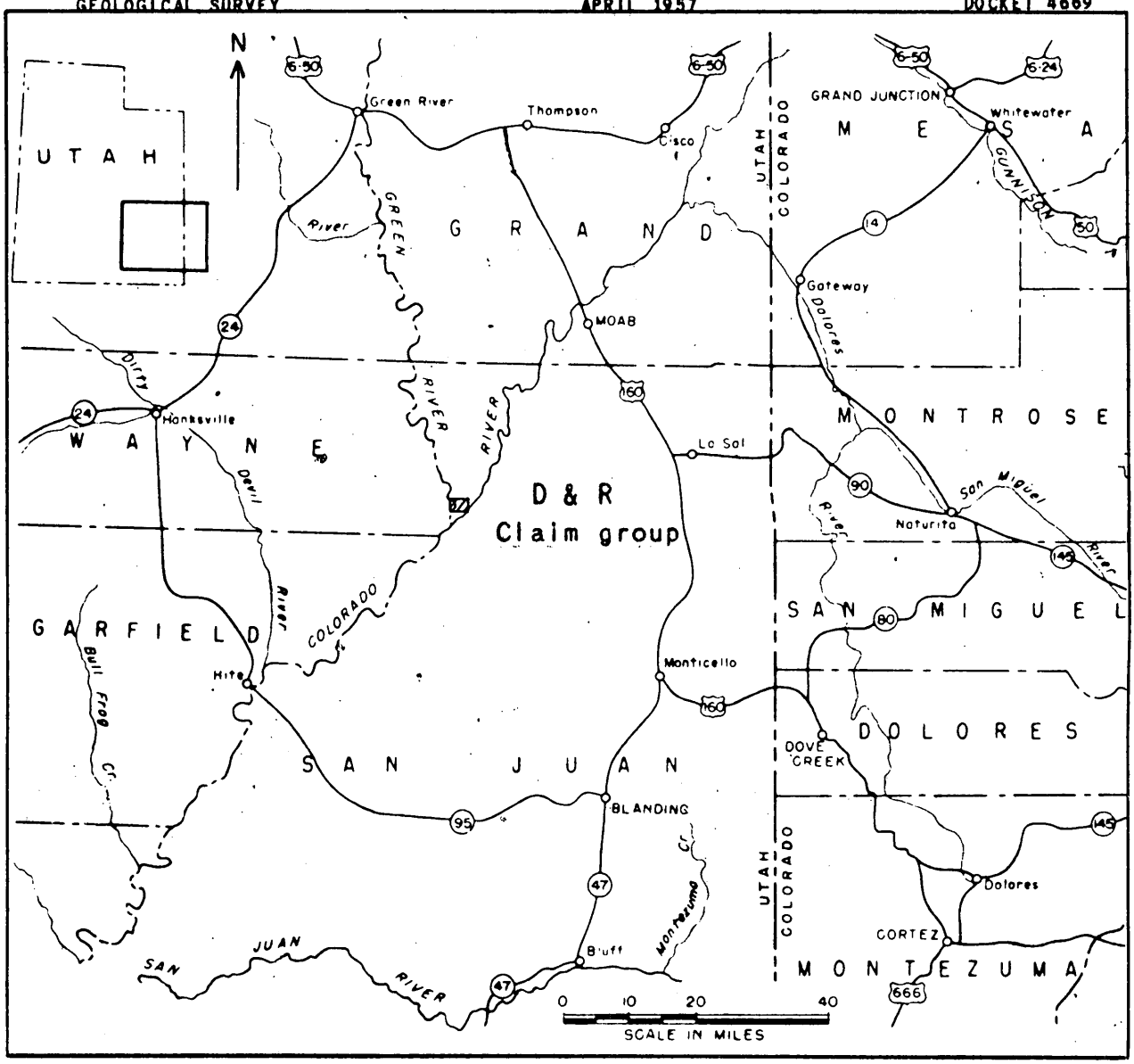
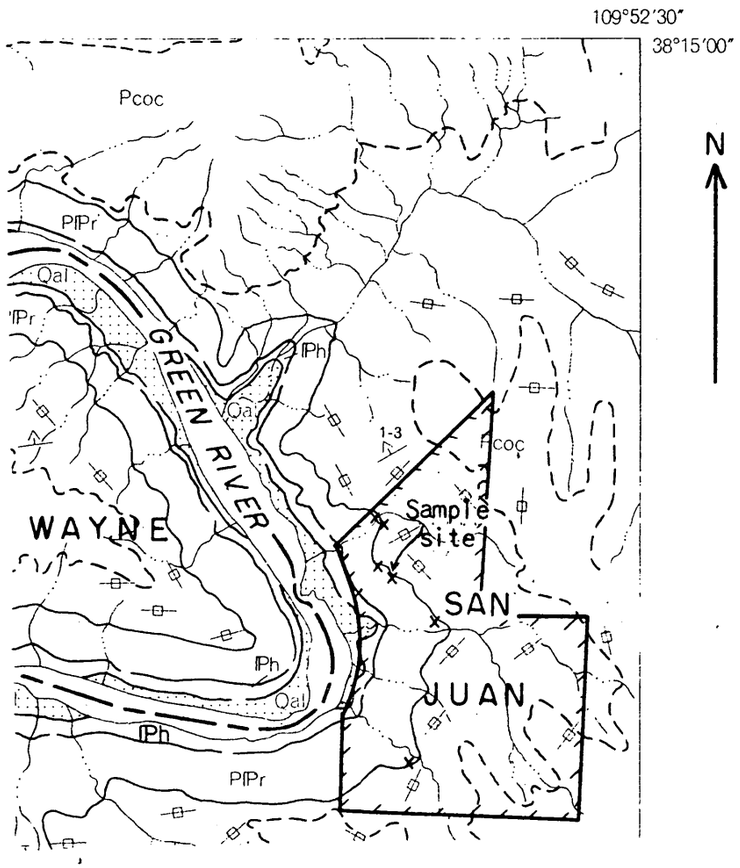


FIGURE 1.--LOCATION MAP; D & R CLAIM GROUP; D & R URANIUM CORP; INTER-RIVER AREA; SAN JUAN COUNTY, UTAH.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
MAY 1957 DOCKET 4669



Qal QUATERNARY ALLUVIUM

Pcoc PERMIAN CUTLER, ORGAN ROCK TONGUE AND CEDAR MESA MEMBER, UNDIFFERENTIATED

PIPr PENNSYLVANIAN AND PERMIAN(?) RICO FORMATION

IPh PENNSYLVANIAN HERMOSA FORMATION

FORMATION CONTACT

RESISTANT BED

STRIKE AND DIP OF BEDS

STRIKE OF APPROXIMATELY VERTICAL JOINTS

BOUNDARY OF AREA OF PROPOSED EXPLORATION

x POINTS OF EXAMINATION OF OUTCROP

Note: BASE FROM PHOTOGEOLOGIC MAP CARLISLE - 12

2000 0 4000 FEET

FIGURE 2.--GEOLOGIC MAP SHOWING AREA OF PROPOSED EXPLORATION, D AND R URANIUM CORP., SAN JUAN COUNTY, UTAH.

OFFICIAL FILE COPY
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RECEIVED MAY 22 1957

DATE	INITIALS	CODE

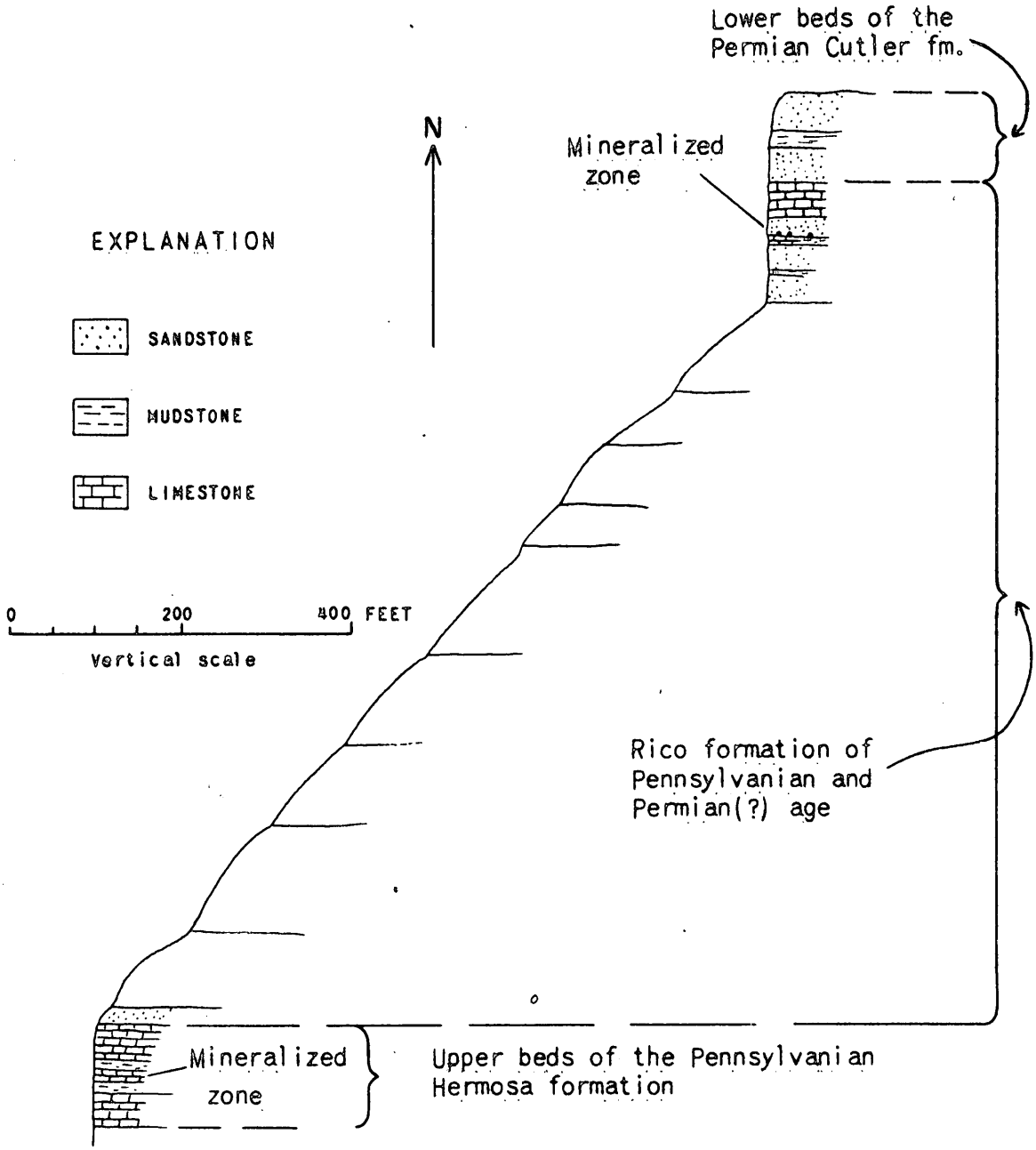

FIGURE 3.--GENERALIZED PROFILE OF STRATA ON THE D & R GROUP OF CLAIMS, D & R URANIUM CORP., SAN JUAN COUNTY, UTAH.

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D M E A
RECEIVED MAY [illegible]

DATE	INITIALS	CODE

DMEA
DEPARTMENT OF THE INTERIOR

MAR 28 1957

REGION III
DENVER, COLORADO

March 28, 1957

Memorandum

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

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4669 (Uranium) D & R Uranium Corporation (D & R Group) San Juan County, Utah

The application for D & R Uranium Corporation, Docket DMEA 4669, in the amount of $112,770.00 was received in this office on March 28.

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

W. H. King

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DMEA
RECEIVED 1957
DATE CODE
4/4 C 220
~~15 Accept~~ 700

cc: Executive Officer (2)
E. N. Marshman
J. W. Mesler
M. H. Salsbury
J. F. Shaw

WO(2)

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 29 1957

DATE	INITIALS	CODE
4/1	C	220
	~~Murphy~~	804

224 New Customhouse
Denver 2, Colorado

March 27, 1957

Memorandum

To: W. H. King) W/enclosures, Items 1-5
J. W. Hasler) W/enclosures, Items 2-4

From: DMEA Field Team, Region III

Subject: Docket DMEA-4669 (Uranium) D & R Uranium Corporation (D & R Group) San Juan 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 John E. Crawford, USBM.
3. Memorandum of Review by W. P. Williams, USGS.
4. Letter of transmittal of the foregoing to this office, dated March 21, 1957, from the Chairman, Operating Committee, DMEA.
5. Routing control sheet.

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

If the field examiners decide an examination of the D & R Group is warranted, the applicant should be given prior notice that the Government does not participate in any cost incurred before the date a contract is approved.

Should the field examiners view the work proposal favorably, the applicant should be instructed to submit to this office a bid for the drilling recommended from each of three independent drilling contractors.

Twelve extra copies of each map used in the joint report which show the land to be subordinated and the location and extent of recommended work, relative to property boundaries, should be submitted if Government participation is recommended.

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

Original signed by
E. N. HARSHMAN

By E. N. Harshman
Acting Executive Officer

Enclosures

MEM:ch

cc: Sec. Op. Comm. (2)
Harshman w/enclosures, Items 2-4
King
Dockut
Chron.

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
3-19	Murphy	700
3-19	Elliot	700
3/20	Selfridge	130
"	Lamb	110
"	Mitchenor	100
3/21	C	220

780

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

MAR 21 1957

Re: Docket No. DMEA-4669 (Uranium)
D & R Uranium Corporation
D & R Group
San Juan County, Utah

Dear Mr. Harshman:

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

Enclosed are copies of memoranda, dated March 12 and 18, 1957, by W. P. Williams, USGS, and J. E. Crawford, USBM, respectively, relating to the application. Also enclosed for Field Team use is one copy of the application and the exhibits pertaining thereto.

The cost estimates submitted are much higher than our usual contracts in the "Plateau" area. Also, under "Instruction No. 7" page 8 of the supplementary information, the Applicant states that the $31,000 cost of an access road previously constructed to the proposed project area should be considered as part of its share of the project costs.

If the Field Team considers a field examination of the D & R group is advisable, then, before the examination is scheduled, it should advise the Applicant that the Government does not participate in any costs incurred prior to the date a contract is approved.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures
APPROVED:

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

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

FMMurphy/izm 3-19-57
cc to: Admr.'s Reading File
Operating Committee
Mr. Murphy
THKiilsgaard, 5224
JKratchman, AEC

8623

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
3-19	Murphy	700
3-19	Petty	700
3/20	Selfridge	130
"	Johnson	110
"	Mittendorf	100
		225

MAR 21 1957

Mr. W. D. Petty, President
D & R Uranium Corporation
555 San Pablo Drive
Las Vegas, Nevada

Re: Docket No. DMEA-4669 (Uranium)
D & R Group
San Juan County, Utah

Lamb
Kilgaard

Dear Mr. Petty:

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

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

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

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

FMMurphy/izm 3-1 9-57
cc to: Mr. Murphy
Admr.'s Reading File
DMEA FT Reg. 3 (2)

8623

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 18 1957

DATE	INITIALS	CODE
3 18	C	220
"	~~Ellis~~ Murphy	700
	Comments Complete	

March 18, 1957

DMEA Contract No. 4669
Commodity Uranium
Name of applicant D & R Uranium Corp.
Name of property D & R Claim Group
Location of property San Juan County, Utah
Estimated cost of project $112,770.00

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

Application

(Application, Field Team Report, etc.)

1. Date of application 3/4/57 2. Date received by DMEA 3/14/57
3. Points of this project worth to review: Yes [ ] No [ ]
4. Points of this project worth to inform: Yes [ ] No [ ]
5. Information available on post production: Yes [ ] No [ ]
6. Other pertinent factors worth to review: Yes [ ] No [ ]
7. Explain items marked yes above:

8. Other matters 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 [x]
c. Denial [ ]
d. Agree with Field Team [ ]
e. Disagree with Field Team [ ]
f. Suggest alternate plan [ ]
g. Request another construction [ ]
h. Approval [ ]
i. Consult with Mr. _____ at _____ AEC office.

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

IN REPLY REFER TO:

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

March 12, 1957

Memorandum

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

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

Subject: Review of application, DMEA 4669, D&R Uranium Corporation, D&R claims, Inter-river area, San Juan County, Utah, (uranium).

The applicant proposes to explore for uranium ore deposits on a block of about 50 contiguous mining claims located at the confluence of the Green and Colorado rivers in Utah.

The applicant's proposals are not very specific. He proposes to drill 100 test holes on 12 selected claims. The estimated depth of the holes is 860 feet. The holes would be drilled "to the river bed." The applicant did not submit a map on a large enough scale to show the geologic formations in the vicinity or the locations of proposed drill holes. The applicant hints that he may be seeking deposits in the Cutler formation. If so, the project is not well conceived.

It is my impression that a large amount of geologic study and mapping in the vicinity by the AEC resulted in a low appraisal of the region. On that basis I doubt that DMEA expenditures are warranted on the property. I recommend, however, that the application be referred to the Field Team for their appraisal.

The applicant suggests, p. 8, that some road construction that he has completed on the property be considered as his share of the proposed expenditures. It seems likely that the applicant does not have a full understanding of DMEA practices and procedures.

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 13 1957

DATE	INITIALS	CODE
3/13	C	220
"	Ellis	700

W. P. Williams

W. P. Williams

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

March 8, 1957

Mr. W. D. Potty
D & R Uranium Corporation
555 San Pablo Drive
Las Vegas, Nevada

Subject: DMEA-4669
Re: Exploration Assistance

Dear Mr. Potty:

Your application for exploration assistance, dated March 1, 1957 submitted to our office at Denver, Colorado has been assigned Docket Number DMEA-4669 and referred to the Rare & Miscellaneous Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Chief
Operations Control and
Statistics Division

Copy to: region III

Uranium!

THE MOST FABULOUS MINING BOOM SINCE THE GOLD RUSH DAYS

McAllister's

NEW

URANIUM AND MINERAL MAP

OF

THE NINE SOUTHWEST STATES

SHOWING LOCATION OF URANIUM AND OTHER MINERALS

"Where and How to Prospect for Uranium"

PROSPECTOR

TYPICAL URANIUM COUNTRY

PUBLISHED BY
THOMAS BROS.
"The Map House"
Since 1915

OAKLAND 12
337 17th Street
GLencourt 1-6756

LOS ANGELES 39
2560 Glendale Blvd.
NOrmandy 3-9247

SAN FRANCISCO 14
2308 Market Street
Underhill 3-1256

PRICE: ONE DOLLAR

176

Exhibit "1(a)"

, AND ROOM

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U. S. Government Messenger Envelope

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

1. Use blocks consecutivel
2. Void previous block.
3. Write clearly.

NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM		NAME OR TITLE OF PERSON, DEPARTMENT, ADDRE
Mr. W. N. Chamberlain	RUN	
D.M.E.A. Room 4454	STOP	
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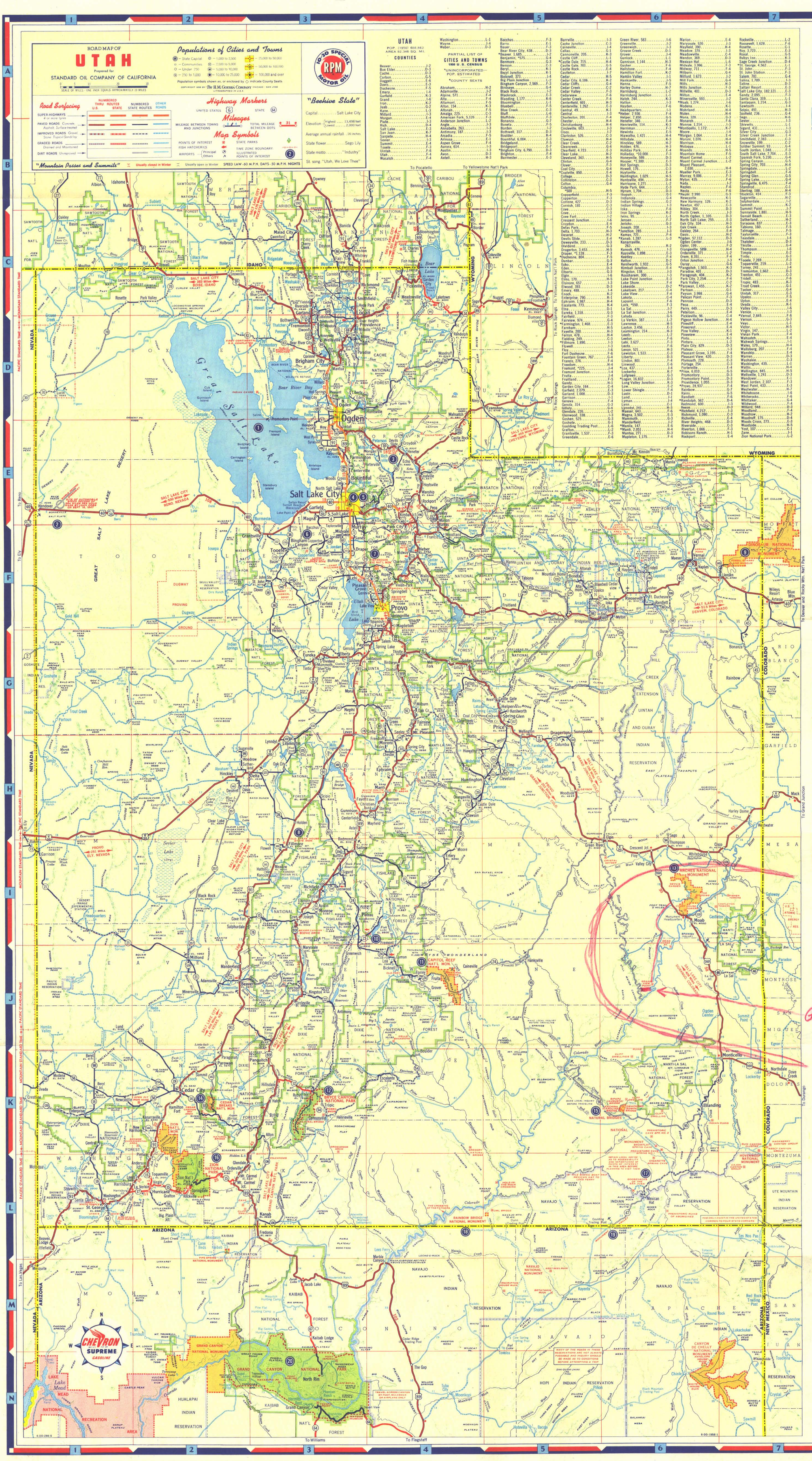
Send surplus envelopes to supply room for reissue.

Use other side

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

10



1 Great Salt Lake

To float on the surface of this unusual body of water is a most unique experience. Its remarkable buoyancy is due to its salt content of 23 per cent—exceeded only by the Dead Sea

2 Bonneville Salt Flats

The world's fastest automobile speed records have been set on the remarkably smooth and level surface of the salt beds that were formed on the floor of prehistoric Lake Bonneville

3 Devils Slide

In Weber Canyon, east of Ogden, one of Utah's strangest rock phenomena can be seen. Limestone ridges run down a hillside, 20 feet apart and parallel along several hundred feet

4 Salt Lake Temple

At the center of Salt Lake City, in a ten-acre plaza, stands the Temple, world shrine of the Mormon religion. Near it stand the Tabernacle with its noted organ and a fine museum

5 "This Is the Place" Monument

A monument to mark the point where the tgail ended for the Mormons led by Brigham Young on the great trek of 1847. "This is the place," said he when the valley was before them

6 Bingham Canyon

Like steps up the canyon walls are the terraces of the largest surface copper mine in the world. Now one of the most valuable mines in Utah, it was once judged too poor to work

7 Timpanogos Cave National Monument

The "Great Heart of Timpanogos," in the illustration, is among the many fantastic limestone formations which decorate the walls and passages of this famed cavern in Wasatch Range

8 Old State House State Monument, Fillmore

Originally designed to be the south wing for the capitol of Utah, this structure was used by legislatures of 1855-56. It is now a museum for a colorful collection of pioneer relics

9 Dinosaur National Monument

Remarkable deposits from which have come over 20 complete skeletons of prehistoric reptiles. Largest of these, when mounted, was a dinosaur 20 ft. high and almost 100 ft. long

10 Fish Lake

Nestled between the slopes of high mountains in central Utah, at an elevation of 8600 feet, Fish Lake is among the West's highest, yet most accessible, fine fishing spots

11 Capitol Reef National Monument

Depicted here is Chimney Rock, one of many giant formations in this colorful region. The national monument embraces a part of the vast area known as the Wayne Wonderland

12 Bryce Canyon National Park

A series of natural amphitheatres caused by erosion. These contain countless gorgeously colored spires and fantastically sculptured forms resembling castles, animals, chessmen

13 Arches National Monument

Sculptured from red sandstone, this region is remarkable for a show of Nature's most bizarre architecture. The multitude of forms include huge monoliths and several great arches

14 Cedar Breaks National Monument

A stupendous chasm nearly 2000 feet deep, at an altitude of 10,700 feet. From the rim there is a superb view of the interior which contains many beautifully colored rocks and cliffs

Property of DJR

15 Natural Bridges National Monument

The 200-foot Owachomo Natural Bridge, illustrated here, is but one of three gigantic spans that are grouped in a relatively small area and are among the largest ever discovered

16 Zion National Park

The "Great White Throne" shown here is one of the tremendous monolithic creations of Nature for which this canyon is noted. Many colors from deep red to white, band the cliffs

17 Goosenecks of the San Juan River

Aptly named is this twisting canyon carved into a desert plateau by the meandering San Juan River, on its way to join the Colorado. Canyon walls are a thousand feet in height

18 Rainbow Bridge National Monument

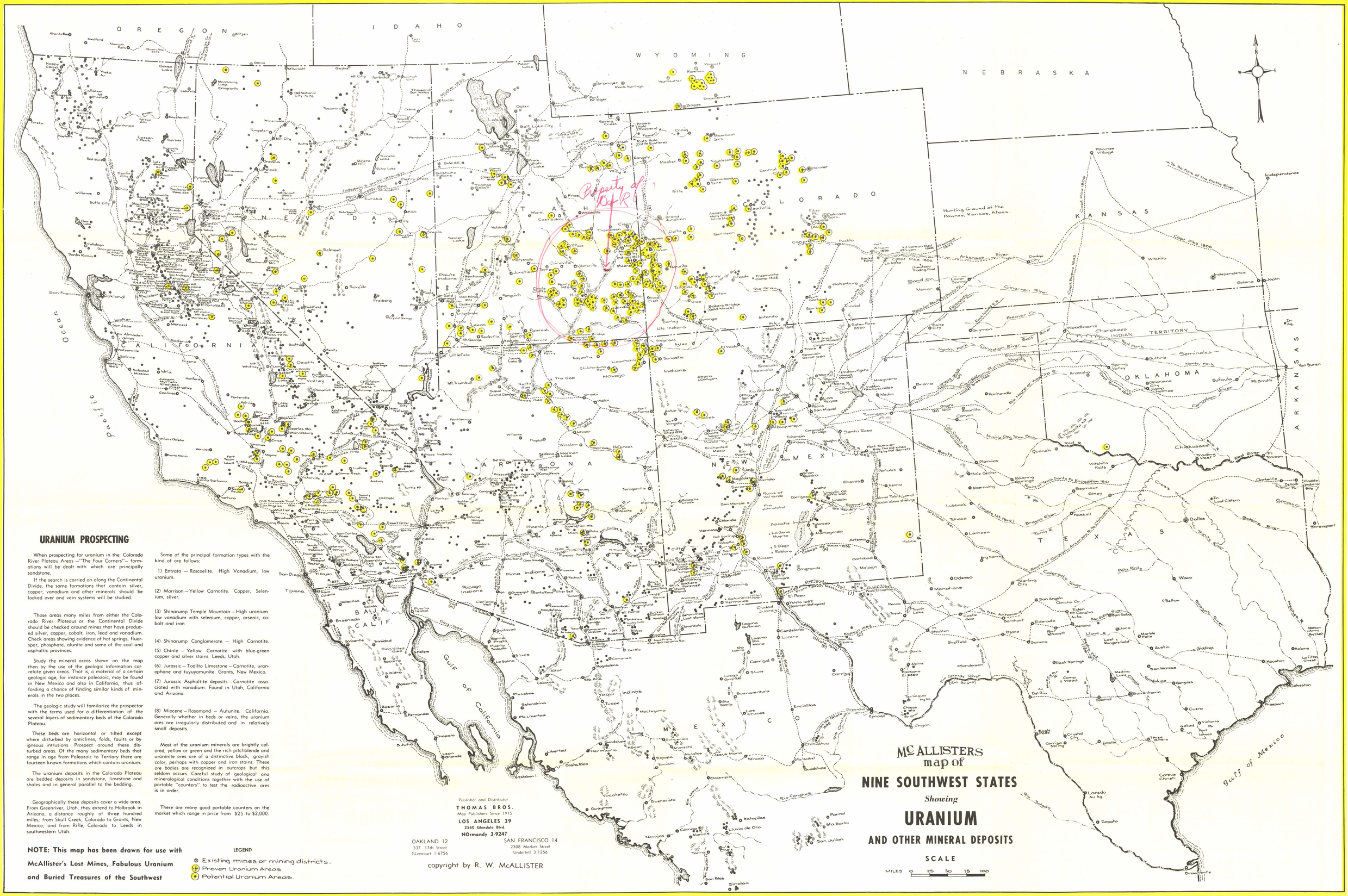
The largest known natural bridge in the world, this magnificent arch stands 309 feet above the canyon floor. Auto road approaches to within 14 miles; pack trail leads to bridge

19 Monument Valley

Giant columns soaring hundreds of feet into the sky are scattered over a wide area which stretches across the Arizona-Utah line. One of the most awesome of the West's wonders

20 Grand Canyon National Park, Arizona

Often referred to as "Earth's Most Sublime Spectacle," Grand Canyon of Arizona has a glory no words can describe. It is 4 to 18 miles wide, 5000 feet deep, over 200 miles long



URANIUM PROSPECTING

When prospecting for uranium in the Colorado River Plateau Areas –"The Four Corners"– formations will be dealt with which are principally sandstone.

If the search is carried on along the Continental Divide, the same formations that contain silver, copper, vanadium and other minerals should be looked over and vein systems will be studied.

Those areas many miles from either the Colorado River Plateaus or the Continental Divide should be checked around mines that have produced silver, copper, cobalt, iron, lead and vanadium. Check areas showing evidence of hot springs, fluorspar, phosphate, alunite and some of the coal and asphaltic provinces.

Study the mineral areas shown on the map then by the use of the geologic information correlate given areas. That is, a material of a certain geologic age, for instance paleozoic, may be found in New Mexico and also in California, thus affording a chance of finding similar kinds of minerals in the two places.

The geologic study will familiarize the prospector with the terms used for a differentiation of the several layers of sedimentary beds of the Colorado Plateau.

These beds are horizontal or tilted except where disturbed by anticlines, folds, faults or by igneous intrusions. Prospect around these disturbed areas. Of the many sedimentary beds that range in age from Paleozoic to Tertiary there are fourteen known formations which contain uranium.

The uranium deposits in the Colorado Plateau are bedded deposits in sandstone, limestone and shales and in general parallel to the bedding.

Geographically these deposits cover a wide area. From Greenriver, Utah, they extend to Holbrook in Arizona, a distance roughly of three hundred miles; from Skull Creek, Colorado to Grants, New Mexico; and from Rifle, Colorado to Leeds in southwestern Utah.

Some of the principal formation types with the kind of ore follows:

1) Entrata – Roscoelite. High Vanadium, low uranium.

(2) Morrison – Yellow Carnotite. Copper, Selenium, silver.

(3) Shinarump Temple Mountain – High uranium low vanadium with selenium, copper, arsenic, cobalt and iron.

(4) Shinarump Conglomerate – High Carnotite.

(5) Chinle – Yellow Carnotite with blue-green copper and silver stains. Leeds, Utah.

(6) Jurassic – Todilto Limestone – Carnotite, uranophane and tuyuyamunite. Grants, New Mexico.

(7) Jurassic Asphaltite deposits – Carnotite associated with vanadium. Found in Utah, California and Arizona.

(8) Miocene – Rosamond – Autunite. California. Generally whether in beds or veins, the uranium ores are irregularly distributed and in relatively small deposits.

Most of the uranium minerals are brightly colored, yellow or green and the rich pitchblende and uraninite ores are of a distinctive black, grayish color, perhaps with copper and iron stains. These ore bodies are recognized in outcrops but this seldom occurs. Careful study of geological ana mineralogical conditions together with the use of portable "counters" to test the radioactive ores is in order.

There are many good portable counters on the market which range in price from $25 to $2,000.

NOTE: This map has been drawn for use with McAllister's Lost Mines, Fabulous Uranium and Buried Treasures of the Southwest

LEGEND

- Existing mines or mining districts.
- Proven Uranium Areas.
- Potential Uranium Areas.

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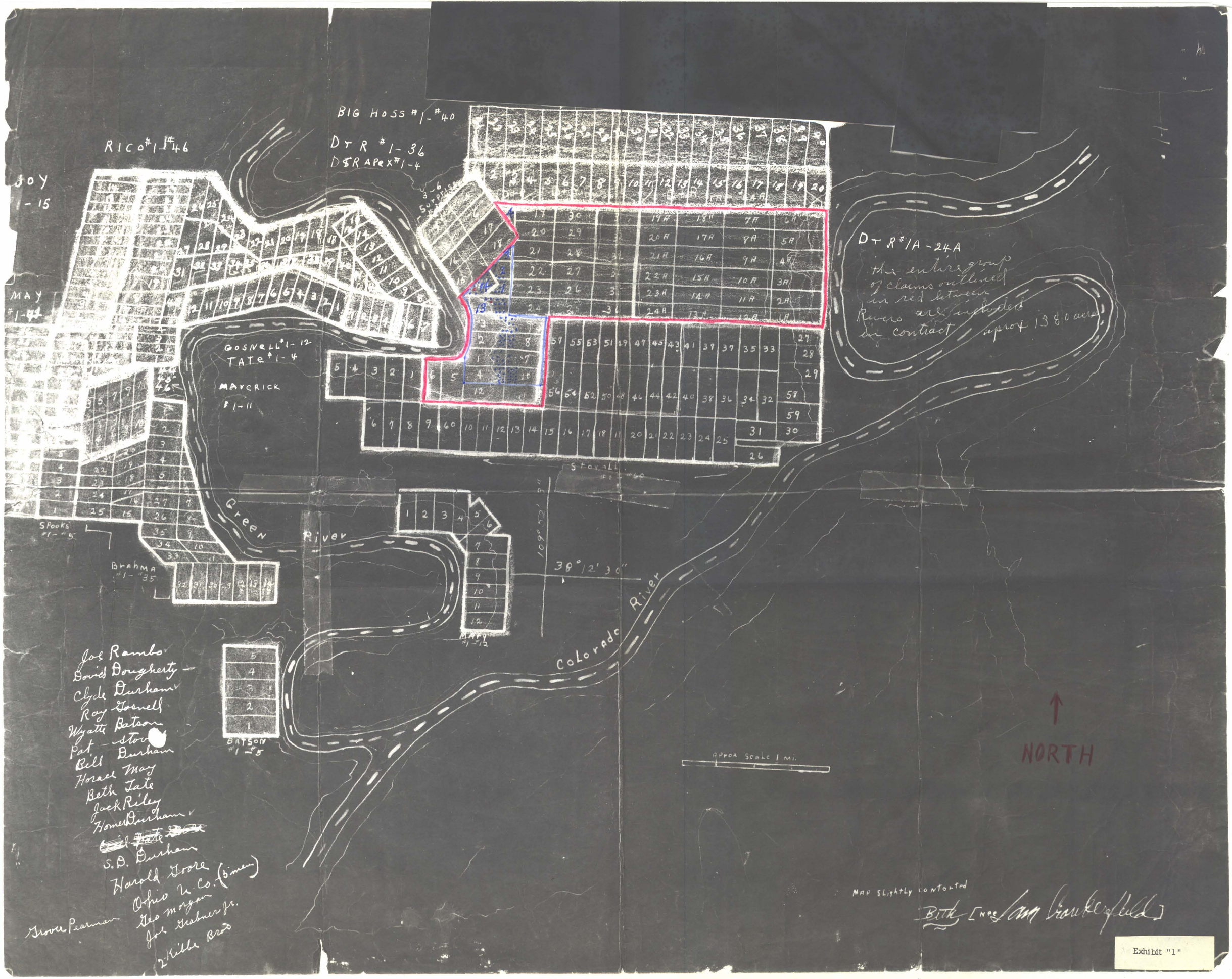
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TATE #1-4
MAVERICK #1-11
SPOOKS #1-#5
BRAHMA #1-#35
BATSON #1-5
MARY #1-12
STORALL
Green River
Colorado River
38° 12' 30"
109° 52' 30"
D & R #1A-24A
the entire group of claims outlined in red between Rivers are included in contract approx 1380 acres
Joe Rambo
David Dougherty
Clyde Durham
Roy Gosnell
Wyatt Batson
Pat Storall
Bill Durham
Horace May
Beth Tate
Jack Riley
Homer Durham
S.B. Durham
Harold Goore
Ophio U. Co. (3 men)
Geo Morgan
Joe Grabner Jr.
2 Kibbe Bros
Grover Pearman
APPROX SCALE 1 MI.
NORTH
MAP SLIGHTLY CONTORTED
BTH [NOE] [illegible]

Exhibit "1"