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DEFENSE MINERALS ADMINISTRATION
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DMA Docket No. 3576

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CONTROLLED DOCUMENT

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

Surname copy

Ching
Ellis
Kiilsgaard
Hedges
Selfridge
Johnson

APR 11 1955

Mr. Roger Conrow
President & General Manager
Uranium Ventures, Inc.
105 Park Drive
Grand Junction, Colorado

Re: Docket No. DMEA-3576 (Uranium)
Topaz Claims
San Miguel County, Colorado

Dear Mr. Conrow:

Your application for aid in an exploration project and other information available to us in Washington concerning your 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 a small amount of uranium mineralization on your property, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

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

Sincerely yours,

C. O. Mittendorf

Administrator

MChing/gla
4-8-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. J. E. Crawford, Rm. 3641
T. H. Kiilsgaard, Rm. 5224
J. O. Hosted, Rm. 3210, GSA
Code 700 Mr. Ching
DMEA Field Team, Region III (2)

R.C.

Ching
Ellis

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

April 7, 1955

Summary of Proposed Project

Object: Denial of application for an exploration project

Docket No.: DMEA -3576

Commodity: Uranium

Applicant: Uranium Ventures, Inc.
105 Park Drive
Grand Junction, Colorado

Property: 6 lode mining claims, Topaz Nos. 3 through 8 in Sections 10 and 15, T. 44 N., R. 18 W., N.M.P.M. San Miguel County, Colorado

Applicant's Property Rights: Lease from Simpson Mining Company held by Roger Conrow, President of Uranium Ventures, Inc. Assignment to latter not included in application. About 5½ acres of Topaz No. 3 claim not included in application because it is part of patented claim owned by U. S. Vanadium Company.

Date of Application: October 22, 1954

Amount of Application: $102,555.92

Work Proposed: Core and non-core drilling

Stage I - 32 holes - 9870 feet - 250 ft. X 500 ft. spacing
Stage II - 28 holes -14000 feet - Offset favorable Stage I holes or holes already drilled.
Total - 60 holes -23870 feet -

Estimated Costs

Independent contract drilling	$66,090.00
Labor, supervision and consultants	17,661.60
Operating materials and supplies	1,825.00
Miscellaneous	3,812.33
Contingencies	13,166.99

Work Proposed: Estimated Costs - Cont'd

Total	$102,555.92
Government participation at 75 percent	76,916.94

Field Team Report: February 11, 1955, George C. Simmons, USGS - Carl Belser, USBM

The upper Salt Wash sandstone lenses form the only known mineralized zone in this part of Gypsum Valley. Known deposits in the area are all small and spotty. The Salt Wash sandstone lenses exposed are of unfavorable thickness. About 50% of the property is covered by landslide debris up to 50 feet thick. Widespread faulting and fracturing present serious geologic and drilling problems. Considerable drilling in the vicinity of a mineralized hole has been done by the Applicant without proving the presence of an ore body. While several of the 15 holes drilled on the adjoining Uncle Sam claim encountered ore-grade material, this alone does not justify exploration on the subject Topaz group. The prospects for a significant discovery are not good, and it is recommended that the application be denied.

Commodity Committee Members' Comments:

Geological Survey - E. L. Newcomb, March 28, 1955

Limited exposures of Salt Wash sandstones are thin and discontinuous, mineralization is spotty, and the targets extremely small. The results of drilling 15 holes on the adjacent Uncle Sam claim were unfavorable although two holes encountered thin sections of ore grade material. Sufficient drilling was done to indicate that Government assistance is not geologically justified on the subject claims. Concurs with the Field Team that this application should be denied.

Bureau of Mines - J. E. Crawford, April 5, 1955

Discussed the proposed program with the AEC representative, and concurs with the Field Team that the application should be denied.

The Applicant drilled 11 diamond-drill holes in an area which could be considered the most favorable on the property, being located adjacent to an area on the U. S. Vanadium Company Uncle Sam claim where several drill holes exposed ore-grade material. One of the 11 holes reportedly showed 12 feet of 0.10% U_3O_8, but the 10 surrounding closely-spaced holes showed neglibible mineralization. The mineralization on the adjoining claim does not appear to lie in any one well defined horizon, but was found at elevations varying as much as 120 feet. Applicant evidently wishes to drill most of the proposed Stage II holes in the area of the one existing mineralized hole where 10 other holes have already been drilled without significant results. All the proposed Stage I holes thus appear to be "wildcat" drilling. Indicated depths of many of these "Wildcat" holes would be close to 500 feet. In view of the foregoing circumstances, the unfavorable geological conditions prevailing, and the history of production from the area, the proposed exploration program does not appear to be justified.

Conclusions and Recommendations:

The chances of discovering a significant ore body by the proposed program are not good and it is recommended that the application be denied.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

4/6/55-gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 8 1955

April 5, 1955

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: Bureau of Mines Member
Uranium Commodity Committee

Subject: Report of Examination, Docket DMEA-3576 (Uranium), Uranium Ventures, Inc., Topaz claims, San Miguel County, Colorado

I have reviewed the Field Team report of examination and have discussed it with Joseph O. Hosted, representative of the Atomic Energy Commission.

We concur with the recommendation of the Field Team that the application be denied.

John E. Crawford
John E. Crawford

Copy to: Division of Minerals
Branch of Rare and Precious Metals
J. O. Hosted (2)
J. E. Crawford (2)

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

DEPARTME...
Bureau Min...
APR - 6 1955

April 5, 1955

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John E. Crawford

Copy to: Division of Minerals
Branch of Rare and Precious Metals
J. O. Hosted (2)
J. E. Crawford (2)

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

DEPARTM
Defense Min
AF :
APR - 6 1955

April 5, 1955

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John E. Crawford

Copy to: Division of Minerals
Branch of Rare and Precious Metals
J. C. Hosted (2)
J. E. Crawford (2)

4/4/5-5-gla

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 31 1955

March 28, 1955

Re: DMEA-3576
Uranium Ventures, Inc.
(Topaz Claims)
San Miguel Co., Colo.
$102,555.92 - Uranium

Memorandum

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

From: E. L. Newcomb, U. S. Geological Survey

Subject: Concurrence with Field Team recommendation for denial

The Field Team has recommended the application be denied for the following reasons:

1.) the proposed program is wildcatting and essentially a prospecting venture.

2.) all Salt Wash sandstone lenses in the area (the proposed horizon for exploration) are thin and unfavorable.

3.) faulting and fracturing present serious geologic and drilling problems.

4.) known uranium occurrences in the immediate area are small and difficult to find.

Limited exposures of Salt Wash sandstones are thin and discontinuous, and mineralization is spotty and the targets extremely small. The results of drilling 15 holes on the adjacent Uncle Sam claim (U. S. Vanadium Corp.) were unfavorable. Two holes encountered thin sections of ore grade material. However, sufficient drilling was done to indicate that DMEA exploration assistance is not geologically justified on the Topaz claims.

I concur with the Field Team's conclusions and recommend this application be denied.

E. L. Newcomb

E. L. Newcomb

IN REPLY REFER TO:

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

March 28, 1955

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Uranium Ventures, Inc.
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I concur with the Field Team's conclusions and recommend this application be denied.

ELNewcomb:hlm
G-3/28/55

CC: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641 Interior

E. L. Newcomb

IN REPLY REFER TO:

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

March 28, 1955

Re: DMEA-3576
Uranium Ventures, Inc.
(Topaz Claims)
San Miguel Co., Colo.
$102,555.92 - Uranium

Memorandum

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I concur with the Field Team's conclusions and recommend this application be denied.

ELNewcomb:hlm
G-3/28/55

CC: Director's reading, 4212 E. L. Newcomb
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641 Interior

IN REPLY REFER TO:

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

March 26, 1955

Re: DMEA-357
Uranium Ventures, Inc.
(Tegan Claims)
San Miguel Co., Colo.
$102,555.92 - Uranium

Memorandum

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

From: E. L. Newcomb, U. S. Geological Survey

Subject: Concurrence with Field Team recommendation for denial

The Field Team has recommended the application be denied for the following reasons:

1.) the proposed program is wildcatting and essentially a prospecting venture.

2.) all Salt Wash sandstone lenses in the area (the proposed horizon for exploration) are thin and unfavorable.

3.) faulting and fracturing present serious geologic and drilling problems.

4.) known uranium occurrences in the immediate area are small and difficult to find.

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I concur with the Field Team's conclusions and recommend this application be denied.

ELNewcomb:hlm
G-3/28/55

CC: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641 Interior

E. L. Newcomb

3/28

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

224 New Customhouse
Denver 2, Colorado

March 18, 1955

Memorandum

To: Secretary to the Operating Committee

From: Field Team, Region III

Subject: Report of Examination, Docket DMEA-3576 (Uranium), Uranium Ventures, Inc., Topaz claims, San Miguel County, Colorado

Enclosed are the original and three copies of the report of examination pertaining to the above application.

We concur with the recommendation of the field examiners that this application in the amount of $102,555.92 be denied.

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
3-25-55
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DMEA
Date Rec'd
FEB 21 1955
BUREAU OF MINES
Denver, Colorado

Region III

TRANSMITTED
MAR 18 1955

Building 20, Room 137
Denver Federal Center
Denver 2, Colorado
February 17, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw, Project Supervisor

Subject: Examination report on the Topaz Claims (Uranium), Uranium Ventures, Inc., San Miguel County, Colorado, docket DMEA 3576

Enclosed are the original and ten copies of a Summary, Conclusions and Recommendations by George C. Simmons, Geologist and Carl Belser, Mining Engineer. Also enclosed are the original and ten copies of an Engineering Report by Carl Belser.

The applicant requested exploration assistance to perform 23,870 feet of diamond drilling at a total estimated cost of $102,555.92. The examination disclosed that the Salt Wash sandstones are considerably broken and the lenses appear thin. It is not believed that a significant amount of uranium will be disclosed by the proposed exploration, and it is recommended that this application be denied.

John F. Shaw

John F. Shaw

JFS/dj

cc: ✓10
3576
Chron.

Reviewed by
DMEA OPERATING COMMITTEE
3-25-55
(date)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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MAR 21 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 3576, Topaz Claims

Uranium Ventures, Inc.

San Miguel County, Colorado

Uranium

George C. Simmons, Geologist
Geological Survey

Carl Belser, Mining Engineer
Bureau of Mines

February 11, 1955

Reviewed by
DMEA OPERATING COMMITTEE
3-25-55
(date)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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MAR 21 1955

DMEA 3576
TOPAZ CLAIMS
URANIUM VENTURES, INC.
SAN MIGUEL COUNTY, COLO.

Summary, Conclusions, and Recommendations

By George C. Simmons
Geologist
Geological Survey

Carl Belser
Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
3-25-55
(date)

DMEA 3576

MAR 21 1955

TOPAZ CLAIMS
URANIUM VENTURES, INC.
SAN MIGUEL COUNTY, COLO.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By George C. Simmons and Carl Belser

Uranium Ventures, Inc., Roger Conrow, President, 304 Main Street, Grand Junction, Colorado, has applied for Defense Minerals Exploration Administration assistance estimated to cost $102,555.92 to explore the Topaz group of claims by 23,870 feet of diamond drilling.

A field investigation was made on January 19, 1955 by an examining team from the Geological Survey and the Bureau of Mines. Louis P. Gaggini, consulting geologist, accompanied the team and represented the applicant.

The Topaz claims are in Big Gypsum Valley in secs. 10 and 15, T. 44 N., R. 18 W., New Mexico principal meridian.

The exposed rocks are mainly of the upper part of the Salt Wash member and the lower part of the Brushy Basin member of the Morrison formation of the Upper Jurassic. At least three northwesterly trending faults traverse the claims. These faults are parallel to the valley and are caused by the breaking off of slump blocks. About half of the area on the claims is covered by alluvial landslide material. Exposed Salt Wash sandstone lenses are thin.

Eleven diamond drill holes were drilled on the Topaz No. 3 claim, and 20 on the adjacent Uncle Sam claim.

The applicants' proposal called for 32 Stage I diamond drill holes totalling 9,870 feet of drilling and a total of 14,000 feet of

Reviewed by
DMEA OPERATING COMMITTEE
3-25-55
(date)

Stage II drilling at an estimated cost of $102,555.92, Government participation 75 percent or $76,916.94.

The examining team does not believe that the area contains significant uranium deposits and that any deposits discovered will be small and spotty. The examining team recommends that the application be denied.

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Administration
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MAR 21 1955

DMEA 3576

TOPAZ CLAIMS
URANIUM VENTURES, INC.
SAN MIGUEL COUNTY, COLO.

Engineering Report

By Carl Belser
Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
3-25-55
(date)

DMEA 3576

TOPAZ CLAIMS
URANIUM VENTURES, INC.
SAN MIGUEL COUNTY, COLO.

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Conclusions 7
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ILLUSTRATIONS

Figure — Follows Page

1. Location map, Topaz claims, Uranium Ventures, Inc., San Miguel County, Colo. 2

2. Claim map, showing proposed exploration, Topaz claims, Uranium Ventures, Inc., San Miguel County, Colo. 2

DMEA 3576

RECEIVED
MAR 21 1955

TOPAZ CLAIMS
URANIUM VENTURES, INC.
SAN MIGUEL COUNTY, COLO.

ENGINEERING REPORT

By Carl Belser

INTRODUCTION

Uranium Ventures, Inc., 105 Park Drive, Grand Junction, Colo., on October 23, 1954, submitted an application for Defense Minerals Exploration Administration assistance on the Topaz claims in Gypsum Valley, San Miguel County, Colo. The application, DMEA 3576, requested aid in completing 23,870 feet of diamond drilling at a total estimated cost of $102,555.92--Government participation 75 percent, or $76,916.94. This proposed exploration was to test the Salt Wash member of the Morrison formation for uranium mineralization.

A joint field examination was made by a Geological Survey and Bureau of Mines examining team on January 19, 1955. The examining team, as a result of their investigations, recommended that Government assistance of the applicant's proposal of exploratory drilling be denied.

ACKNOWLEDGMENTS

Louis P. Gaggini, consultant, accompanied the examining team and represented the applicant.

W. P. Williams assigned George C. Simmons, geologist, to make the examination as the Geological Survey member of the team. Simmons was accompanied by W. P. Williams and William Gazdik, geologists, Geological Survey.

Reviewed by
DMEA OPERATING COMMITTEE
3-25-55
(date)

The Atomic Energy Commission was consulted regarding the area before the examination was made.

LOCATION, TOPOGRAPHY, AND CLIMATE

The Topaz claims consist of six unpatented claims containing about 116 acres free from conflicts. The claims are located in secs. 10 and 15, T. 44 N., R. 18 W., New Mexico principal meridian, Gypsum Valley, San Miguel County, Colo., (figs. 1 and 2). The claims cover an area of steep, east sloping hillside and altitudes range from 5,700 feet to 6,300 feet.

A good county road connects with State Highway 80 at Gypsum Gap, 9 miles south, from whence Naturita is 30 miles north, Uravan 46.3 miles north, Norwood 43.5 miles east, Ridgeway 84.5 miles east, and Grant Junction 172 miles northeast. Labor, supplies, and light equipment can be obtained in Naturita, Norwood, and Uravan. Heavy equipment can be purchased in Grand Junction. The nearest railroad is the Denver and Rio Grande Western at Ridgeway. Some pinon grows on the property. Large timbers and dimension lumber can be obtained in the local towns. The nearest mills and ore depots are in Naturita and Uravan. An R.E.A. power line has been surveyed to supply the mines in Gypsum Valley with electric power and construction is expected to start in 1955. There are no living accomodations in Gypsum Valley.

Annual rainfall is light and the country is classed as semi-arid. Winter snowfalls seldom exceed 6 inches and mining operations can be maintained the year around. Water for drilling

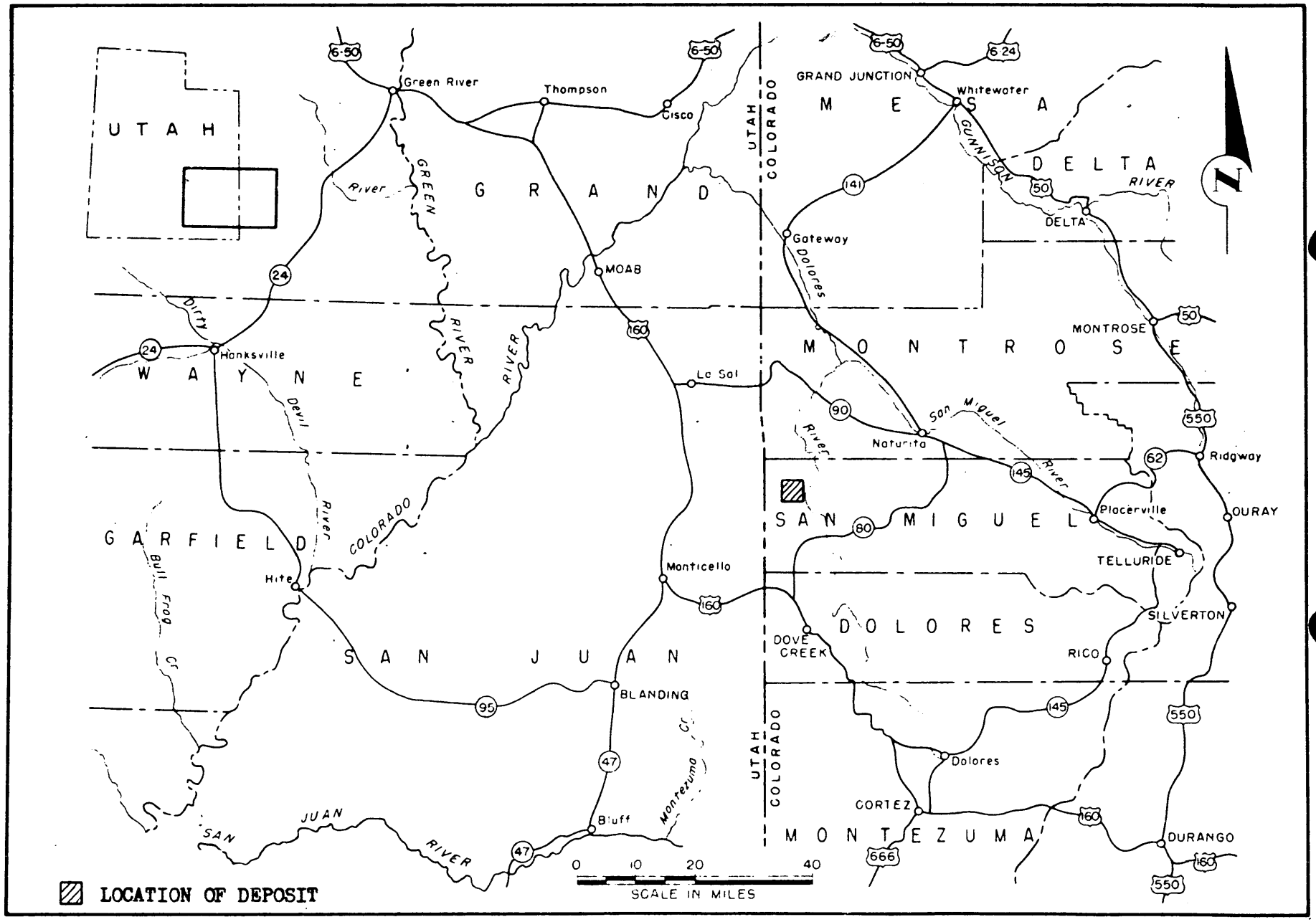


FIGURE 1 - LOCATION MAP, TOPAZ CLAIMS, URANIUM VENTURES, INC., SAN MIGUEL COUNTY, COLO. (DMEA 3576)

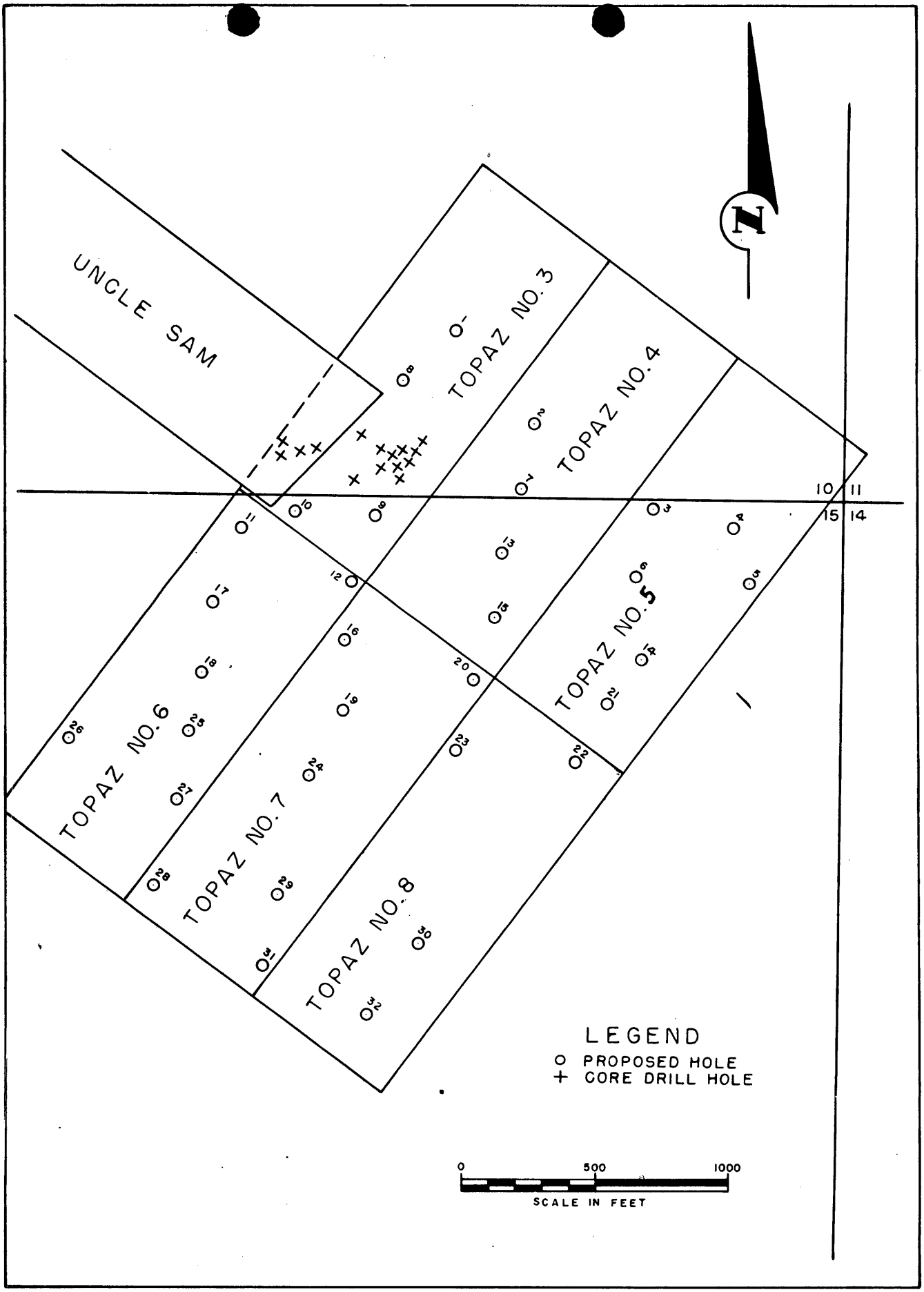


FIGURE 2 - CLAIMS MAP, SHOWING PROPOSED EXPLORATION, TOPAZ CLAIMS, URANIUM VENTURES, INC., SAN MIGUEL COUNTY, COLO. (DEMA 3576)

purposes can be obtained from the Dolores River, 4 miles distant, and water for domestic purposes can be obtained at Slick Rock or Naturita.

HISTORY AND PRODUCTION

Some intermittent mining of vanadium ore has been done in Gypsum Valley for a considerable period of time, but it was not until the introduction of the Government buying schedules in 1948 that uranium prospecting became of interest. The Topaz claims were located on January 20, 1953 by The Simpson Mining Company, et al. Eleven diamond drill holes were drilled on the Topaz No. 3 claim. There are no workings on the claims and no ore has been produced. A minor production of vanadium ore was made from the adjacent Uncle Sam vein.

OWNERSHIP AND EXTENT

The property consists of six unpatented claims containing approximately 116 acres. The claims are recorded in the office of the County Clerk and Recorder of San Miguel County, Colo., as follows:

	Original				Amended			
Claim	Book	Page	Date Filed	Discovery: Date	Book	Page	Date Filed	Date Amended
Topaz No. 3	216	422	3/14/53	1/20/53	240	501	9/28/54	8/10/54
Topaz No. 4	216	422	3/14/53	1/20/53	240	502	9/28/54	8/10/54
Topaz No. 5	216	423	3/14/53	1/20/53	240	503	9/28/54	8/10/54
Topaz No. 6	216	423	3/14/53	1/20/53	240	504	9/28/54	8/10/54
Topaz No. 7	216	424	3/14/53	1/20/53	240	505	9/28/54	8/10/54
Topaz No. 8	216	424	3/14/53	1/20/53	240	506	9/28/54	8/10/54

Notice of lease applications under Circular 7 were recorded in book 229, pages 7-12, on February 17, 1954, and withdrawn on September 28, 1954 and the withdrawal was recorded in book 241, page 317.

A five year lease with renewal privileges was granted to Roger Conrow and Company by the Simpson Mining Company, et al., on April 5, 1954.

DESCRIPTION OF DEPOSITS

The exposed rocks on the Topaz claims are Morrison formation. There are no mine workings and no ore has been encountered or produced. Adjacent to the applicants' ground, but on the Uncle Sam claim, a small amount of spotty ore has been produced from thin sandstone lenses in the Salt Wash member of the Morrison formation.

MINEABLE ORE RESERVES

There are no known mineable ore reserves on the property.

PRESENT STATUS

Exploration and Development

No exploration and development work has been done on the property to date with the exception of the 11 core drill holes which were drilled on the Topaz No. 3 claim. No mineable ore was found in any of these drill holes (fig. 2).

Mining and Milling Equipment and Other Facilities

There is no mining or milling equipment on the property and the only facilities consist of a network of access roads.

PROPOSED EXPLORATION

The applicant proposed to explore the Salt Wash formation on the claims with a two-stage drilling program. Stage I consists of diamond drilling 9,870 feet (32 holes) and Stage II consists of diamond drilling 14,000 feet (about 28 holes). Stage II holes would

be spaced on short centers to delineate ore found in Stage I drilling.

ESTIMATED COST OF PROJECT

The application, as submitted, included all costs, but the Stage I and Stage II costs have not been broken down separately.

Estimated Cost of Core Hole Drilling

Independent contracts

Drilling

Stage I	3,730 feet at $2.00 (non-core)	$ 7,460.00	
Stage I	2,830 feet at $2.25 (core)	6,367.50	
Stage I	1,430 feet at $2.50 (core)	3,575.00	
Stage I	870 feet at $2.75 (core)	2,392.50	
Stage I	590 feet at $3.25 (core)	1,917.50	
Stage I	150 feet at $3.75 (core)	562.50	
Total Stage I 9,600 feet (not 9,870)		$22,275.00	
Stage II	6,020 feet at $2.00 (non-core)	$12,040.00	
Stage II	3,220 feet at $2.25 (core)	7,245.00	
Stage II	1,960 feet at $2.50 (core)	4,900.00	
Stage II	1,680 feet at $2.75 (core)	4,620.00	
Stage II	980 feet at $3.75 (core)	3,185.00	
Stage II	140 feet at $3.75 (core)	525.00	
Total Stage II 14,000 feet		$32,515.00	
Reaming	4,600 feet at $1.50/ft.	6,900.00	
Bulldozing			
	Moving in and out 4 trips at $100.00/trip	$ 400.00	
	Operation 40 days at $100.00/day	4,000.00	
Total independent contracts			$ 66,090.00

Labor and supervision

Labor		
	Draftsman 144 hrs/mo. at $3.00/hr-12 months	$1,728.00
	Typist 24 hrs./mo. at $2.20/hr.-12 months	633.60
	Sampler-assistant $375.00/mo.-12 months	4,500.00
Supervision		
	Geo-Engineering fees, etc. $900.00/mo. - 12 months	10,800.00
Total labor and supervision		17,661.60

Operating materials and supplies		
Office supplies and map reproduction 12 months at $150.00/mo.	$ 1,800.00	
Survey stakes, etc.	25.00	
Total operating material and supplies		$ 1,825.00
Initial rehabilitation and repairs		
None		
New buildings, installations, etc.		
None		
Miscellaneous		
Accounting (Uranium Ventures, Inc.) $100.00/mo. - 12 months	$ 1,200.00	
Payroll taxes - 10 percent of $571.00/mo.	686.16	
Total miscellaneous		1,886.16
Contingencies		
Independent contracts, 15 percent	10,092.75	
Labor and supervision, 10 percent	1,766.16	
Operating material and supplies, 20 percent	365.00	
Miscellaneous, 50 percent	943.08	
Total contingencies		13,166.99
Total estimated cost of 23,870 feet of core hole drilling		$100,629.75
Estimated cost per foot		4.216

SUMMARY COST OF PROJECT

23,870 feet of drilling at $4.216/ft.	$100,635.92	
Assaying - 320 samples at $6.00	1,920.00	
Grand Total		$102,555.92
Government participation 75 percent, or		76,916.94

It will be noted that the applicant did not include assaying in the unit costs. Labor, supervision, and contingencies are high and would be cut about $10,000 by an engineer's estimate of costs.

CONCLUSIONS

The production from the area has been small. The Salt Wash sandstones are considerably broken and the lenses appear thin. The occurrence of significant ore deposits is not probable.

RECOMMENDATIONS

It is recommended that the application be denied.

/dj

TRANSMITTED

MAR 1 8 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA
Date Rec'd
FEB 17 1955

BUREAU OF MINES
Denver, Colorado

Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

February 16, 1955

Memorandum

Reviewed by
DMEA OPERATING COMMITTEE
3-25-55
(date)

To: Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 3576 (uranium), Uranium Ventures, Inc., Topaz claims, San Miguel County, Colorado

Enclosed are 10 copies of a geologic report by G. C. Simmons, U. S. Geological Survey, on the above subject property.

The claims are located on the southwest flank of the Gypsum Valley graben in a faulted area, over 50 percent of which is covered with Quaternary landslide debris.

The ore horizon on the claims is the Salt Wash member of the Morrison formation. The sandstone members are described by Simmons as thin and unfavorable for the deposition of significant deposits of uranium ore. Small "spotty" bodies of mineralized sandstone have been found in the area, but there has been no production of ore.

In a telephone conversation with W. P. Williams, I determined that data on the exploration by the U. S.Vanadium Corporation on the Uncle Sam claim, which is in part contiguous with the Topaz No. 3 claim of this application, were obtained too late to include in the report by Simmons. Williams states that these data will be included in a supplement to the report but that the supplement will not change the recommendation for denial of the application.

This morning I received a telephone call from Mr. Louis P. Gaggini of Geo-Engineering, representing the applicant, requesting that final action on the application (DMEA Docket 3576) be deferred pending submission by him of supplemental information on the U. S. Vanadium Corporation drilling. According to Mr. Gaggini, these data will prove the existence of ore bodies on the Topaz claims.

In view of the supplementary data that should arrive in the next week or ten days, it appears advisable to defer the final Field Team recommendation on proposed project until after a review of these data is made.

The Survey copy of the brochures is returned herewith.

E. N. Harshman

E. N. Harshman
Member, Field Team

Enclosures (11)

MINERAL DEPOSITS
DMEA
RECEIVED
FEB 14 1955
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

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

February 2, 1955

TRANSMITTED
MAR 18 1955

Memorandum

To: E. N. Harshman, DMEA Field Team, Region III

From: W. P. Williams

Subject: DMEA 3576 (Uranium), Uranium Ventures, Inc., Topaz claims, San Miguel County, Colorado

Enclosed are 11 copies of a geologic report and accompanying maps by G. C. Simmons, covering the above-referenced property, together with the brochure.

After field examination, Simmons recommends that DMEA assistance to explore the property be denied for these reasons: 1) The proposed program is of a wildcat nature, 2) all Salt Wash sandstone lenses in the area are thin and unfavorable for the occurrence of uranium deposits, 3) faulting and fracturing on the claims present serious geologic and drilling problems, and 4) known ore deposits in the area are all small and difficult to find.

I concur with Simmons' recommendation.

The Atomic Energy Commission was asked for its aid and advice in evaluating the property.

T. E. Mullen
for W. P. Williams
Geologist

TEM/mlr
Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
3-25-55
(date)

UNITED STATES DEPARTMENT OF THE INTERIOR

DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 3576, Uranium Ventures, Inc., Topaz claims, San Miguel County, Colorado

Uranium

Geologic Report

by

George C. Simmons
U. S. Geological Survey

February 4, 1955

Reviewed by
DMEA OPERATING COMMITTEE
3-25-55
(date)

INTRODUCTION

Uranium Ventures, Inc., 105 Park Drive, Grand Junction, Colorado, has submitted an application to the Defense Minerals Exploration Administration, prepared by Geo-Engineering, 304 Main Street, Grand Junction, Colorado. The application, Docket No. 3576, requests DMEA assistance in exploring for uranium ore on the Topaz group of claims, Big Gypsum Valley area, secs. 10 and 15, T. 44 N., R. 18 W., Gypsum Valley mining district, San Miguel County, Colorado, (fig. 1).

The claims were examined on January 19, 1955, in company with Carl Belser, U. S. Bureau of Mines representative, W. P. Williams, W. B. Gazdik and George C. Simmons of the U. S. Geological Survey, and L. P. Gaggini, chief geologist for Geo-Engineering and representative for the applicant.

GEOLOGY AND ORE DEPOSITS

The Topaz group is located on the southwest flank of the Gypsum Valley graben, a valley formed by the collapse of an anticlinal crest following the solution of underlying salt beds. The claims are underlain by the Lower Cretaceous Burro Canyon formation and Upper Jurassic Brushy Basin and Salt Wash members of the Morrison formation. These rocks have been faulted into at least three blocks which are more than 50 percent covered by Quaternary landslide debris. (See figure 2, showing generalized geologic setting of the Topaz claims).

The thickness of the Quaternary landslide debris reaches a maximum of about 50 feet. The Burro Canyon formation consists of mudstones and conglomeratic sandstones, and is probably less than 100 feet thick. The Brushy Basin member of the Morrison formation, which unerlies most of the Topaz group, comprises about 400 feet of reddish and greenish mudstones with minor siltstones, sandstones, and conglomerates. Underlying the Brushy Basin is the 350-foot-thick Salt Wash member of the Morrison formation which consists of reddish and greenish-gray sandstones and mudstones. The upper Salt Wash sandstone lenses form the only known mineralized zone in that part of Gypsum Valley.

The structural setting of the claims is not simple, as they are situated on fault blocks of the ancestral anticline. One major fault of at least 600 feet vertical displacement and another fault of less than 400 feet vertical displacement are known to transect the properties. There are minor fractures within the major fault blocks. Other structural complications may be present but are obscured by the landslide debris.

One diamond-drill hole on the Topaz group allegedly had a chemical assay of 0.10 percent U_3O_8 and 0.85 percent V_2O_5 for a 12-foot thickness. There are 10 offset holes near the mineralized hole at distances of 40 to 210 feet and averaging 100 feet in distance. None of the 10 offset holes had more than a trace of mineralization.

Exposures of Salt Wash on the claims showed that all sandstone members are of unfavorable thickness, the thickest being about 20 feet.

Small, "spotty" mineralization occurs in the general area, but there has been no production from the Topaz group.

PROPOSED EXPLORATION

A $102,555.92 drilling project is proposed. A total of about 60 holes would be drilled. The first 32 holes would be on a roughly rectangular grid of 500-foot and 250-foot spacing. The remaining holes would be used to offset the holes deemed most favorable by the applicant, including up to 26 offsets of the mineralized hole which already has 10 unsuccessful offsets.

CONCLUSIONS AND RECOMMENDATIONS

It is recommended that this application be denied for the following reasons: (1) The applicant proposes a wildcat drilling program which is not testing for a known favorable trend. (2) All Salt Wash sandstone units exposed have unfavorable thicknesses. (3) Faulting and fracturing of the outcrops in addition to the structure concealed by the landslide debris would present serious geologic and drilling problems. (4) Enough offset holes have been drilled to determine if an ore body was present in the vicinity of the mineralized drill hole. (5) Known deposits in the area are all small and "spotty".

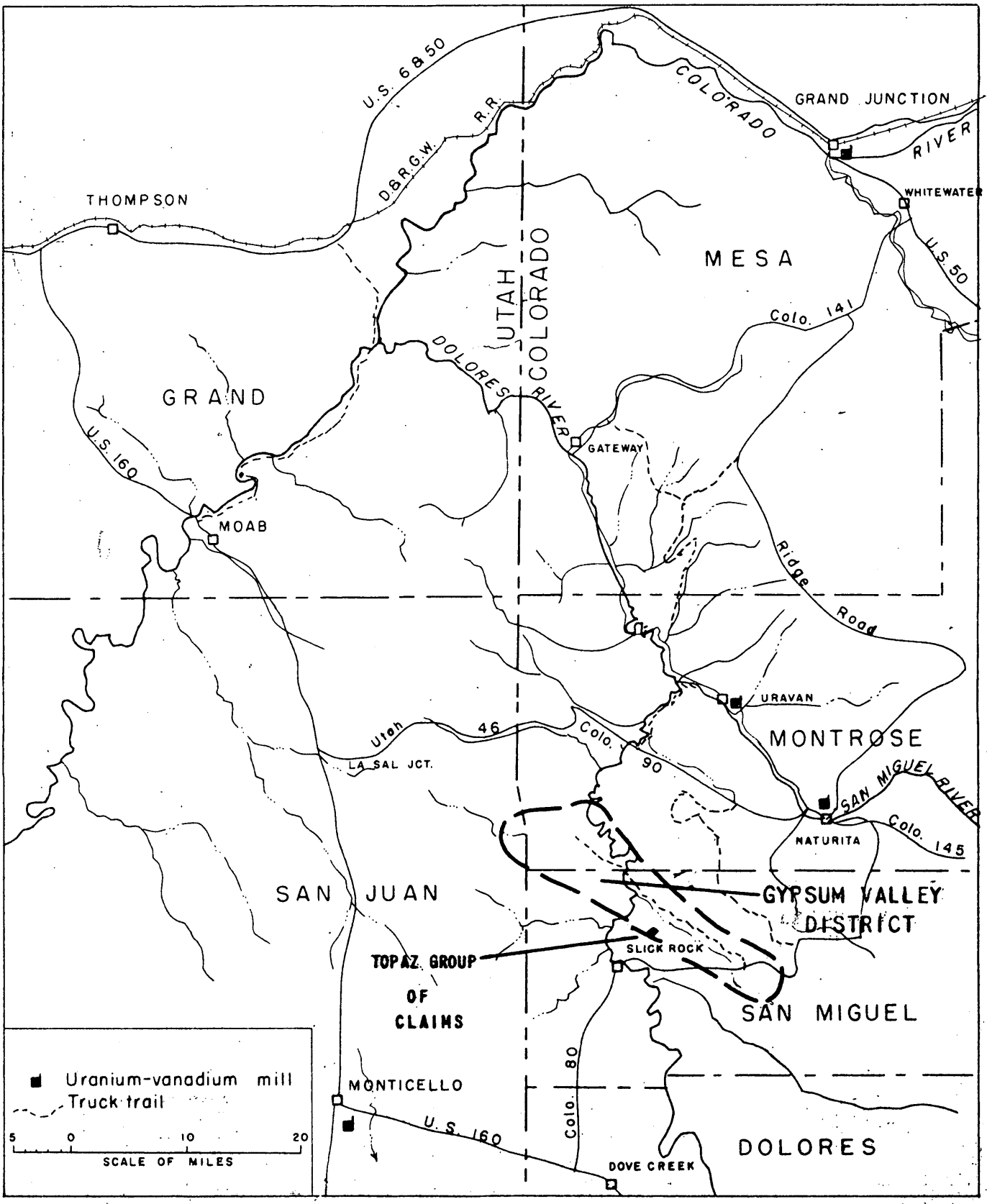
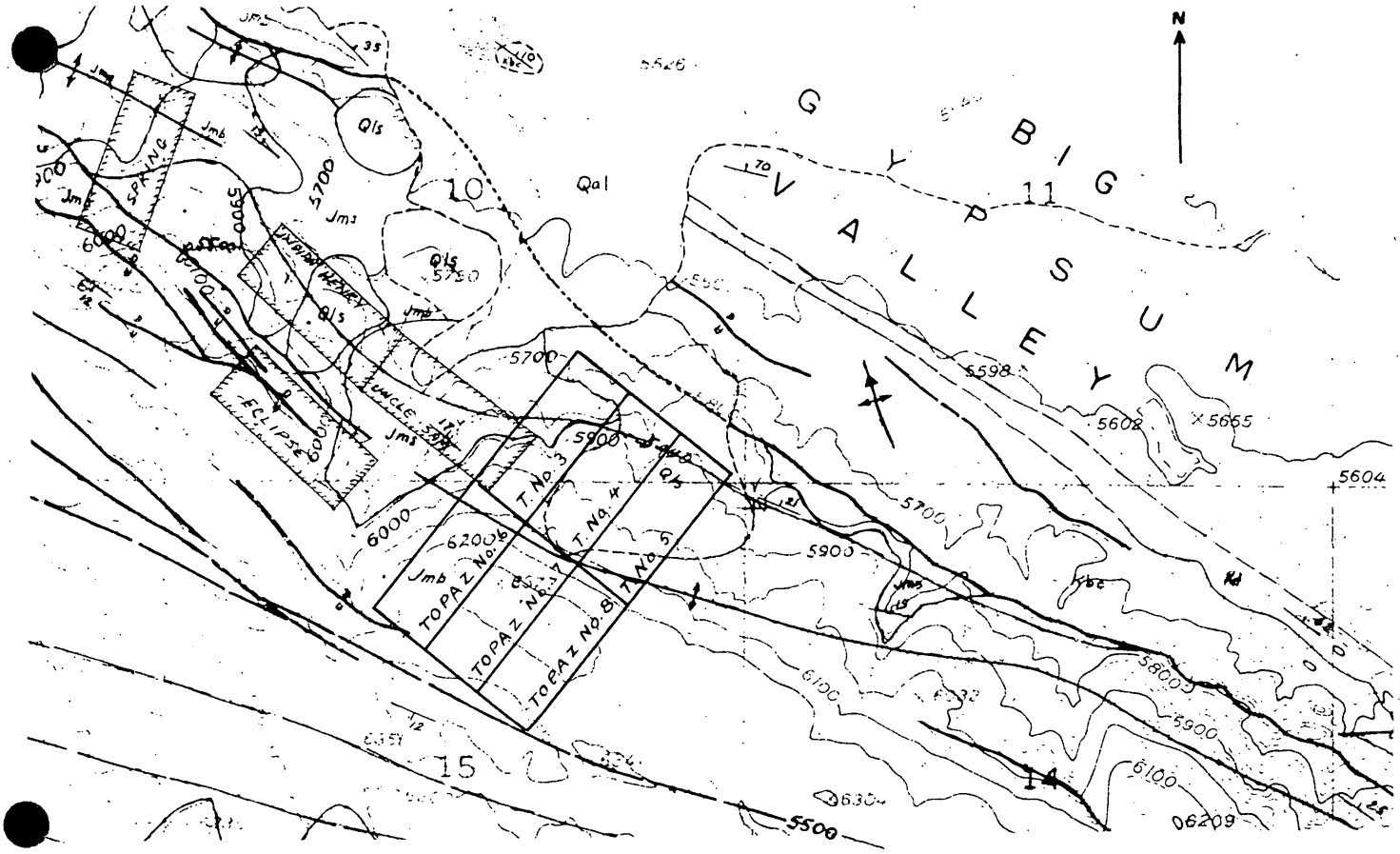


Figure 1. INDEX MAP OF PART OF THE COLORADO PLATEAU SHOWING LOCATION OF GYPSUM VALLEY MINING DISTRICT AND TOPAZ GROUP OF CLAIMS, URANIUM VENTURES INC., SAN MIGUEL COUNTY, COLORADO



EXPLANATION

QUATERNARY	Qal	ALLUVIUM	DIP AND STRIKE OF BEDS
	Qls	LANDSLIDE DEBRIS	AXIS OF ANTICLINE SHOWING PLUNGE
CRETACEOUS	Km	MANCOS SHALE	FAULT, SHOWING RELATIVE MOVEMENT
	Kd	DAKOTA	FORMATION CONTACT (DASHED WHERE INFERRED)
	Kbc	BURRO CANYON	STRUCTURE CONTOURS ON TOP OF ENTRADA
JURASSIC	Jmb	BRUSHY BASIN	PATENTED CLAIM BOUNDARY, LOCATED APPROXIMATELY
	Jms	SALT WASH	10 LAND SECTION NUMBER

1000 0 3000 FEET

CONTOUR INTERVAL 100 FEET
DATUM IS MEAN SEA LEVEL

Figure 2. MAP OF PART OF GYPSUM VALLEY MINING DISTRICT SHOWING PATENTED MINING CLAIMS, GEOLOGY AND LOCATION OF TOPAZ GROUP OF CLAIMS, URANIUM VENTURES, INC., SAN MIGUEL COUNTY, COLORADO

IN REPLY REFER TO:

DMEA
Date Rec'd
MAR 2 1955
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

March 2, 1955

Memorandum

To: Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 3576 (uranium), Uranium Ventures, Inc., Topaz claims, San Miguel County, Colorado

Enclosed are 10 copies of a memorandum by W. P. Williams, U. S. Geological Survey, giving supplemental information on the above subject property. Accompanying the memorandum are one copy each of the logs of 15 holes drilled on the Uncle Sam claim of the U. S. Vanadium Corporation, which adjoins the Topaz group on the west, and one copy of a map showing the location of the 15 holes.

Williams and Simmons, who wrote the original report of field examination, conclude that although two of the 15 holes drilled on the Uncle Sam claim encountered thin ore-grade material, exploration on the Topaz group is not warranted. Their conclusion appears justified, particularly in view of the complex faulted nature of the area proposed for exploration.

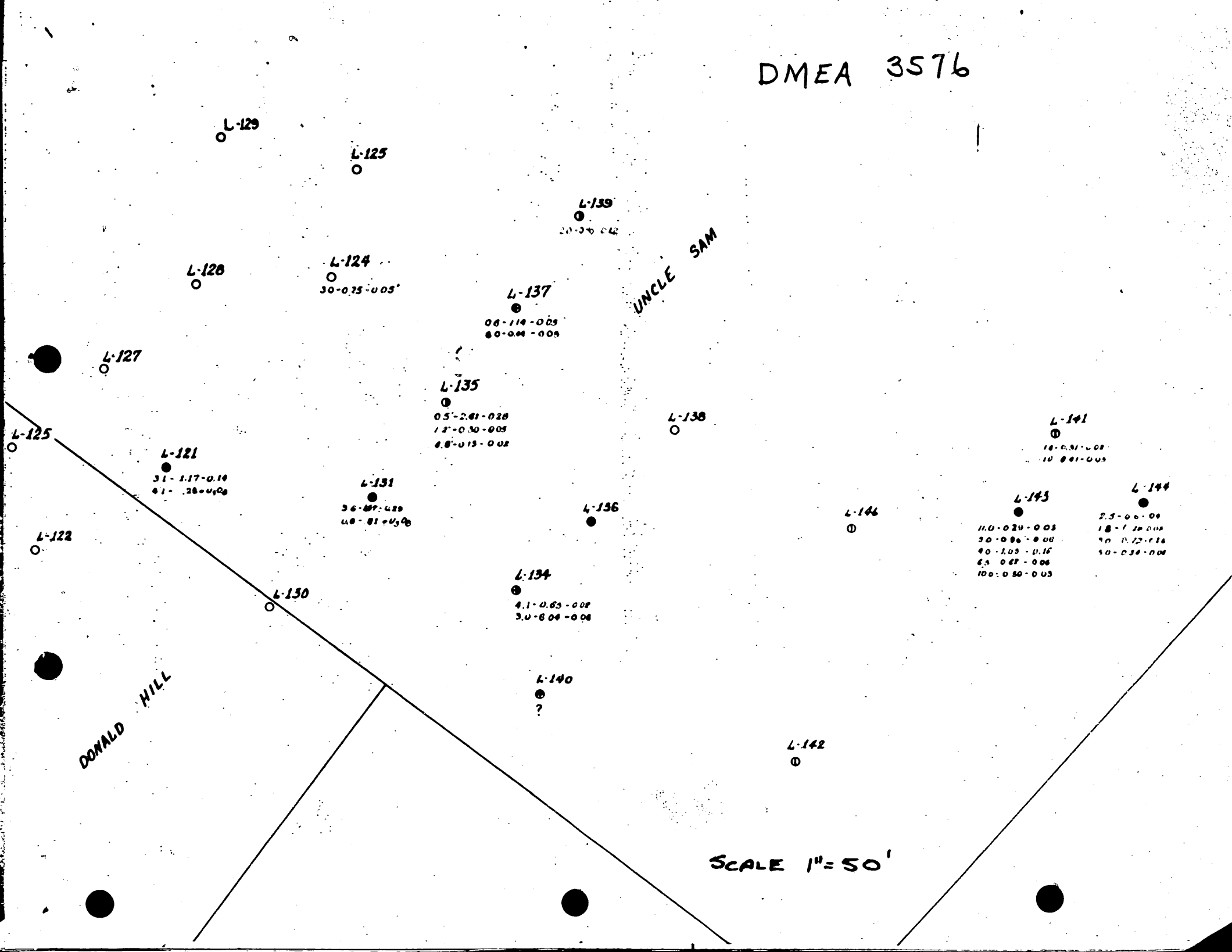
E. N. Harshman

E. N. Harshman
Member, Field Team

Enclosures (26)

ENHarshman:arh

DMEA 3576


L-129
L-125
L-139
L-124
3.0-0.25-0.05
L-128
L-137
0.6-1.14-0.09
8.0-0.44-0.09
UNCLE SAM
L-127
L-135
0.5-2.61-0.28
1.2-0.30-0.05
6.8-0.15-0.02
L-138
L-141
L-125
L-121
3.1-1.17-0.14
L-131
L-136
L-146
L-143
L-144
L-122
L-130
L-134
4.1-0.65-0.02
3.0-6.04-0.06
L-140
?
DONALD HILL
L-142
SCALE 1"=50'

Diamond Drill Log

Drill Hole No. L-121
Total Depth 130.0
Coordinates N
E
Collar Elevation

Claim UNCLE SAM
Group GYP VALLEY

Date Drilled
Date Logged completed on 10-21-53
Logged By

Summary of Log

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	6	6.0				MS	R			
	6	23.0	17.0				SS	BN-GY	F	S INT	S-A LIMONITE
	23.0	30.0	7.0				MS	R/GY			
	30.0	65.0	35.0				SS	BN-GY	F	S-A-GY-R-BNG	S-A, CBN, S-A GYP, A GY CLAY SEAM 62-63.5'
	65.0	75.0	10.0				MS/BLK	GY			1-7 SS RIBS
	75.0	88.0	13.0				SS	BN-GY	F	S-A-INT-W	S-A LIMONITE
S-1	88.0	90.4	2.4	.05	.01		SS	BN	F	S INT	
S-2	90.4	93.5	3.1	1.17	0.14		SS	LT-DK GY	F	S-INT-GY-P	PRETTY WELL BROKEN UP FEW PIECES GOOD CARNOTITE (SEE BARNABY LOG BELOW)
S-3	93.5	97.0	3.5	.04	NIL		SS	GY BN	F	S-A-INT-W	
	97.0	127.0	30.0				SS	GY-BN	F	S-A-INT-GY-P	
	127.0	129.0	2.0				MS	GY			
	129.0	130.0	1.0				MS	R			

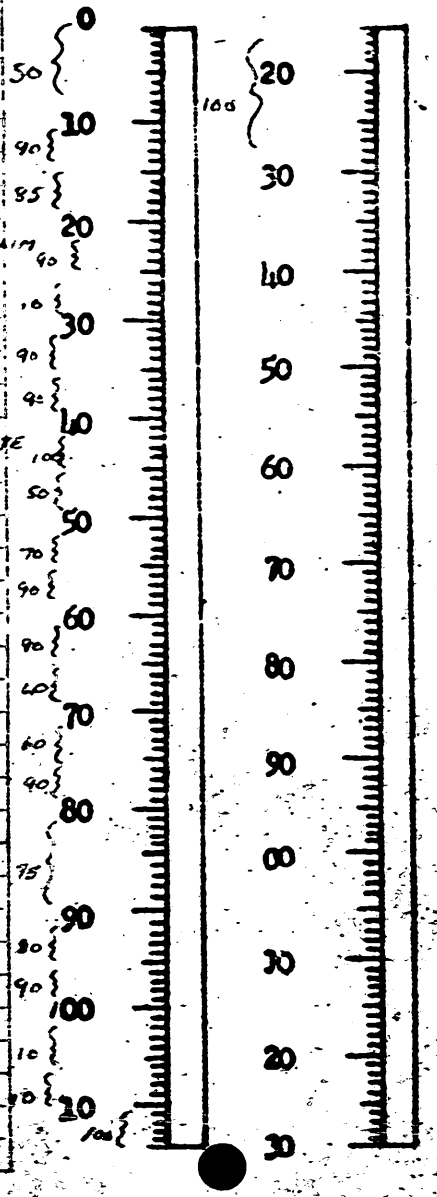
— BARNABY LOG —

FROM	TO	THICK	COUNT	ASSAY U_3O_8
85.3	86.0	0.7	6200	0.62
86.0	87.3	1.3	4600	0.23
87.3	88.5	1.2	3600	0.13
88.5	89.4	0.9	8500	0.70

NOTE DISCREPANCY IN DEPTH OF ORE WITH DRILLERS LOG. USV PROBE INDICATES THIS TO BE CORRECT DEPTH.

35 - 10
52 - 2
B5-129

Graphic Log
1" 20'



Diamond Drill Log

Drill Hole No. L-130
Total Depth 163.0
Coordinates N. E.
Collar Elevation

Claim DEPAULD HILL
Group LOWER GYP

Date Drilled
Date Logged 12-9-53
Logged By J. MOYICA

Graphic Log 1" 20'

Summary of Log SEMI - FAVORABLE

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	10.0	10.0								FILL
	10.0	16.5	6.5				SS	Gy BN	M		
	16.5	24.0	5.5				MS/SS	R			
	24.0	30.5	6.5				SS	Gy	F-M	A; Gy; P	MS CONGL.
	30.5	38.0	7.5				MS	Gy			
	38.0	45.5	7.5				MS	R			
	45.5	48.0	2.5				MS	Gy			
	48.0	60.5	12.5				SS	BR-Gy	F-M	SA; Gy; P	A LIMON STAIN - GYP
	60.5	94.0	33.5				MS	Lt Gy			+ SS ribs
	94.0	119.5	25.5				SS	BN Gy	F-M	SA; Gy; SM; P	
	119.5	124.0	4.5				MS	Gy			
	124.0	128.5	4.5				SS	BN Gy	F	SA; Gy; P	very hard in part
	128.5	132.0	4.5				MS	Gy			hard ribs
	132.0	150.4	7.4				SS	Gy-BN	F	SA; Gy; M	
	150.4	151.4	1.0				MS	Gy			
	151.4	163.0	11.6				MS	R			hard ribs

26 - M
5 - S
7 - 1

RS 151

Diamond Drill Log

Drill Hole No. L-131
Total Depth 185.0
Coordinates N
E
Collar Elevation

Claim UNCLE SAM
Group Lower Gyp

Date Drilled
Date Logged 12-18-53
Logged By J.M.

Summary of Log

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	12.0	12.0				MS	Z			
	12.0	28.5	16.5				SS	GY-TAN	F-M	S.A. Gy, P	
	28.5	38.5	14.0				MS	Gy			
	38.5	55.0	16.5				SS	BN-GY-BN	F	S.A.; S.A.; Gy	
	55.0	68.3	13.3				MS	Gy-R			
	68.3	90.0	21.7				SS	Gy	F	S.A.; Gy; P	Very Hard
	90.0	93.0	3.0				MS	Gy			
	93.0	95.0	2.0				SS	Gy Bu	F		
	95.0	99.0	4.0				MS	Gy			
	99.0	119.5	20.0				SS	BN	F	S.A.; Gy; SMS	
	119.5	129.5	10.0				MS	Gy			4 H. RIBS
	129.5	129.8	0.3				SS	Gy-BN	F		& CBN
	129.8	143.0	13.2				SS	BN	F-M	S.; INT.; Gy	
1	142.0	144.2	1.7	0.04	0.03		SS	BN	F	S.	CARN. STAIN ON FRAC. 100%
2	144.2	145.0	0.8	0.50	0.51		SS	Gy BN	F	S.; Gy; SM	GOOD U_3O_8; FAIR V_2O_5
3	145.0	147.8	2.8	2.26	0.23		SS	Gy BN	F-M	S.A.; Gy; SM	GOOD U_3O_8; GOOD V_2O_5
4	147.8	148.8	1.0	0.29	0.01		SS	BN	F	S.A.; Gy; SMS	CARN ON FRAC.
	148.8	160.0	11.2				MS	Gy			
	160.0	180.0	20.0				SS	BN	F-M	S.A.; Gy; SM; INT	
	180.0	184.0	4.0				MS	Gy			
	184.0	185.0	1.0				MS	R			
		✓									
								BARNABY LOG		U_3O_8	
								146.7-150.2		.49	
								172.6-173.4		.21	

Graphic Log

2	-4
20	-10
18	-11
20	-4

Diamond Drill Log

Drill Hole No. 1-134
Total Depth 245.0
Coordinates N
E
Collar Elevation

Claim UNCLE SAM
Group LOWER GYP

Date Drilled
Date Logged 2-16-54
Logged By J.M.

Summary of Log FAVORABLE

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	30	30								PLUG
	30.0	54.0	24.0				MS	DK Gy			@ SS RIBS
	54.0	86.0	32.0				SS	BN-Pk	F-M	J-Aky, Jnt	
	86.0	93.0	7.0				MS	Gy-LR			
	93.0	103.0	10.0				SS	BN	F	S	
	103.0	132.0	29.0				MS	Gy-BN			@ SS ribs
	132.0	144.0	12.0				SS	BN-Gy	F	S-10% Gy	
	144.0	156.0	12.0				MS	Gy			w/ SS-ribs
	156.0	176.6	16.6				SS	LBN	F	S	
S-1	176.6	177.0	0.4				SS	LGy-DGy	M	S	FA.a V.a- WK U.Oa
	177.0	190.0	13.0				MS	Gy			@ SS ribs
S-2	190.0	193.4	3.6	Nil	.02		SS	LGy-Lbr	F-M	S	OK-V - WKU
S-3	193.4	197.5	4.1	0.65	.02		SS	DKGy-Gy	F	S	F V - WKU
S-4	197.5	201.0	3.5	0.04	.06		SS	Br	F-M		WKV - WKU
	201.0	205.0	4.0				MS	Gy-GW			
S-5	205	209.0	4.0	Nil	.01		SS	Gy-Br	F	S-10% MS	WKU - WK U SACh
	209	215.0	6.0				MS	Gy			
	215	240.0	25.0				SS	Lt		S-A-Sme	Quartzite -238-240
	240	243	3.0				MS	Gy			
	243	245	2.0				MS	Rf			

— BARNABY LOG —

FROM	TO	THICK	eU_3O_8
189.1	194.1	5.0	.03
194.1	196.7	2.6	.07
196.7	201.3	4.6	.04
206.6	209.1	2.5	.02

12 - 12
11 - 13
11 - 4
4 - 6
25 - 2
PROJECT

Diamond Drill Log

Drill Hole No. L-135
Total Depth 182.0
Coordinates N
E
Collar Elevation

Claim UNCLE SAM
Group GRID VALLEY

Date Drilled
Date Logged 2-15-54
Logged By [illegible]

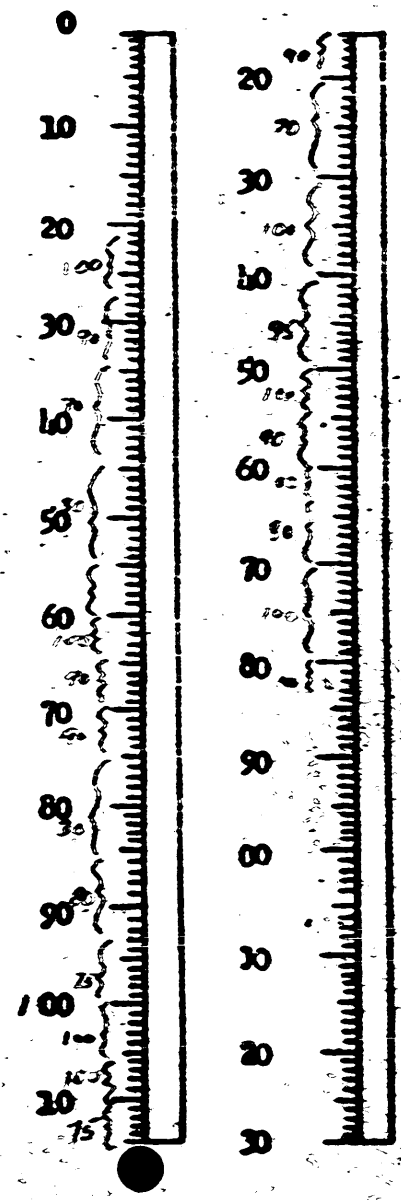
Summary of Log FAVORABLE

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Disp.	Rock	Color	Grain	MS in SS	Remarks
	0	22	22								PLUG
	22.0	35.0	13.0				MS	RD GY			
	35.0	55.0	20.0				SS	BN	F -	S-Gy-Sm	Silty
	55.0	66.0	10.0				MS	Gy			w/ SS ribs
	66.0	100.0	45.0				SS	Gy-BN	F-M	S-Gy	
[illegible]	100.0	101.5	1.5	.08	.01		SS	BN	F	S	VK V. VK U
[illegible]	101.5	102.0	0.5	2.61	0.20		SS	DGy	F	S	GOOD V. FAIR U
[illegible]	102.0	103.5	1.5	0.23	0.02		SS	BN	F	S	BLOTY CHOCKY. VK V. VK U
[illegible]	103.5	109.0	5.5				SS	BN	F	S	
[illegible]	109.0	119.0	10.0				MS	Gy			w/ SS ribs
[illegible]	119.0	126.0	7.0				SS	BN	F-M	S	
[illegible]	126.0	128.2	1.2	0.20	0.05		SS	Gy-BN	F	S-Gy SMT	VK V. VK U. S CBN
[illegible]	128.2	136.8	8.6				SS	BN	F-M	SMT, Gy, D	
[illegible]	136.8	140.3	3.5	0.20	0.04		SS	BN	F	S-Gy, Gy, D	VK V. VK U
[illegible]	140.3	143.6	3.3	0.15	0.02		SS	BN	F-M	S-Gy, P	VK V. VK U. SOME CBN
[illegible]	143.6	145.6	1.0	0.10	0.02		SSPK	BN-Gy	F	S-Gy SMT, P	VK V. VK U
[illegible]	145.6	148.6	3.0				MS	Gy			
[illegible]	148.6	154.0	5.4				SS	BN-Gy	F-M	S-Gy SMT	
[illegible]	154.0	155.0	1.0				MS	Gy			
[illegible]	155.0	156.2	1.2	0.10	0.02		SS	L. Gy	F-M	S-Gy, P, MT	VK V. VK U. STAINK
[illegible]	156.2	159.0	2.8				MS	Gy			
[illegible]	159.0	162.0	3.0				MS	R			

— BARNABY LOG —

From	To	Thick	CU_3O_8
111.6	112.3	0.7	.24
112.3	114.5	2.2	.06
114.5	115.4	0.9	.32
140.2	141.2	1.2	.06
159.0	160.0	1.0	.04
160.9	163.5	2.6	.06
165.3	166.5	1.2	.03
175.1	176.2	1.0	.04

Graphic Log
1" 20'



Diamond Drill Log

Drill Hole No. L-13½
Total Depth 245.0
Coordinates N
Collar Elevation

Claim UNCLE SAM
Group GYP VALLEY
E

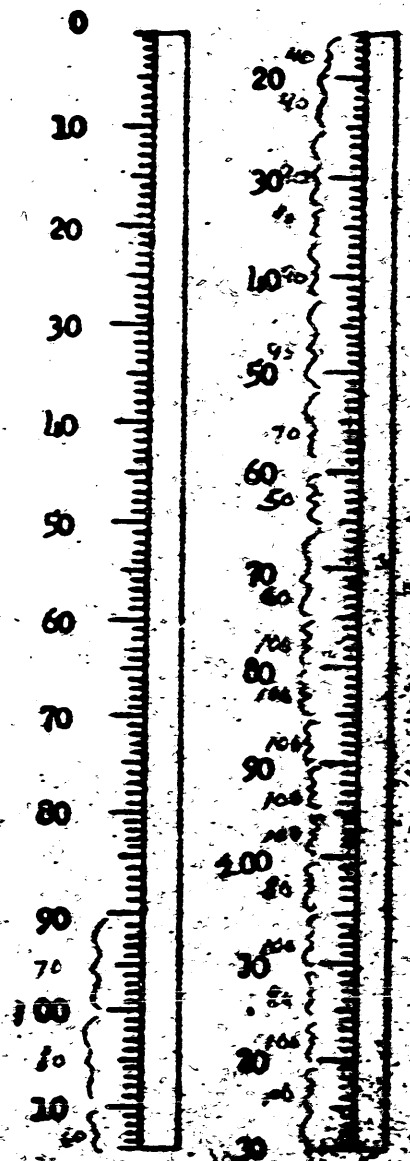
Date Drilled
Date Logged 2-22-54
Logged By JBM

Summary of Log FAVORABLE

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	90	90								PLUG
	90.0	105.5	15.5				SS	LBN	F-M	S-A; SLIGHT	
	105.5	120.0	14.5				MS	GRY/R			W/ SS ribs
	120.0	127.0	7.0				SS	GRY-BN	F-M	S-A; LIGHT	SOFT IN PART
	127.0	159.5	18.5				M	DKGY			W/ SS ribs
	159.5	173.0	22.5				SS	BN	F-M	S	
	173.0	183.0	10.0				MS	GY			
	183.0	196.3	13.3				SS	BN	F	S	
S-1	196.3	196.9	0.6	0.84	0.03		SS	LGY	F	S	FAIR V; VR U
S-2	196.9	197.8	0.9	1.54	0.19		SS	DGY	F	S	GOOD V; GOOD U
S-3	197.8	199.1	1.3	1.60	0.04		SS	GY	F	S; SLIGHT	FAIR V; FAIR U; CBN
S-4	199.1	199.5	0.4	2.49	0.32		SS	GY	F	S; SLIGHT	GOOD V; GOOD U; CBN
S-5	199.5	200.5	1.0	2.04	0.09		SS	GY	F	S; SLIGHT	GOOD V; FAIR U
S-6	200.5	201.0	0.5	0.88	0.61		SS	LGY	F	A; NO MS	GOOD V; GOOD U
S-7	201.0	202.2	1.2	1.75	0.43		SS	GY	F	A; NO MS	GOOD V; VR U
	202.2	203.2	1.0				MS	GY			
	203.2	232.0	28.8				SS	BN	F	S	
	232.0	241.0	9.0				MS	GRY			W/ SS ribs
	241.0	245.0	4.0				MS	R			

23-10
19-1
29-9
RS 241

Graphic Log
1" 20'



Diamond Drill Log

Drill Hole No. L-137
Total Depth 177.0
Coordinates N
Collar Elevation

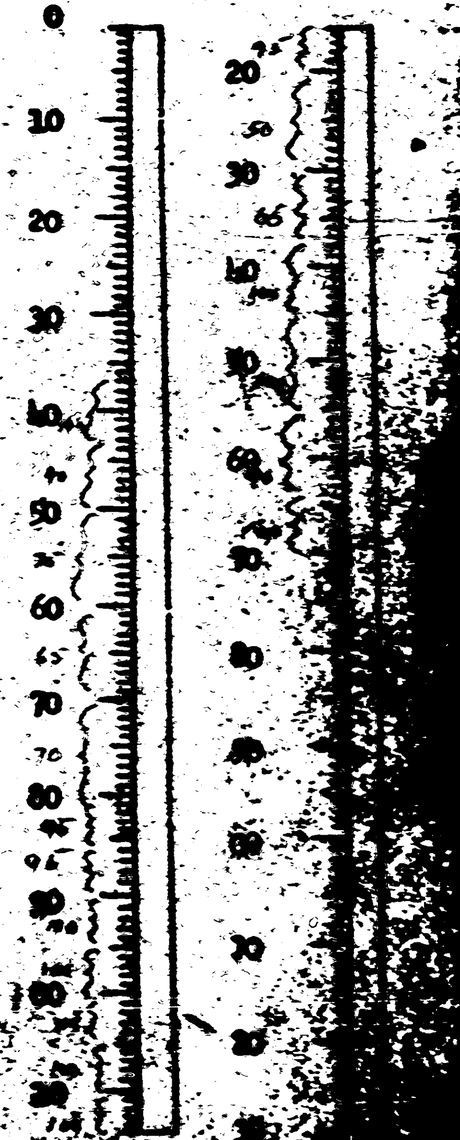
Claim UNCLE SAM
Group GYP
E

Date Drilled
Date Logged 7-19-54
Logged By J. M.

Summary of Log FAVORABLE

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	37									PLUG
	37.0	38.0	1.0				MS	R			
	38.0	53.0	15.0				SS	L BN	F	S	
	53.0	60.0	7.0				MS	Gy			
	60.0	81.5	21.5				SS	L BN	F	S	
S-1	81.5	82.1	0.6	1.14	.05		SS	Gy	F	A Gy SMS	FAIR V. C. .10 U_3O_8
	82.1	83.1	1.0				SS	L BN	F	S	
S-2	83.1	84.3	1.2	Nil	.02		SS	L BN	F	S	CARB. 1/4 FRAC. WK U, WK V
	84.3	88.0	3.7				SS	L BN	F	S	
	88.0	91.2	3.2				MS	Gy			
	91.2	115.0	28.2				SS	L BN	F	SS; Gy SMS P	A MS SMS 111-115
	116.0	119.0	4.0				MS	Gy			
	119.0	122.0	3.0				SS	L Gy	F	A; Gy INT	
	122.0	125.0	2.0				MS	Gy			
	125.0	137.5	12.5				SS	Gy-BN	F	S	
S-3	137.5	138.8	1.3	0.31	.02		SS	Gy-BN	F	S	WK V; WK U
S-4	138.8	139.9	1.1	0.70	.09		SS	Gy-BN	F	A Gy SMS	FAIR V; WK U
S-5	139.9	141.5	1.6	0.48	.09		SS	Gy-BN	F	S A; Gy P	WK V; WK U
S-6	141.5	142.4	0.9	1.14	.09		SS	Gy-BN	F	S-A Gy SMS	FAIR V; WK U
S-7	142.4	144.8	2.4	0.22	.09		SS	Gy-BN	F-M	S	WK V, WK U
S-8	144.8	145.5	0.7	0.35	.09		SS	Gy-BN	F	S	FAIR V; WK U
	145.5	160.0	14.5				SS	BN	F-M	S; INT Gy	
	160.0	161.0	1.0				MS	Gy			
	161.0	163.0	2.0				SS	Gy	F	N	Hard
	163.0	166.0	3.0				MS	Gy			
	166.0	173.0	7.0				SS	Gy-BN	F-M	[illegible] SMS	CBN 163-170
	173.0	176.0	3.0				MS	Gy			
	176.0	177.0	1.0				MS	R			24-3
		✓			— BARNABY —			eU_3O_8			3-3
					81.4	82.3	0.9	.098			35-1
					137.5	145.5	7.9	0.14			2-3
					138.8	145.5	[illegible]	0.[illegible]			7-3

Graphic Log
1" = 20'



Diamond Drill Log

Drill Hole No. L-138
Total Depth 230.0
Coordinates N
E
Collar Elevation

Claim UNCLE SAM
Group GYP VALLEY

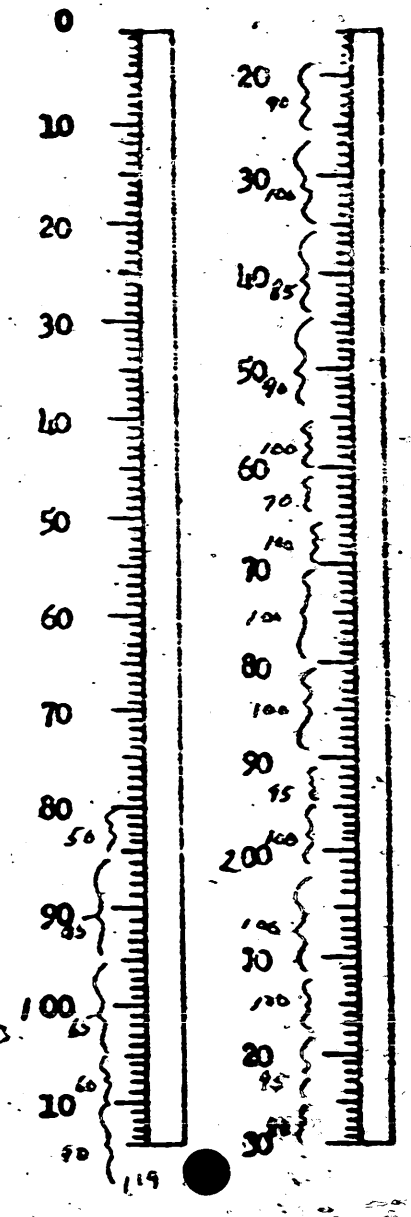
Date Drilled
Date Logged 2-25-54
Logged By J.M

Summary of Log

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	80	80								PLUG
	80.0	92.5	12.5				SS	L BN	F-M	S	
	92.5	102.5	10.0				MS	RBGY			
	102.5	107.0	4.5				SS.	L Gy	F	S	HARD
	107.0	110.0	3.0				MS	Gy			
	110.0	119.0	9.0				SS	Gy-BN	F-M	S	A GYP
	119.0	125.0	16.0				SS	BN	F-M	S	
	125.0	131.0	6.0				MS	Gy			
	131.0	140.0	9.0				SS	BN	F-M	S-A GYP	S GYP
	140.0	143.0	3.0				MS	RBGY			
	143.0	156.0	13.0				MS	Gy			
	156.0	168.5	12.5				SS	BN	F-M	S-A GYP	
	168.5	174.0	5.5				MS	Gy			S-A CBN
	174.0	184.5	9.5				SS	BN-Gy	F	S	S-A CBN
	184.5	190.5	6.0				MS	Gy			
	190.5	196.5	6.0				SS	Gy-BN	F	S	
	196.5	201.0	4.5				MS	Gy			
	201.0	205.5	4.0				MS	R			
		←									
											HOLE PROBED. BARREN

- 13
17 - 6
10 - 5
6 - 5
BS 226

Graphic Log
1" 20'



Diamond Drill Log

Drill Hole No. L-139
Total Depth 190.0
Coordinates N.
E
Collar Elevation

Claim UNCLE SAM
Group GUD VALLEY

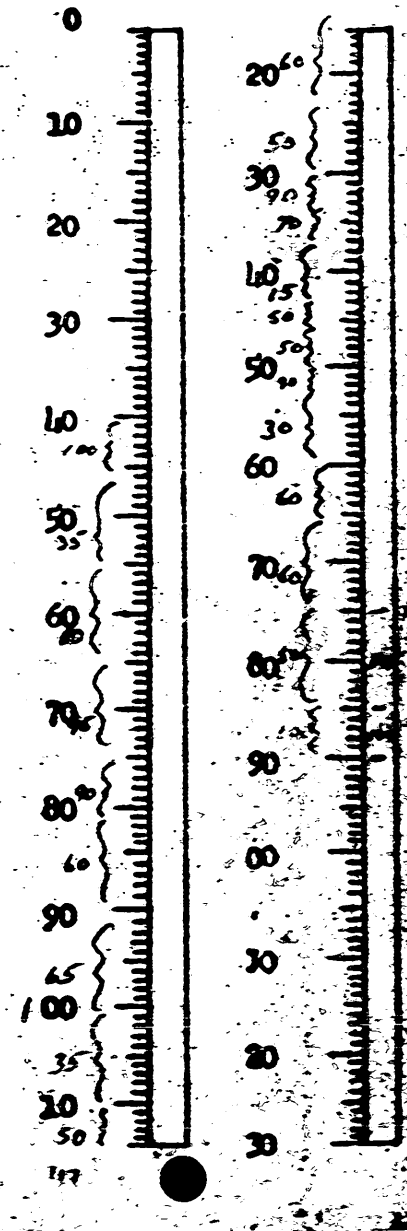
Date Drilled
Date Logged 2-25-54
Logged By J. M.

Summary of Log

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	40									PLUG
	40.0	43.0	3.0				MS	R			
	43.0	58.0	15.0				MS	Gy			S SS RIBS
	58.0	81.5	23.5				SS	L BN	F-M	S; INT	
	81.5	117.0	35.5				MS	Gy			
	117.0	119.0	2.0				SS	L Gy	F	R; INT	MUDDY
S-1	119.0	120.0	1.0	NIL	.03		SS	Gy-BN	F	S; INT	VERY HARD, WK V, WK U
	120.0	124.0	4.0				MS	Gy			
	124.0	125.0	1.0				SS	L BN	F-M	S	S GYP
S-2	124.0	127.0	3.0	0.96	0.12		SS	Gy-BN	F	S	FAIR V, WK U, S CBN BADLY BROKEN
	136.0	149.5	13.5				SS	BN	F-M	S-A; Gy SMS	A LIMONITE, A CBN
	149.5	166.0	16.5				SS	Gy-BN	F	S-A; Gy-MT; S MS	Very hard, S CBN
	166.0	178.5	12.5				MS	Gy			
	178.5	185.0	6.5				SS	Gy	F	S	Very hard
	185.0	190.0	5.0				MS	R/Gy			SS ribs
											HOLE PROBED:
											24 - 35
											2 - 4
											42 - 12
											7 - 0

25 185

Graphic Log
1" 20'



Diamond Drill Log

Drill Hole No. E-140
Total Depth 267.0
Coordinates N
E
Collar Elevation

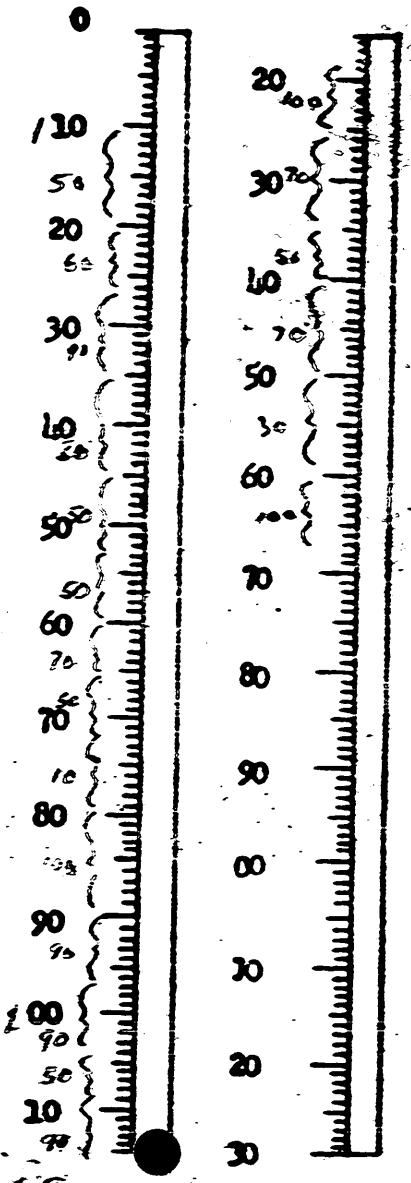
Claim UNCLE SAM
Group GOLD BAGGER

Date Drilled
Date Logged 8-1-[illegible] (Comp 2-27-54)
Logged By J.C.

Summary of Log

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Cap Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	112									PLUG
	112.0	130.0	28.0				SS	RN-Gy	F-M	SM; Gy SBS	
	130.0	140.0	14.0				MS	Gy			
	140.0	154.0	9.0				SS	BN	F	S	
	154.0	159.0	5.0				MS	Gy			
	159.0	171.0	12.0				SS	Gy-Bn	F	S-A-Gy P	
	171.0	180.0	9.0				MS	Gy			
	180.0	198.0	18.0				SS	Bn	F-M	S	
	198.0	202.0	4.0				MS	Gy			
	202.0	208	6.0				MS	R-Gy			
	208.0	218.0	10.0				MS	Gy			
S-1	218.0	229.0	[illegible]	0.54	.07		SS	Gy-Bn	F	S-A-Gy-Bn	WK V; WK U; SCBN
	229.0	263.0	[illegible]				SS	L TAN	F-M	S-A Gy-Bn	
	263.0	267.0	4.0				MS	R-Gy			

Graphic Log
1" 20'



S - 5
12 - 9
18 - 4
6 - 10
45.0
TD 267

Diamond Drill Log

Drill Hole No. L-141
Total Depth 216.0
Coordinates N
Collar Elevation

Claim UNCLE SAM
Group GYP VALLEY
E

Date Drilled
Date Logged
Logged By

Summary of Log

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	40	40								PLUG
	40	47.0	7.0				SS	Gy-BN	F	S-A INT	
	47.0	55.0	8.0				MS	Gy			
	55.0	118.5	63.5				SS	BN	F-M	S-INT	A CBN 76-77.5
	118.5	120.5	2.0				MS	Gy			
	120.5	147.0	26.5				SS	BN	F-M	S-INT	
	147.5	150.5	3.0				MS	Gy			
	150.5	156.0	5.5				SS	LGy-BN	F	A-INT	Silty
	156.0	165.0	9.0				MS	Gy			
	165.0	173.0	8.0				SS	LGy-BN	F	A-INT	Silty
	173.0	175.0	2.0				MS	Gy			
	175.0	186.0	11.0				SS	LBN	F	S	
S-1	186.0	187.0	1.0	0.34	0.02		SS	LGy	F	S-INT	UK V; UK U
	187.0	195.0	8.0				SS	LGy-BN	F	S-INT	
S-2	195.0	196.0	1.0	0.41	0.03		SS	LGy	F	A-INT	UK V; UK U
	196.0	201.5	5.5				SS	LBN	F-M	SA Lo Dims	
	201.5	212.0	10.5				MS	Gy			[illegible]
	212.0	216.0	4.0				MS	R			

64-2
26-3
6-9
8-2
16-4
85 212

Graphic Log
1" 20'

Diamond Drill Log

Drill Hole No. L-142
Total Depth 324.0
Coordinates N
E
Collar Elevation

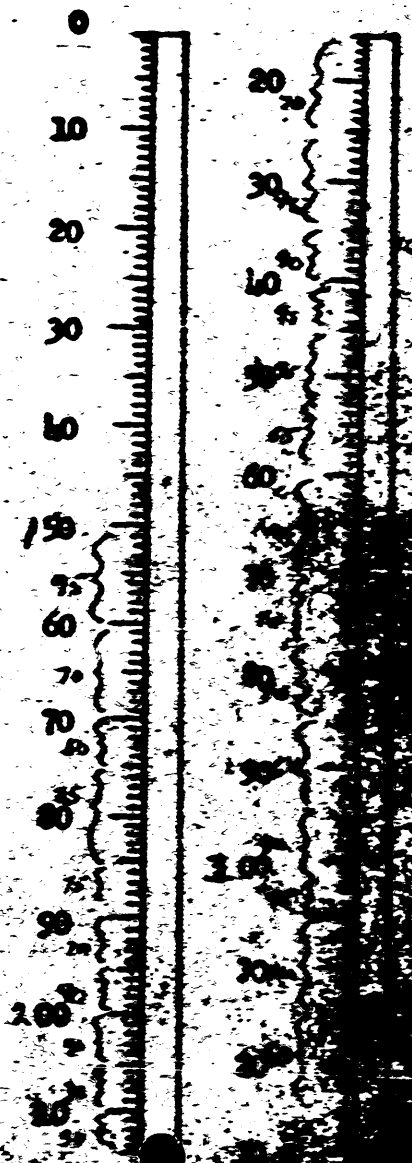
Claim UNCLE SAM
Group GRO VALLEY

Date Drilled
Date Logged 3-6-54
Logged By J.M.

Summary of Log Sandstone

Sample No.	From	To	Feet	V_2O_3	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	150	150								PLUG
	150.0	155.0	5.0				SS	Gy	F	A; Gy SHS	
	155.0	157.0	2.0				MS	Gy			
	157.0	186.0	29.0				SS	L BN	F-M	S-A; Gy SHS P	
S-1	186.0	189.5	3.5	0.48	0.08		SS	Gy-BN	F-M	S-A; Gy INT	WK V; WK U; CARN VISIBLE ON FRAC. - PLUG REC
	189.5	200.5	11.0				SS	L BN	F-M	S-A; Gy SHS	
	200.5	218.0	17.5				MS	Gy			W/ SS MIX
	218.0	246.0	27.0				SS	L BN	M	S-A; Gy SHS	
	246.0	247.0	7.0				MS	Gy			
	247.0	270.0	23.0				SS	L BN	F-M	S-A; Gy SHS	A CBN 265-270
	270.0	280.0	10.0				MS	Gy			
	280.0	294.0	14.0				SS	BN	F	S-A; Gy SHS	
S-2	294.0	301.0	7.0	0.25	0.04		SS	L Gy-BN	F-M	S-A; Gy SHS P	WK V; WK U; CARN VISIBLE ON FRAC.
S-3	301.0	305.0	4.0	0.15	0.02		SS	L Gy-BN	M	S-A; Gy SHS	WK V; WK U; CARN VISIBLE ON FRAC.
S-4	305.0	306.0	1.0	0.69	0.02		SS	L Gy	M	A; Gy INT	WK V; WK U
	306.0	312.0	6.0				MS	Gy			
	312.0	315.0	3.0				SS	L Gy	F	A; INT	silty
	315.0	318.0	3.0				MS	Gy			
	318.0	324.0	6.0				MS	R			
		✓									

Graphic Log
1" 20'



Diamond Drill Log

Drill Hole No. L-143
Total Depth 250.0
Coordinates N
E
Collar Elevation

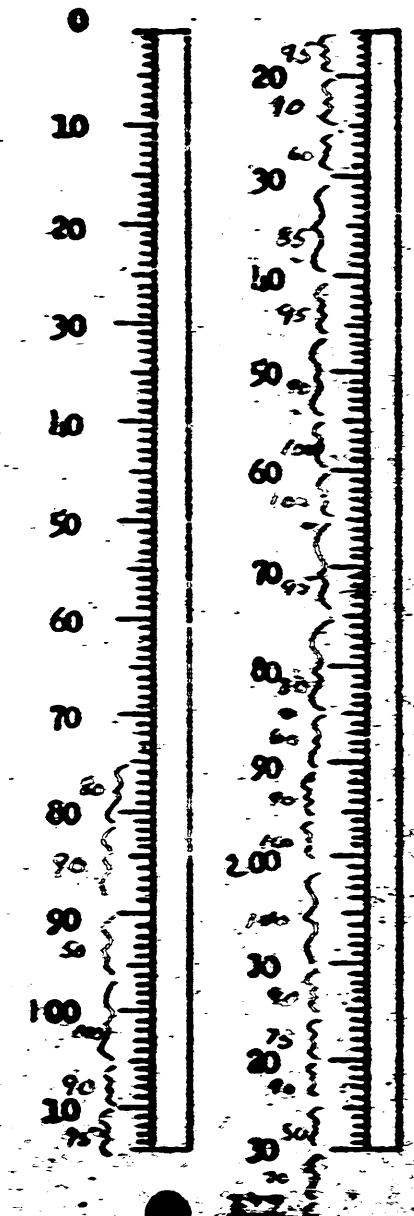
Claim UNCLE SAM
Group GIO VALLEY

Date Drilled
Date Logged
Logged By J. MOTTIS

Summary of Log

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	76	76								PLUG
	76.0	86.0	5.0				SS	Gy	F	S	TRACE CARB
	86.0	89.0	3.0				MS	Gy			
	89.0	99.0	14.0				SS	LBN	F-M	S; Gy MT	
	99.0	99.0	2.1				MS	Gy			
S-1	99.0	105.0	6.0	0.23	0.04		SS	LGy	F-M	S; Gy MT	WK V, WK U
S-2	105.0	107.0	2.0	0.20	0.02		SS	Gy-BN	F	S	WK V, WK U
S-3	107.0	110.0	3.0	0.38	0.02		SS	Gy	F	S	FAIR V, WK U, VIS CARB
S-4	110.0	113.0	3.0	0.44	0.06		SS	Gy	F	S	FAIR V, WK U
S-5	113.0	116.0	3.0	0.06	0.02		SS	Gy	F-M	S	WK V, WK U
S-6	116.0	119.0	4.0	1.03	0.16		SS	Gy	F	S; Gy MT	FAIR V, WK U
	119.0	121.0	2.0				SS	LBA	F-M	S	
	121.0	150.0	7.0				MS	Gy			
	150.0	154.0	2.0				SS	LBA	F-M	S	
	154.0	165.0	11.0				MS	Gy			WD SS rib
	165.0	167.5	2.5				SS	LGy-BN	F-M	S; Gy P, MT	
	165.5	202.0	6.5				MS				1 SS rib
	202.0	208.0	6.0				SS	LGy-BN	F	S; Gy MT	
	208.0	210.0	2.0				MS	Gy			
S-7	210.0	215.0	4.0	0.36	0.07		SS	Gy	F	S; Gy MT	FAIR V, WK U
S-8	215.0	217.5	2.5	0.39	0.05		SS	LGy	F-M	S	WK V, WK U
S-9	217.5	220.0	2.5	0.22	0.02		SS	LGy	F-M	S	FAIR V, WK U
S-10	220.0	223.0	3.0	0.19	0.01		SS	LGy	F	S	WK V, WK U
S-11	223.0	225.0	2.0	0.40	0.05		SS	Gy	F-M	S	FAIR V, FAIR U
S-12	225.0	227.5	2.5	0.50	0.06		SS	LGy	F-M	S	FAIR V, WK U
	227.5	230.0	2.5				SS	LGy	F	S	
	230.0	240.0	10.0				MS	Gy			
	240.0	250.0	10.0				MS	Gy			
											59 - 8
											24 - 5
											11 - 6
											16 - 8

Graphic Log
1" 20'



ES 240

Underground Drill Log

Drill Hole No. L-144
Total Depth 240.0
Coordinates N
Collar Elevation

Claim UNCLE SAM
Group GRP VALLEY
E

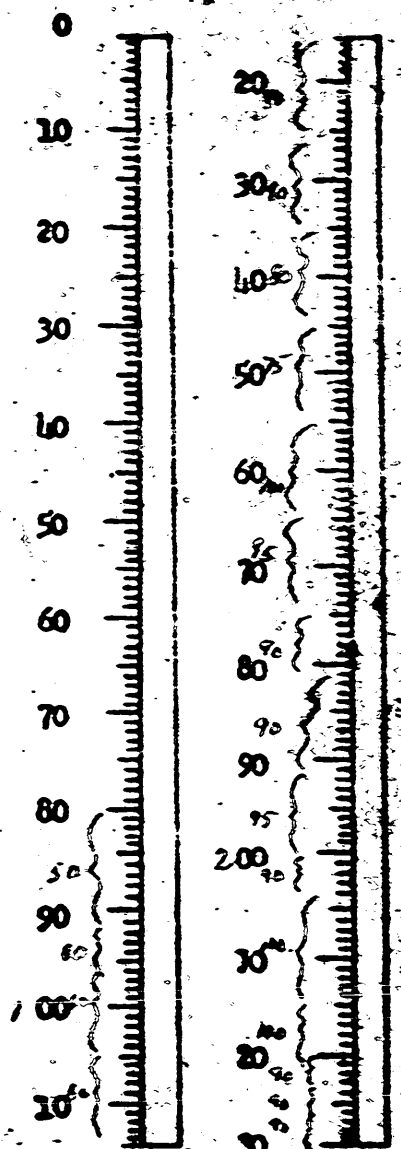
Date Drilled
Date Logged 3-10-54
Logged By J.P.

Summary of Log

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	80	80								PLUG
	80.0	110.0	30.0				SS	LBN	F-M	A-Gy SPOT	A <LBN 96-97; 104-105
S-1	110.0	112.5	2.5	.06	.04		SS	LBN-Gy	F	S. INT	UR V; WR V
	112.5	142.0	29.5				SS	LBN	F-M	S-A-SLP	A Gy AR P 120-122
	142.0	150.5	8.5				MS/ST	Gy	VF		
	150.5	177.0	26.5				SS	BN	M	S-A-SLP	
	177.0	185.0	8.0				MS	Gy			SS 1.2
	185.0	197.0	12.0				SS	Gy-BN	M	S-A-Gy INT	
	197.0	206.0	9.0				MS	Gy			A SS RIBS
	206.0	223.2	17.2				SS	LGy-BN	F-M	S	
S-2	223.2	225.0	1.8	0.28	0.05		SS	Gy-Bn	F	S	AR V; WR V; CARB ON FRAC
S-3	225.0	228.0	3.0	0.72	0.26		SS	Gy	F	S-A-SLP	GRN V; FAIR V; CARB ON FRAC
S-4	228.0	229.0	1.0	0.40	0.09		SS	Gy	F	S-A-Gy TINT	FAIR V; WR V
S-5	229.0	231.0	2.0	0.25	0.03		SS	LGy	F	S-A-Gy TINT	GRN; WR V; CARB ON FRAC
	231.0	235.0	4.0				MS	Gy			
	235	END	5.0				MS	R			

Gr - 8
2T 8
B - 7
M - 4
BS 235

Graphic Log
1" = 20'



Diamond Drill Log

①

Drill Hole No. L-146
Total Depth 266.0
Coordinates N
Collar Elevation

Claim UNCLE SAM
Group GYP VALLEY
E

Date Drilled
Date Logged 2-19-54
Logged By

Graphic Log
1" 20'

Summary of Log

Sample No.	From	To	Feet	V_2O_5	U_3O_8	Ore Elev.	Rock	Color	Grain	MS in SS	Remarks
	0	90	90								PLUG
	90.0	93.0	3.0				SS	Brn/Gy	M-MC	A.Gy P	
	93.0	99.0	6.0				MS	RBGy			
	99.0	112.0	13.0				SS	Brn	F-M	S	
	112.0	114.0	2.0				MS	Gy			
	114.0	127.0	13.0				SS	LBrn	F	S	
	127.0	129.0	2.0				MS	Gy			
	129.0	198.0	69.0				SS	Gy-Brn	F-M	SA Gy SP	
	198.0	214.0	16.0				MS	Gy			
S-1	214.0	217.0	3.0	0.10	0.02		SS	LTGy	F	A.Lit	UK V. UK U BADLY
S-2	217.0	219.0	2.0	0.06	0.03		SS	LtGy	F	SA SUBR	UK V. UK U BROKEN
S-3	219.0	220.5	1.5	0.35	0.07		SS	Gy	F	S	FAIR V. UK U
	220.5	228.0	7.5				MS	Gy			POSS. FAULT GOUGE
	228.0	253.0	25.0				SS	LBrn	F-M	S-A.Gy MP	
	253.0	254.0	1.0				MS	Gy			
	254.0	258.0	4.0				SS	LBrn	F	S-A.Gy MP	CBN 254-283
	258.0	264.0	6.0				MS	Gy			
	264.0	266.0	2.0				MS	RBGy			

69 - 4
7 - 7
25 - 1
4 - 6
B 264

Surname 700

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

DEC 1 0 1954

Ching
Ellis
Johnson
Kilsgaard
Martin
F. E. Johnson

Uranium Ventures, Inc.
105 Park Drive
Grand Junction, Colorado

Re: Docket No. DMEA-3576 (Uranium)
Topaz Claims
San Miguel County, Colorado

Gentlemen:

The application for assistance in exploring your property in San Miguel County, Colorado, under the above-captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred to the Executive Officer of Region IV at the following address:

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

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

Sincerely yours,

C. O. Mittendorf

Administrator

MChing:am
12-8-54
cc to: Admr. Reading File
Docket
Mr. Ching
Code 700
DMEA Field Team, Region IV(2)

Surname 700

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

Ching
Ellis
Martin
Johnson

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

DEC 10 1954

Re: Docket No. DMEA-3576 (Uranium)
Uranium Ventures, Inc.
Topaz Claims
San Miguel County, Colorado

Dear Mr. King:

The subject application is being referred to you for investigation, a field examination if warranted, and recommendations. A copy of the application is already in your files.

Enclosed are two copies each of comments and recommendations by John E. Crawford and F. L. Newcomb of the Uranium Commodity Committee, dated November 30 and December 1, 1954, respectively.

You have already noted that an assignment of the lease from Roger Conrow to Uranium Ventures, Inc., will be required in case a contract is recommended. Your attention is also called to the fact that the Owner's Consent to Lien submitted by the Applicant is on an obsolete form and should be replaced by the form revised on July 1, 1954, if a contract is recommended.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee (SHB)

Enclosures

MChing:am
12-8-54

APPROVED:

C. H. JOHNSON
Member, Bureau of Mines (SHB)

Thor H. Kiilsgaard
Member, Geological Survey (SHB)

cc to: Admr. Reading File
Operating Committee
Docket
Messrs. J. E. Crawford, Rm. 3641
T. H. Kiilsgaard, Rm. 5224
J. O. Hosted, Rm. 3210, GSA
Mr. Ching
Code 700

12/3/54 gla

IN REPLY REFER TO:

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

Defense Minerals Administration
RECEIVED
DEC - 2 1954

December 1, 1954

Re: DMEA-3576
Uranium Ventures, Inc.
(Topaz Claims)
San Miguel Co., Colo.
$102,556 - Uranium

Memorandum

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

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of application

The applicant has proposed a two-stage project to drill about 60 holes on the Topaz No. 3-8 claims to an aggregate total of 24,000 feet. All of the drilling will be in the Brushy Basin and/or the Saltwash members of the Morrison formation of Jurassic age.

Previous work on the claims has consisted of drilling 11 holes on the Topaz No. 3 claim. Holes H-1, H-3, H-4, H-7, and H-9 are reported to have intersected traces to minor amounts of uranium mineralization. Hole H-9 cut 12 feet of ore averaging 0.10 percent uranium.

According to the applicant, the U. S. Vanadium Corporation has done extensive drilling on the Uncle Sam claim in an area which is contiguous with a part of the Topaz No. 3 claim. The results of their drilling is not known to the applicant, but undoubtedly the Field Team will be able to determine the significance of this work and its possible bearing on the applicant's proposal.

The applicant plans to follow a rough grid pattern of drilling on all the Topaz claims; however, it would seem advisable to carry out the first drilling in the neighborhood of the earlier holes. It is possible a favorable trend or channelway exists on the property which should be further tested in place of the applicant's grid drilling.

I recommend this application be referred to the Field Team for their review and recommendations.

E. L. Newcomb

E. L. Newcomb

IN REPLY REFER TO:

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

Colorado Minerals
RECEIVED
DEC - 2 1954

December 1, 1954

Re: DMEA-3576
Uranium Ventures, Inc.
(Topaz Claims)
San Miguel Co., Colo.
$102,556 - Uranium

Memorandum

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

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of application

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The applicant plans to follow a rough grid pattern of drilling on all the Topaz claims; however, it would seem advisable to carry out the first drilling in the neighborhood of the earlier holes. It is possible a favorable trend or channelway exists on the property which should be further tested in place of the applicant's grid drilling.

I recommend this application be referred to the Field Team for their review and recommendations.

ELNewcomb:hlm
G-12/1/54
CC: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641

E. L. Newcomb

12/1/54 gfa

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

Defense Minerals Administration
DEC - 1 1954

November 30, 1954

Memorandum

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

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

Subject: DMEA Docket 3576, Uranium Ventures, Inc., 105 Park Drive, Grand Junction, Colorado

I have reviewed the application included in the subject docket and have discussed it with Joseph O. Hosted, representative of the Atomic Energy Commission.

We recommend that the application be referred to the Field Team for investigation and report, and that the Field Team be requested to discuss the application with Ernest R. Gordon, Atomic Energy Commission, Grand Junction, Colorado.

John E. Crawford

John E. Crawford

Attachment

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

November 23, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA - 3576 Uranium Ventures Inc.

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

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

November 23, 1954
Subject: DMEA-3576
Re: Exploration Assistance
Topaz Claims

Uranium Ventures Inc.
105 Park Drive
Grand Junction, Colo.

Gentlemen:

The receipt of your application dated October 22, 1954 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3576 and referred to the Rare and Miscellaneous Metals Division.

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

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

60932

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

224 New Customhouse
Denver 2, Colorado

November 16, 1954

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region 1V

Subject: Application of Uranium Ventures, Inc., (Uranium) Topaz group of unpatented claims, Lower San Miguel Mining District, San Miguel County, Colorado

Enclosed are three copies of an application for exploration assistance in the amount of ~~$66,090.00~~ $102,556, submitted by Uranium Ventures, Inc.

An assignment of the lease from Roger Conrow to the Uranium Ventures, Inc. will be required in case this application is recommended for a contract.

John F. Shaw
For W. H. King

Enclosures

GEO-ENGINEERING

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
NOV 22 1954

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP

Lower San Miguel Mining District, San Miguel County, Colorado

Prepared for

URANIUM VENTURES, INC.
105 Park Drive
Grand Junction, Colorado

by
GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

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GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

LIST OF SCHEDULES

Title	Schedule No.
Estimated Hole Depths	1
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Estimate of Amounts to be Paid Independent Contractors	3
Estimated Costs under Headings 6(b), 6(c), & 6(g) (MF-103)	4
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LIST OF EXHIBITS

Title	Exhibit No.
Completed Form MF-103	1
Lease Agreement from Simpson Mining Co. to Uranium Ventures	2
Completed Form MF-203 - Consent to Lien	3
Logs of Holes Drilled before Project	4 thru 14
Explanation of Drill Log Symbols	15

LIST OF FIGURES

Title	Figure No.
Map of Uravan Mineral Belt Showing Position of Plate 1	1
Map Showing Dominant Orientation of Fossil Logs & Rolls	2
Topographic Map of Topaz Group in Big Gypsum Valley	3

LIST OF PLATES

Title	Plate No.
Claim Map Showing Geology & Sites of Proposed Holes	1
Map Showing Area of Drilling Prior to DMEA Participation and Sites of Stage II Drilling	2

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

October 23, 1954

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP

Prepared for
URANIUM VENTURES, INC.
105 Park Drive
Grand Junction, Colorado

INTRODUCTION

This application, written by Geo-Engineering for the purpose of obtaining a DMEA project loan on the Topaz group of uranium claims, is prepared for Uranium Ventures, Inc. DMEA form MF-103 has been signed and is attached as Exhibit 1. Numbers and letters in front of the headings of the following report refer to the part of the form MF-103.

ABSTRACT

This report, with form MF-103 (numbers and letters in front of headings used in the report refer to parts of form MF-103) attached as Exhibit 1, is an application for a Defense Minerals Exploration Administration project contract of the short form or unit cost type. A $102,555.92 project is proposed for the exploration of six uranium claims in Big Gypsum Valley, San Miguel County, Colorado (see Exhibit 1). A total of 23,870 feet of diamond drilling is proposed on the Topaz Group at a unit cost of $4.216 per foot. An estimated $1,920.00 for custom assaying is not included in the calculation of this unit cost, but it is included in the total proposed expenditure. 25% of the total expenditure or $25,638.98 will be furnished by Uranium Ventures, Inc., the applicant. The Defense Minerals Exploration Administration is asked to loan the rest or $76,916.94.

Location for 32 holes of Stage I drilling are shown on Plate I. Where any of these holes should be in unfavorable geological locations, Uranium Ventures, Inc., would like the privilege to decide if the hole should be drilled. It is requested that the footage thus saved be transferred, with the permission of the DMEA Field Team, to other parts of the group that might be more favorable for ore.

The Topaz Group lies within the "Uravan Mineral Belt" as defined by the United States Geological Survey in their Bulletin 988-A (see Figure 1). Skilled labor, materials and equipment are readily available in the Naturita-Uravan district. Personnel of Geo-Engineering will act as consulting geologists for the project.

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC.,105 PARK DRIVE, GRAND JUNCTION, COLORADO

1. NAME OF APPLICANT

a. Uranium Ventures, Inc., 105 Park Drive, Grand Junction, Colo. (Please address all correspondence regarding application to Geo-Engineering, 304 Main Street, Grand Junction, Colorado)

b. This concern has been incorporated under the laws of Colorado with its principal address at 105 Park Drive, Grand Junction, Colorado.

c. The officers are:

President & General Manager
Roger Conrow
105 Park Drive
Grand Junction, Colorado

Secretary & Treasurer
Allan M. Simpson
304 Main Street
Grand Junction, Colorado

Attorney & Director
Lincold D. Coit
518 Main Street
Grand Junction, Colorado

d. Omitted.

2. GENERAL

The following report is written in accordance with the instructions on Form MF-103 of the Defense Minerals Exploration Administration and is intended to become an integral part of the enclosed application.

The letters and numbers used as headings for the parts of this report refer to the letters and numbers used on Form MF-103.

3. APPLICANT'S PROPERTY RIGHTS

a. & b. Legal Description and Name of Property

The land on which the exploration work is to be performed consists of two adjoining rows of three claims each or six unpatented mining claims that shall be referred to in this report and in future correspondence as the Topaz Group. The claims are located on the southwest flank of Big Gypsum Valley in Sections 10 and 15, Township 44 North, Range 18 West, New Mexico Principal Meridian, in the Lower San Miguel Mining District of San Miguel County, Colo-

rado. Their position with respect to the G. L. O. Grid is shown on Plate 1.

A plot of about 5½ acres is withdrawn from the Topaz No. 3 claim. This is on a patented claim owned by the United States Vanadium Company. A total of 116 acres is left for the use of this project.

c. Interest

Uranium Ventures, Inc., has a lease on the Topaz Group from the Simpson Mining Company, 304 Main Street, Grand Junction, Colorado, owners of the property. A copy of this lease is included as Exhibit No. 2.

d. Outstanding Liens

The only obligation against the property is the royalty agreement in the lease included as Exhibit No. 2. The lien of the Government for money loaned by the Defense Minerals Exploration Administration is, however, consented to by the Simpson Mining Company and associates, owners of the property, and is to remain in effect under terms set forth in MF-203, Owner's Consent to Lien (see Exhibit No. 3).

e. Record of Title

All transactions affecting title to the claims are recorded in the office of the County Clerk and Recorder of San Miguel County at Telluride, Colorado. These six claims were located in January, 1953, and recorded in March, 1953, by the Simpson Mining Company, to wit:

Topaz Claims Nos. 3-8, inclusive
Located on 1/20/53, recorded 3/14/53 in book 216, pages 422-424, inclusive
Notice of Lease Applications under Circular 7 recorded 2/17/54, book 229, pages 7-12, incl.
Amended Notices of Location recorded 9/13/54, book 240, pages 501-506, inclusive.
Notice of Withdrawal of Lease Application recorded 9/28/54, book 241, page 317.

4. PHYSICAL DESCRIPTION OF PROPERTY

a. Operations

There are no mine workings on the claims. Logs from 11 drill holes on Topaz No. 3 claim are shown as Exhibits 4 through 15. Several of these drill holes showed uranium mineralization. Hole No. 9 had 12 feet of mineralization that gave a chemical assay of 0.10% U_3O_8 and o.85% V_2O_5. The United States Vanadium Company has drilled 20 holes on close spacing on their patented claim, Uncl Sam. No information on these holes was obtained.

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

b. Production and Ore Reserves

There has been no past production, and there are, at present, no proven ore reserves on the Topaz Group. There is evidence of uranium in parts of the 11 holes shown as Exhibits 4 through 15 (see Plate 2). This will justify some Stage II drilling as shown by holes marked T8 on Figure 3. A 50 foot circle, a 100 foot circle, and a 200 foot circle around hole 9 is recommended. Since these holes will be about 200 feet deep, this will use about 27% of Stage II drilling. Permission is requested that, if it is felt that some of these Stage II holes are in unfavorable geological positions, the hole need not be drilled and the footage saved and used elsewhere on the Topaz Group.

The elevation of the mineralization in hole 9 agrees closely with the elevation of some workings on the Uncle Sam and other properties to the northwest from which ore has been shipped.

The number of holes drilled on the Uncle Sam claim and their close spacing would seem to indicate that this is a favorable geological area.

c. Geological Features

Stratigraphy: The proposed drill holes will be collared in the Brushy Basin and Salt Wash members of the Morrison and in the landslide area of the Quaternary Age (see Plate 1). All holes will be drilled to the red clay underlying the sandstone lenses that occurs at the center of the Salt Wash member. Sandstone lenses occurring in the upper part of the Salt Wash member have been the host rocks for at least 90% of the Morrison uranium production. Sandstones were cut at this stratigraphic zone by all of the holes shown as Exhibits 1 through 14.

Formations older than the Morrison are not differentiated or discussed in this report as they have no bearing on this exploration project.

Structure: The Topaz Group is located on the south flank of the Big Gypsum Valley. This valley was formed by the dissolution of a salt body that allowed the covering formations to collapse or to be faulted downward. William Lee Stokes covers this subject fully in the Utah Geological Society Bulletin for 1948, entitled Geology of the Utah-Colorado Salt Dome Region with Emphasis on Gypsum Valley, Colorado.

The profile on Plate 1 shows the results of the step faults. Formations at the left of the profile are in place, while each fault shows more vertical displacement.

No drill sites were placed in the claim area northeast of the northern fault. Drilling on this area is considered to be too deep to be justified at present.

Ore Deposits: There are no known ore deposits on this group. The mineralized holes drilled by Uranium Ventures, Inc., before this application was prepared can be classified as favorable criteria for large ore deposits. The presence of gray-green mudstone at the base of a potentially ore-bearing sandstone has been an excellent guide to ore. Where one foot or more of this gray-green mudstone below an ore horizon has been found by Stage I drilling, Stage II drilling around these holes has, in most instances experienced by the writers, led to the discovery of an ore body.

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

Justification of Exploration: The Topaz Group lies within the Uravan Mineral Belt (see Figure 1). This belt has been defined by the United States Geological Survey in Bulletin 988-A as "a narrow elongate area in southwestern Colorado in which carnotite deposits in the Morrison formation have a closer spacing, larger size and higher grade than those in adjoining areas. The belt extends from Gateway through Uravan to Slick Rock."

Sections 11 and 14 as shown on Plate 1 have been withdrawn by the United States Atomic Energy Commission for their exploration.

On the west, the United States Vanadium Company have drilled many holes on their patented "Uncle Sam" claim. It can be assumed that they must have found ore or favorable indication by the number of drill holes and their close proximity. Drill information on these holes could not be obtained at the time of this application.

d. Accessibility

The Topaz Group lies on the south rim of Big Gypsum Valley about 1 mile from the main gravel road through the valley. The distance to the Vanadium Corporation of America mill at Naturita, Colorado, is about 40 miles while it is about 55 miles to the United States Vanadium Company mill at Uravan. It is approximately 155 miles to the Durango, Colorado, mill and 75 miles to the Monticello, Utah, mill.

Supplies and all necessary equipment can be obtained either at Naturita or Uravan, Colorado. There are permanent settlements with motor freight depots at both places. Railroad and airline terminals are located at Grand Junction, Colorado, which lies at a distance of 175 miles by road and 70 miles by air.

e. Availability of Manpower, Equipment, Supplies, etc.

Manpower, skilled in performing the type of drilling planned, is readily available in the area, as are dependable outlets for materials and supplies.

The equipment to be used on this project will be furnished by private contractors.

Geo-Engineering, a professional engineering firm, will supply surveying instruments and transportation for technical personnel. Geo-Engineering has principal offices at Norwood, Colorado, 50 miles from the Topaz Group, and at Grand Junction, 175 miles from the property.

Drilling water will be hauled from the Dolores River, about 4 miles away. A survey for a powerline into the Gypsum Valley area has been completed, but no construction work has, as yet, been started. Power will be furnished by the San Miguel Power Association, Inc., R. E. A. of Nucla, Colorado.

5. THE EXPLORATION PROJECT

a. The mineral for which this project will explore is uranium.

b. Proposed Work

Drills for the project will be provided by private drilling companies under contract.

It is estimated that it will take 12 months to complete this project with one drill. The employment of more than one drill would result in inadequate geological control, wasted footage, and an increase in exploration costs per ton of ore discovered.

Proposed holes are shown on Plate 1. Estimated hole depths are listed in Schedule 1. Although only 32 holes are shown and tabulated on Plate 1, it is estimated from the writers' experience that at least 10 holes per claim will be required to even sparsely explore this property. Intelligent selection of locations for 60 holes is, however, impossible at this stage. It is recommended, therefore, that a DMEA contract be allowed for a 60 hole project but that the selection of locations for the Stage II holes be made with the approval of the Defense Minerals Exploration Administration Field Team after the data from some of the preliminary drilling has been accumulated. It is anticipated that most of this Stage II drilling will be around Stage I holes that have penetrated ore. Certainly all of the Stage II locations will be in areas where Stage I drilling has revealed favorable geology (see Exhibit 12).

Logging and Sampling: A sampler who will also act as a field assistant for surveying will be employed to supervise the logging and sampling. An accurate log will be kept by the driller, and all barren core will be arranged on the ground and properly marked so that the geologist or sampler can carefully check the driller's log. Core from each run will be carefully dropped out of the core barrel into a wooden trough provided for the purpose by the drilling contractor. The sampler or other competent individual will then examine the core, using a field gamma ray detecting device. If any trace of mineralization is found, the complete core "run" will be arranged in a core box provided with a hinged lid, and will be kept until such time as the geologist will have been able to properly sample the core.

Each sample will be carefully described by the geologist in a bound field book, as it is placed in the sample sack. Core losses will be prorated proportionately regardless of lithology. All samples will be sent to commercial assayers for percentage determination of U_3O_8, V_2O_5, and $CaCO_3$.

Geologic Control of Drilling: Uranium Ventures, Inc., asks the privilege of not drilling any of the proposed holes shown on Plate 1 if, in the opinion of the company's manager, they fall in an area which, based on previous drilling information, is considered unfavorable. Footage thus saved would be used in more favorable areas, at

locations approved by the DMEA Field Team. The criteria used to determine unfavorable areas will, in general, be the same as those used by the United States Geological Survey and the United States Atomic Energy Commission in their drilling programs. These are discussed in a report by Doris Blackman Wier (Wier, Doris Blackman, 1952, Geologic Guides to Prospecting for Carnotite Deposits on Colorado Plateau, U. S. Geological Survey Bulletin 988-B), and the reader is referred to this writing for the information lacking in the brief discussion given below.

Previous experience in Big Gypsum Valley and surrounding areas has taught the writers that, although all of the criteria listed by Mrs. Wier are important, sandstone thickness and color of basal mudstone are by far the best guides in this area.

When Stage I holes penetrate one foot or more of the gray-green mudstone at the base of a potentially ore-bearing sandstone which is over 30 feet thick, Uranium Ventures Inc. might recommend to the DMEA Field Team Stage II drilling around such holes.

The Drilling Plan recommended to the Defense Minerals Exploration Administration and to Uranium Ventures, Inc., is as follows:

1. The 32 proposed holes shown on Plate 1 should be drilled at the sites selected unless previous information makes it advisable to move the holes.

2. Since Holes H1 through 9 have been drilled prior to DMEA participation, the cost of these holes and drill site preparations are not included in the estimated cost of the proposed DMEA project (see Schedule 5). These drill sites can be used as access roads onto many parts of the Topaz Group.

3. Proposed holes UV 1 through 32 are "wildcat" holes placed on 250 foot centers along 500 foot spaced rows to find favorable areas or to eliminate large sections as being unfavorable.

4. Stage II drilling of holes around Hole H-9 is recommended to the DMEA. The rest should be placed around other favorable holes.

5. Stage II drilling should be performed only in those areas determined to be favorable. The proposed Stage I drilling is sufficient to produce the negative information necessary to delineate unfavorable areas.

6. All deposits of ore or uraniferous and/or vanadiferous sandstone encountered should be tested by drilling at 70 to 100 feet intervals as this is the minimum spacing which will permit a satisfactory determination of tonnage and grade (the usual 50 foot pattern is not recommended here because of drilling depths).

c. See MF-103, attached as Exhibit 1

d. Ability of Applicant

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

Uranium Ventures, Inc., have uranium properties under production in Big Indian Valley near the Mi Vida mine of Mr. Charles Steen. Mr. Conrow, who is the General Manager and who will supervise the project, is, at present, sinking a 250 foot shaft on Uranium Ventures, Inc., property, which has been leased from the Homestake Mining Company, in Dry Valley, Utah. He drilled and mined out a large uranium ore body in East Canyon of Dry Valley, Utah, in 1952-54. He has had worldwide experience in heavy construction and mining, having worked in Chile, Cripple Creek, Colorado, Netherlands West Indies, Iran, and Belgium.

Geo-Engineering, a firm of professional engineers and geologists, with offices conveniently located at Norwood, Colorado, 50 miles from the property, and at Grand Junction, 175 miles from the property, will act as consultants to Uranium Ventures, Inc., for this project. A brief description of the experience background of the three general partners of Geo-Engineering is given below.

Louis P. Gaggini, who is Chief Geologist for Geo-Engineering, began working in uranium in 1941, as geologist for the Union Mines Development Corporation, a contractor for the United States Army Manhattan Engineering Project. Subsequent experience in carnotite exploration included almost two years with the Exploration Branch of the Atomic Energy Commission in Grand Junction and six months with the United States Vanadium Company. Mr. Gaggini was for two years Mining Superintendent of the Dulaney Mining Company, where he was in charge of all mining and exploration. This company is at present mining large tonnages from ore bodies which were discovered during that period. From August, 1952, to February, 1954, Mr. Gaggini was manager of the Colorado Uranium Division of the J. R. Simplot Company. During this period Mr. Gaggini successfully prepared applications for and administered for several months two large DMEA projects.

Harold A. Culp is a geologist and geophysicist and a copartner in Geo-Engineering with Mr. Gaggini and Mr. Lewis D. Anderson. Since graduating with a degree in economic geology from Oregon State College in 1941, Mr. Culp has, in addition to uranium, worked with gold, oil, copper, cobalt and tungsten; this includes 6 years' experience in metal mining and 5 years of geophysical prospecting in oil and mining. In addition to mine management for others, he has operated a mine in which he shared a 1/3 investment interest. His work has included the preparation of Defense Minerals Exploration Administration projects and, after approval of loan applications by that agency, supervision of the project. During 1953-54, Mr. Culp was project geologist and then acting superintendent of the Bull Canyon mines of the J. R. Simplot Company.

Lewis D. Anderson, mining engineer, is a graduate from the Colorado School of Mines (registered mining engineer #1844 in Colorado). From December, 1946, through 1948, Mr. Anderson worked as engineer and shift boss for the Resurrection Mining Company at Leadville, Colorado. From January, 1949, through April, 1950, he worked as mining engineer In the General Chemical Division of Allied Chemical and Dye. He was mine foreman of the Rico-Argentine Mining Company, Rico, Colorado, from June,

1950, to October, 1951. Mr. Anderson then accepted employment as Division Engineer for the Dulaney Mining Company in the Gateway, Dove Creek, Monticello, and Gyp Valley areas. From June, 1952, to 1954, Mr. Anderson's duties as mining engineer covered both the mining and milling of uranium-vanadium ores and included jurisdiction over the United States Vanadium Company's uranium operations in the Edgemont, South Dakota area.

6. ESTIMATE OF COSTS

It is the desire of Mr. Conrow and Uranium Ventures, Inc., that this exploration project contract be placed on a unit cost basis. Schedule 5 gives the exact amount bid per unit by Uranium Ventures, Inc., for performing the exploration work. Custom assaying is not included in the cost per foot for drilling because of the difficulty of making an accurate estimation. The $6.00 per sample figure bid for custom assaying is the exact amount charged by the A. E. C. approved assayors.

a. Independent Contracts

All drilling and bulldozer work will be performed by independent contractors.

Drilling will be done by private contractors. The prices quoted by firms active in the uranium field are used in Schedule 2 and Schedule 4 in the unit cost columns. Estimate for the cost of the holes proposed for Stage II drilling is based on an estimated depth of 500 feet making a cost of $1,161.25 per hole or a total of $32,515.00 for all Stage II drilling (see Schedule 3).

Reaming is quoted at $1.50 per foot. Several drilling contractors,who are familiar with the region where this project will be, were contacted for estimates of the amount of reaming that might be required. All of them suggested that at least 20% of the total footage might have to be reamed. The broken and faulted areas may have to be cased. Since the proposed holes are rather deep, it seems reasonable to estimate 4,600 feet of reaming and to allow $6,900.00 to cover the cost thereof (see Schedule 3).

Bulldozer and tractors are readily available in the district for about $100.00 per day. Because many hole locations will be selected from the results of previous drilling, it will be necessary to have a bulldozer hauled to the group at least 4 different times at a cost of $100.00 for each round trip. It is estimated that the tractor will work at least 10 days during each visit to the Topaz Group.

b. Labor, Supervision, Consultants

Geo-Engineering will supervise, direct, and act as consulting geological consultants for $650.00 per month and reasonable expenses (see Exhibit 4). A draftsman and stenographer will be employed on a part time hourly basis to prepare necessary project reports (see Schedule 3). The field assistant will be employed by Geo-Enginee-

ring or Uranium Ventures, Inc., at a minimum of $14.00 per day, to help with surveying and to act as a sampler.

c. Operating Materials and Supplies

$150.00 per month is estimated for the cost of map reproduction and office supplies.

$25.00 is estimated for the cost of field supplies (see Schedule 4).

d. Operating Equipment

All operating equipment will be provided by independent contractors or by Geo-Engineering.

e. Rehabilitation and Repairs

None needed.

f. New Buildings, Improvements and Installations

None needed.

g. Miscellaneous

$100.00 per month is allowed to cover office and miscellaneous supervision to be performed by the personnel of Uranium Ventures, Inc.

Payroll taxes on the field assistant, draftsman, and typist are estimated at 10%.

The cost of analytical work is not covered in the cost per foot. A separate unit cost of $6.00 per sample is added in Schedule 5.

h. Contingencies

Independent contractors vary the charge for drilling with the depth of the hole (see Schedule 2). Hole depths for Stage II drilling in Schedule 3 were proportioned to Stage I drilling. A glance at Plate 1 will show that it is possible that some of the Stage II drilling will exceed 700 feet. Cost of drilling in the 700 to 800 feet interval is $4.75 per foot whereas the most expensive category used in the estimate is $4.25 per foot for the 600 to 700 foot interval.

Estimates to cover payments to contractors for trail building and drill site preparation may be inadequate as they are based on an hourly rate for tractor and bulldozer only. It is possible that some of the trails crossing sandstone ledges might require rock drilling and blasting.

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

Labor, supervision and consultants payments are on a monthly or hourly basis. Any event which might prolong the project will increase the cost of this item. 10% is added to cover these possible increases.

Operating material and supplies are estimated at a minimum. The destruction of a few core boxes or some other unforseen consumption of materials and supplies might easily increase the cost of this item 20%.

Miscellaneous costs are estimated at $157.18 per month. 50% is added to provide for any extra help and for unforseen taxes.

7. APPLICANT'S SHARE OF COST

In accordance with the Defenae Minerals Exploration Administration regulations, Uranium Ventures, Inc., is prepared to assume 25% of the cost of this project in the following manner, to wit:

The company will perform all of the necessary work and pay for all of the labor, materials and supplies. Reimbursement by the DMEA will be in accordance with Schedule 5 less 25% (i.e., the amount to be loaned by the Government for each unit of work performed will be 25% less than the amounts shown in Schedule 5).

Respectfully submitted,

GEO-ENGINEERING

Louis P. Gaggini
LOUIS P GAGGINI

Harold A Culp
HAROLD A CULP

Lewis D Anderson
LEWIS D ANDERSON

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

SCHEDULE NO. 1 - DRILL HOLE DEPTH

Hole #	Claim	Estimated Collar Elevation	Estimated Bottom Elevation	Est. Depth	Hole #	Claim	Estimated Collar Elevation	Estimated Bottom Elevation	Est. Depth
UV 1	T-3	5830	5750	80	UV19	T-7	6260	5800	460
UV 2	T-4	5930	5760	170	UV20	T-7	6110	5800	310
UV 3	T-5	5950	5760	190	UV21	T-5	6070	5800	270
UV 4	T-5	5930	5760	130	UV22	T-8	6150	5800	350
UV 5	T-5	5950	5780	170	UV23	T-6	6240	5790	450
UV 6	T-5	6000	5770	230	UV24	T-7	6350	5790	560
UV 7	T-4	5980	5770	210	UV25	T-6	6330	5770	560
UV 8	T-3	5870	5790	80	UV26	T-6	6230	5720	510
UV 9	T-3	6010	5800	210	UV27	T-6	6300	5780	520
UV10	T-3	6050	5800	250	UV28	T-7	6270	5970	300
UV11	T-6	6070	5800	270	UV29	T-7	6290	5990	300
UV12	T-6	6070	5770	300	UV30	T-7	6310	5980	330
UV13	T-4	6010	5780	230	UV31	T-8	6290	5940	350
UV14	T-5	6050	5800	250	UV32	T-8	6290	5920	370
UV15	T-4	6070	5800	270					
UV16	T-7	6140	5800	340					
UV17	T-6	6160	5790	370				T O T A L----	9870
UV18	T-6	6280	5800	480					

S C H E D U L E #1

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

SCHEDULE 2

DRILLING SUMMARY

Hole No.	Estimated Total Deoth	Estimated Non-Core Drilling	Est. Core Drilling 0'-200'	Est. Core Drilling 200'-300'	Est. Core Drilling 300'-400'	Est. Core Drilling 400'-500'	Est. Core Drilling 500'-600'
UV 1	80		80				
UV 2	170		170				
UV 3	190		190				
UV 4	130		130				
UV 5	170		170				
UV 6	230		200	30			
UV 7	210		200	10			
UV 8	80		80				
UV 9	210		200	10			
UV 10	250	50	150	50			
UV 11	270	70	130	70			
UV 12	300	100	100	100			
UV 13	230	30	170	30			
UV 14	250	50	150	50			
UV 15	270	70	130	70			
UV 16	340	140	60	100	40		
UV 17	370	170	30	100	70		
UV 18	480	280		20	100	80	
UV 19	460	260		40	100	60	
UV 20	310	110	90	100	10		
UV 21	270	70	130	70			
UV 22	350	150	50	100	50		
UV 23	450	250		50	100	50	
UV 24	560	360			40	100	60
UV 25	560	360			40	100	60
UV 26	510	310			90	100	10
UV 27	520	320			80	100	20
UV 28	300	100	100	100	[illegible]		
UV 29	300	100	100	100			
UV 30	330	130	70	100	30		
UV 31	350	150	50	100	50		
UV 32	370	170	30	100	70		
Total---	9,870 feet	3,730	2,830	1,430	870	590	150
Price per foot		$2.00	$2.25	$2.50	$2.75	$3.25	$3.75
Total Price--	$22,275.00	$7,460.00	$6,367.50	$3,575.00	$2,392.50	$1,917.50	$562.50

DRILLING SUMMARY
SCHEDULE 2

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

SCHEDULE 3

ESTIMATE OF AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS

Explanation	Units	No. of Units	Cost/Unit	Total Cost/Item	Grand Total
Drilling Contractor					
Stage I Drilling - see Schedule 2	Feet	9,870	2 257	$22,275 00	$22,275 00
Stage II Drilling					
28 holes @ 500 feet	Feet	(14,000)			
Non-core Drilling	Feet	6,020	2 00	$12,040 00	
0'-200' Core Drilling	Feet	3,220	2 25	$7,245 00	
200'-300' Core Drilling	Feet	1,960	2 50	$4,900 00	
300'-400' Core Drilling	Feet	1,680	2 75	$4,620 00	
400'-500' Core Drilling	Feet	980	3 25	$3,185 00	
500'-600' Core Drilling	Feet	140	3 75	$525 00	
Total Stage II Drilling----------		(14,000)		$32,515 00	32,515 00
Reaming ----------	Feet	(4,600)	1 50	6,900 00	6,900 00
Bulldozer & Tractor Contractor					
Moving on & off property	Rd. trip	(4)	100 00		400 00
Rental with Operator	Day	(40)	100 00		4,000 00
TOTAL ESTIMATED AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS--------	Feet	23,870	2 769		$66,090 00

SCHEDULE 3

ESTIMATE OF AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

SCHEDULE 4

ESTIMATED COST UNDER HEADINGS 6(b), 6(c), 6(g) FORM MF-103

Heading Letter	Cost per Hour	Cost per Day	Cost per Month	Cost per Project	Est. Cost For Form MF-103 Headings
6(b) Labor, Supervision & Consultants					
Geo-Engineering Fees----------			$650 00	$7,800 00	
Geo-Engineering Expenses--------		$10 00	250 00	3,000 00	
Draftsman 48 hr/month----------	$3 00		144 00	1,728 00	
Typist 24 hr/month----------	2 20		52 80	633 60	
Sampler & Field Assistant-------		15 00	375 00	4,500 00	
Total under 6(b) (MF-103) 23,870'----------				$17,661 60	0 740 per foot
6(c) Operating Materials & Supplies					
Office supplies and map and drill log reproduction for monthly reports and other correspondence with the DMEA--			150 00	$1,800 00	
Survey stakes, timber crayon, water bags, and other field supplies				25 00	
Total under 6(c) (MF-103) 23,870'----------				$1,825 00	0 076 per foot
6(g) Miscellaneous					
Uranium Ventures, Inc., expense for accounting, etc.----------			100 00	$1,200 00	
Payroll taxes estimated at 10% of $571.80 (6(b) Draftsman, typist, and field assistant)----------			57 18	686 16	
Total under 6(g) (MF-103) 23,870'----------				$1,886 16	0 079 per foot

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE TOPAZ GROUP, PREPARED FOR URANIUM VENTURES, INC, 105 PARK DRIVE, GRAND JUNCTION, COLORADO

SCHEDULE 5

SUMMARY

Description	Units	Number of Units	Cost per Unit	Total Cost of each Item	Grand Total
a. Independent Contractors (Sch. 3)	Feet	23,870	2 769	$66,090 00	
b. Labor, Supervision & Consultants (Schedule 4)----------	Feet	23,870	0 740	17,661 60	
c. Operating Materials & Supplies (Schedule 4)----------	Feet	23,870	0 076	1,825 00	
d. Operating Equipment----------	NONE				
e. Rehabilitation & Repairs--------	NONE				
f. New Buildings, Improvements, etc.	NONE				
g. Miscellaneous (Schedule 4)------	Feet	23,870	0 079	1,886 16	
h. Contingencies					
For (a) above - 15% ----------				10,092 75	
For (b) above - 10% ----------				1,766 16	
For (c) above - 20% ----------				365 00	
For (g) above - 50% ----------				943 08	
Calculated Unit Cost 23,870'----------			4 216		$100,629 75
Calculated Cost of Project Using Unit Cost Bid & Before Allowance for Analytical Work----------	Feet	23,870	4 216		$100,635 92
Analytical					
U_3O_8 Analysis----------	Sample	320	3 50	1,120 00	
V_2O_5 Analysis----------	Sample	320	1 50	480 00	
$CaCO_3$ Analysis----------	Sample	320	1 00	320 00	1,920 00
GRAND TOTAL----------					$102,555 92
Cost of Project During DMEA Participation----------					$102,555 92
LESS 25% Paid by Uranium Ventures, Inc. ----------					25,638 98
AMOUNT OF DEFENSE MINERALS EXPLORATION ADMINISTRATION LOAN REQUESTED--------					$76,916 94

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Department of the Interior
Defense Minerals Administration
RECEIVED
NOV 22 1954

Not to be filled in by applicant

Docket No. 3576
Metal or Mineral Uranium
Date Received
Estimated Cost $102,556
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Uranium Ventures, Inc.
105 Park Drive
Grand Junction, Colorado

(*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 Topaz claims No. 3 thru 8 in Section 10 & 15, T44N, R18W, NMPM, Lower San Miguel Mining District, San Miguel County, Colorado

(*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 Leased

(*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 Royalty, as shown in contract, a copy of which is submitted with this form.

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

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

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

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

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

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

16—66551-1

Exhibit No. 1

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

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

(*c*) The work will start within 15 days and be completed within 12 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?

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated October 22, 1954

URANIUM VENTURES, INC.

ROGER CONNOR, President & General Manager

By Roger Connor

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

ENTRY No. 172

MINING LEASE

THIS AGREEMENT, Made and entered into in duplicate as of April 5, 1954, between ALAN M. SIMPSON and JULIAN E. SIMPSON, mining partners doing business as SIMPSON MINING COMPANY, of Grand Junction, Colorado; ARTHUR HAMILTON and OTIS PHILLIPS, JR., both of Dallas, Texas; JOHN W. HARRIS, W. D. McDAVID, REX PHILLIPS and GRAHAM B. LADD, all of San Antonio, Texas, parties of the first part hereinafter called Lessors and ROGER CONROW doing business as ROGER CONROW AND COMPANY, 1226 Bunting Avenue, Grand Junction, Colorado, party of second part, hereinafter called Lessee, WITNESSETH:

That lessors, in consideration of the royalties hereinafter reserved and the covenants and agreements hereinafter expressed and by lessee to be kept and performed, hereby grant, demise and lease to lessee the following described lode mining claims in Lower San Miguel Mining District, County of San Miguel and State of Colorado, the location certificates thereof being duly of record in the office of said county as follows:

NAME OF CLAIM	BOOK	PAGE
Topaz No. 3	216	422
Topaz No. 4	216	422
Topaz No. 5	216	423
Topaz No. 6	216	423
Topaz No. 7	216	424
Topaz No. 8	216	424

TO HAVE AND TO HOLD Unto lessee for a term of five years from the date hereof, with a right to renew said lease at its expiration for an additional term of five years, unless sooner forfeited through the violations of any covenant herein required to be performed by lessee, with a right to surrender this lease as hereinafter set forth.

In consideration of such lease, LESSEE COVENANTS AND AGREES with lessors as follows, to-wit:

1. To enter upon and commence actual operations on said mining claims on or before May 1, 1954, and perform exploration and development work by expending a minimum of $3,000.00 each three months and, if commercial ores are discovered, to mine and ship ores of a minimum value of $3,000.00 each three months period; it being understood and agreed that if lessee is unable to mine ores of $3,000.00 in value during each three months, but shall mine some ores, he shall expend in exploration and development to make up the difference between the value of such ores and said minimum of $3,000.00. The first three month period shall commence on May 1, 1954.

2. To cause to be paid to lessors a royalty of 15% of the proceeds of ores mined and sold from any of said claims, including 15% of any bonus payment paid by the Atomic Energy Commission, less, however, development and haulage allowances. All such ores shall be shipped in the joint names of lessors and lessee and payment of such royalties shall be made as follows: 3.75% to Simpson Mining Company, 304 Main Street, Grand Junction, Colorado and 11.25% to W. D. McDavid, Trustee, 918 Milam Building, San Antonio, Texas, and lessee shall be under no liability for the allocation thereof among said lessors.

3. To keep full and accurate records of all operations carried on hereunder, including drilling records, maps and assays, open to inspection of lessors, or their agent, at all reasonable times, and to permit lessors, or their agent, full and free access to said claims for the purpose of inspection and otherwise. To furnish lessors with true copies of all drilling records, maps, assays

Exhibit No. 2

and other relevant information with respect to lessee's mining operations.

To make lessors, or their agent, a written report, within 30 days after the end of each quarterly period, showing gross value of ores shipped and cost of development work performed during such period.

4. To carry on all mining operations in strict conformity with all laws and regulations pertaining to such operations, to carry Workman's Compensation Insurance, and to pay all State and Federal taxes and exactions under operations hereunder, including any production taxes, and to save and keep harmless lessors from any and all liability of every kind and character arising out of their mining operations hereunder.

5. To post notices at or near workings upon said mining claims reciting in substance that all mining operations are being carried on and conducted by lessee, and that lessors will not be liable for any claim or acts of any kind or character arising out of lessee's work hereunder.

6. Lessors heretofore located the six mining claims known as Topaz No. 3, Topaz No. 4, Topaz No. 5, Topaz No. 6, Topaz No. 7 and Topaz No. 8. Subsequently, it was found said claims are located within the area covered by oil and gas lease 054367 and 054373. Lessors have posted and recorded notice of lease application upon said claims as provided by Circular 7 of the Atomic Energy Commission. They agree that they will apply for a mining lease thereon pursuant to the provisions of said circular, and, in the event of its issuance to them, they will sublease the same to lessee subject to the terms thereof, and subject to the payment of a royalty of 15% of the proceeds of ores mined and sold therefrom as provided by the provisions of paragraph 2.

Filed by the Atomic Energy Commission
Lease
MAY 22 1956

MUTUAL COVENANTS

IT IS MUTUALLY AGREED That lessee shall have the right to surrender this lease at any time upon giving lessors at least 30 days written notice of such intention to surrender, sent by registered mail to Simpson Mining Company, Grand Junction, Colorado, and upon such surrender or cancellation as hereinafter provided, lessee shall have the right within a reasonable time, to remove all of his machinery, equipment and personal property from said claims, and, upon surrender or cancellation lessee shall leave all excavations made by him in such condition that the removal of waste material should not be required in order to continue mining at such point or points.

Lessee shall have no right to assign or sublet this lease, or any part of said mining claim, without the written consent of lessors first had and obtained.

IT IS FURTHER AGREED That lessee shall have an option to renew this lease for an additional term of five years from its expiration upon the same terms and conditions as are set forth herein, provided lessee has faithfully kept and performed each of the covenants and conditions herein provided to be kept and performed by it.

IT IS FINALLY AGREED That upon violation by lessee of any of the covenants in the foregoing lease, the term of this lease shall, at the option of lessors, expire, and the same and said mining claims

shall become forfeited to lessors, and lessors, or their agent, may thereupon enter upon said mining claims and dispossess all persons occupying the same, or, at the option of lessors, lessee and all persons found in occupation thereof, may be proceeded against as guilty of unlawful detainer, PROVIDED, HOWEVER, that if said lease is forfeited upon the election of lessors by reason of the failure of lessee to perform the covenants thereof, lessors shall give lessee at least 20 days notice in writing, by registered mail sent to lessee at Grand Junction, Colorado, notifying him of such failure to perform and setting out in said notice the substantial facts as to any such default or breach, and, upon failure or refusal by lessee to cure and correct such default within 20 days from the receipt of such notice, lessee shall surrender and deliver up the possession of all of said mining claims, and their rights under this lease shall thereupon cease and determine.

All of the provisions herein contained shall inure to and be binding upon the heirs and personal representatives of lessors, and lessee and their lawful assigns.

WITNESS Their names.

Julian E. Simpson
By a partner of the
Simpson Mining Company

Arthur Hamilton

Geo Pattison Jr.

John W. Hamm

W. L. McDonald

R. Phillips

William S. Field

Lessors

ROGER CONROW AND COMPANY

By: Roger Conrow
Lessee

MF-203
(Revised July 1, 1[illegible])

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Colorado, County of San Miguel, described as follows: 1/ Topaz #3 - Book 216, page 422; Topaz #4 - Book 216, page 422; Topaz #5 - Book 216, page 423; Topaz #6 - Book 216, page 423; Topaz #7 - Book 216, page 424; Topaz #8 - Book 216, page 424

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ URANIUM VENTURES, INC., 105 Park Drive, Grand Junction, Colorado

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production (as set forth on the reverse side hereof) and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production 3/ provided for under the terms of said exploration project contract, or any amendment thereof, there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom, until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions

Dated this 23RD day of SEPTEMBER, 1954.

SIMPSON MINING CO.
By Julian E. Simpson (Seal) [Seal] E. P. Phillips (Seal)
Cortis Fletcher Jr. (Seal) John W. Harris [Seal] Thomas S. Ladd (Seal)
Arthur Hamilton (Seal) W. R. [illegible] [Seal]

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by the contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

c. Definitions.--As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

d. Lien for Payment.--To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce.--This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Exhibit No. 3

Interior—Duplicating Section, Washington, D. C. 47318

URANIUM VENTURES, INC.

DRILL HOLE LOG

Hole No. 1

Graphic Log

Scale 1" =

Date Drilled 4/12/54

Total Depth 235 feet

Claim Topaz No. 3

Type of Drill Core

Collar Elev.

Coordinates

North West

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	C_aCO_3	U_3O_8	Rock	Color	Remarks
0	143	143							Plug Bit
143	150	7					CS	Yw	
150	157	7					SS	Gy	Hard
157	190	33					SS	Gy	Soft
190	192	2					SS	Gy	Hard
192	201	9					MS	Yw	
201	202	1							Trace of ore
202	207	5					LS		
207	225	18					SS	Gy	
225	229	4							Trace of ore
229	231	2							Minute
231	232	1					SS	Gy	Hard
232	235	3					MS	Bl	Bottomed dry

Hole No. 1

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 4

URANIUM VENTURES, INC.
DRILL HOLE LOG

Hole No. 2

Date Drilled 4/17/54

Total Depth 240

Claim Topaz No. 3

Type of Drill Core

Collar Elev.

Coordinates

North West

Graphic Log

Scale 1" =

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	$CaCO_3$	U_3O_8	Rock	Color	Remarks
0	125	125							Plug Bit
125	146	21					SS	Gy	
146	148	2					CS	Yw	
148	183	35					SS	Gy	
183	203	20					SS	Gy	Soft
203	204	1					CS	Yw	
204	231	27					SS		Soft
231	235	4					SS		Hard
235	238	3					MS	Bl	
238	240	2					MS	R	Bottomed dry

Hole No. 2

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 5

URANIUM VENTURES, INC.
DRILL HOLE LOG

Hole No. 3

Graphic Log
Scale 1" =

Date Drilled 4/21/54
Total Depth 235
Claim Topaz No. 3
Type of Drill Core

Collar Elev.
Coordinates
North West

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	$CaCO_3$	U_3O_8	Rock	Color	Remarks
0	125	125							Plug Bit
125	138	13					SS	Gy	
138	141	3					CS	Yw	
141	150	9					SS	Gy	
150	151	1							Trace ore
151	202	51					SS	Gy	
202	203	1					CS	Yw	
203	205	2					SS	Gy	
205	215	10					SS	Gy	
215	220	5					SS	Gy	
220	223	3							Trace of ore
223	226	3					SS	Gy	
226	233	7					Sh	Bl	Shale
233	235	2					MS	R	Bottomed dry

Hole No. 3

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 6

URANIUM VENTURES, INC.

DRILL HOLE LOG

Hole No. 4

Graphic Log

Scale 1" =

Date Drilled 4/26/54

Total Depth 215

Claim Topaz No. 3

Type of Drill Core

Collar Elev.

Coordinates

North West

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	$CaCO_3$	U_3O_8	Rock	Color	Remarks
0	125	125							Plug Bit
125	161	36					SS	Gy	
161	177	16					SS	Gy	
177	184	17					CS	Yw	
184	208	24					SS	Gy	Soft
208	210	2					SS	Gy	Hard, trace of ore
210	214	4					MS	Bl	
214	215	1					MS	R	Bottomed dry

Hole No. 4

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 7

URANIUM VENTURES, INC.

DRILL HOLE LOG

Hole No. 5

Graphic Log

Scale 1" =

Date Drilled 5/1/54

Total Depth 240

Claim Topaz No. 3

Type of Drill Core

Collar Elev.

Coordinates

North West

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	$CaCO_3$	U_3O_8	Rock	Color	Remarks
0	136	136							Plugged Bit
136	176	40					SS	Gy	
176	196	20					SS	D Gy	
196	213	17					SS	L Gy	
213	216	3					SS	Br	
216	222	6					Sh	Bl	Shale
222	240	18					Sh	R	Shale

Hole No. 5

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 8

URANIUM VENTURES, INC.

DRILL HOLE LOG

Hole No. 6

Graphic Log

Scale 1" =

Date Drilled 5/6/54

Total Depth 235

Claim Topaz No. 3

Type of Drill Core

Collar Elev.

Coordinates

North West

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	$CaCO_3$	U_3O_8	Rock	Color	Remarks
0	96	96							Plug Bit
96	116	20					CS	R	
116	203	87					SS	Gy	
203	206	3					SS	Br	
206	209	3					SS	Gn	
209	211	2					CS	Bl	
211	222	11					MS	R/Bl	
222	235	13					Sh	R	Shale

Hole No. 6

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 9

URANIUM VENTURES, INC.

DRILL HOLE LOG

Hole No. 7

Graphic Log

Scale 1" =

Date Drilled 5/11/54

Total Depth 212

Claim Topaz No. 3

Type of Drill Core

Collar Elev.

Coordinates

North West

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	$CaCO_3$	U_3O_8	Rock	Color	Remarks
0	90	90							Plug Bit
90	96	6					CS	R	
96	112	16					SS	Gr/Gr	
112	116	4					CS	R	
116	162	46					SS	Gy	Min. 150-155 by probe
162	165	3					SS	Br	
165	176	11					CS	Bl	
176	196	20					SS	Gy	
196	202	6					SS	Gy	Min. .02
202	208	6					SS	Br	
208	210	2					CS	Bl	
210	212	2					CS	R	

Hole No. 7

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 10

URANIUM VENTURES, INC.

DRILL HOLE LOG

Hole No. 8

Graphic Log

Scale 1" =

Date Drilled 5/17/54

Total Depth 216

Claim Topaz No. 3

Type of Drill Core

Collar Elev.

Coordinates

North West

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	$CaCO_3$	U_3O_8	Rock	Color	Remarks
0	80	80							Plug Bit
80	90	10					CS	R	
90	110	20					SS	Gy	
110	116	6					CS	R	
116	136	20					SS	Gy	
136	145	9					SS	Gy	
145	176	31					SS	Gy/Br	
176	202	26					SS	Gy	
202	205	3					CS	Bl	
205	216	11					CS	R	

Hole No. 8

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 11

URANIUM VENTURES, INC.

DRILL HOLE LOG

Hole No. 9

Graphic Log

Scale 1" =

Date Drilled 5/21/54

Total Depth 236

Claim Topaz No. 3

Type of Drill Core

Collar Elev.

Coordinates

North West

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	$CaCO_3$	U_3O_8	Rock	Color	Remarks
0	80	80					SS	Gy	
80	96	16					SS	Gy	
96	116	20					SS	Gy	
116	136	20					SS	Gy	
136	156	20					SS	Gy	Min. 153 - 154 Probe
156	170	14					SS	Gy	
170	173	3					SS	D Gy	Min.
173	176	3					SS	Gy	
176	184	8					SS	Gy	
184	196	12					SS	D Gy	U .10 V. .85
196	216	20					SS	Gy	
216	230	14					SS	Gy	
230	233	3					CS	Bl	
233	236	3					CS	R	

Hole No. 9

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 12

URANIUM VENTURES, INC.

DRILL HOLE LOG

Hole No. 10

Graphic Log

Scale 1" =

Date Drilled 5/26/54

Total Depth 235

Claim Topaz No. 3

Type of Drill Core

Collar Elev.

Coordinates

North West

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	$CaCO_3$	U_3O_8	Rock	Color	Remarks
0	183	183					SS	Gy	
183	186	3					SS	Gy	Min. by Probe
186	228	42					SS	Gy	
228	231	3					CS	Bl	
231	235	4					CS	R	

Hole No. 10

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 13

URANIUM VENTURES, INC.

DRILL HOLE LOG

Hole No. 11

Date Drilled 5/30/54

Total Depth 224

Claim Topaz No. 3

Type of Drill Core

Collar Elev.

Coordinates

North West

Graphic Log

Scale 1"=

FOOTAGE			CHEMICAL ASSAY			RAD.	DESCRIPTION		
From	to	Feet	U_3O_8	V_2O_5	$CaCO_3$	U_3O_8	Rock	Color	Remarks
0	156	156					SS	Gy	
156	176	20					SS	Gy	
176	196	20					SS	Gy	
196	210	14					SS	Gy	
210	211	1					SS	Gy	Min.
211	216	5					SS	Gy	
216	219	3					SS	Gy	
219	221	2					CS	Bl	
221	224	3					CS	R	

Hole No. 11

DUNKIN BLUE PRINT & SUPPLY CO., Grand Junction, Colo.

EXHIBIT 14

EXHIBIT 15

EXPLANATION OF U. S. G. S. LOGS

ABBREVIATIONS FOR GEOLOGIC AND ASSAY LOGS

Rock Name

CG -- conglomerate or conglomeratic
SS -- sandstone
MS -- mudstone
ST -- siltstone
CS -- claystone
LS -- limestone
CH -- chert or cherty

Color Description

Wh -- white
Br -- brown
R -- red
Gy -- gray
Bl -- blue
Gn -- green
Yw -- yellow
Bk -- black
Pp -- purple
L -- light
D -- dark

Grain sizes

Wentworth scale (modified)	Millimeters
VF -- very fine	0.060 - 0.125
F -- fine	0.125 - 0.210
MF -- medium fine	0.210 - 0.300
M -- medium	0.300 - 0.420
MC -- medium coarse	0.420 - 0.600
C -- coarse	0.600 - 1.000
VC -- very coarse	1.000 - 2.000

Relative abundance
(use only for accessory minerals, carbon and mudstone in sandstone)

N -- none
S -- sparse
A -- abundant

Chemical abbreviations

Cbn -- carbon
For all other elements use the standard chemical symbols, Cu for copper, Fe for iron, Mn for manganese, etc.

Classification of mudstone in sandstone

P -- pebbles, round or angular fragments of pebble size (more than 4mm or 0.15 in.).
G -- granules (less than 4mm or 0.15 in., and more than 2 mm or 0.08 in.).
Fk -- flakes, paper thin, with two longer dimensions.
Sm -- seams, less than 0.1 ft. thick.
Fm -- films, usually along lamination or cross-lamination planes.
Int -- interstitial.

Miscellaneous abbreviations

1. fav -- favorable
2. semifav -- semifavorable
3. unfav -- unfavorable
4. alt -- altered
5. Bby -- Barnaby
6. carn -- carnotite
7. cond -- condense or condensed
8. disc -- discard or discarded
9. frac -- fracture
10. grad -- gradational
11. itbd -- interbedded
12. lim -- limonite
13. mot -- mottled
14. OBSS -- ore-bearing sandstone
15. op -- opaques or opaque
16. qtzc -- quartzitit
17. H -- high)
18. L -- low) use only for U_3O_8
19. Tr -- trace)

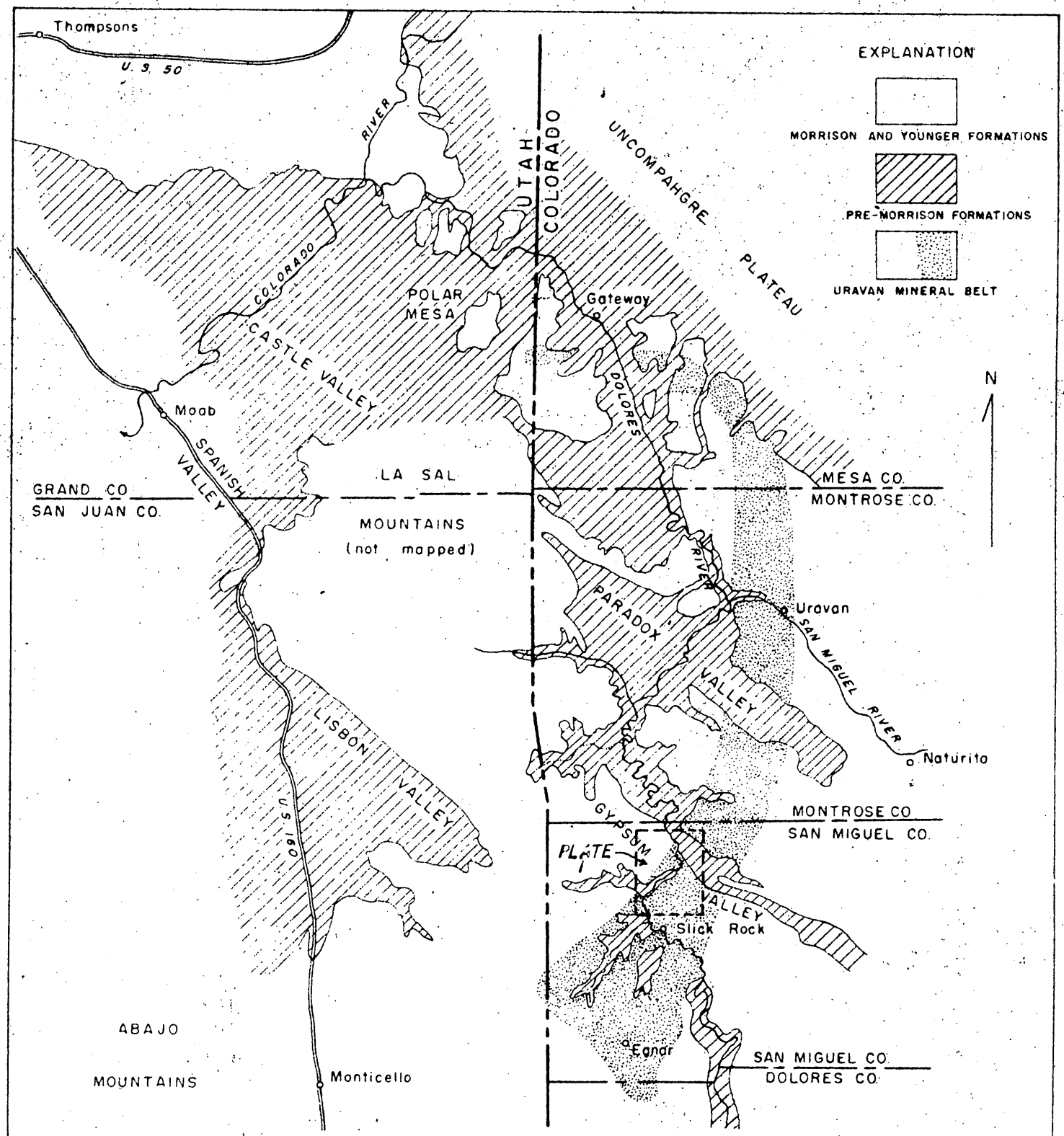


FIG I
GEO ENGINEERING
MAP OF
URAVAN MINERAL BELT
SHOWING LOCATION OF
URANIUM VENTURES, INC.
SCALE: 1" = 10 MILES

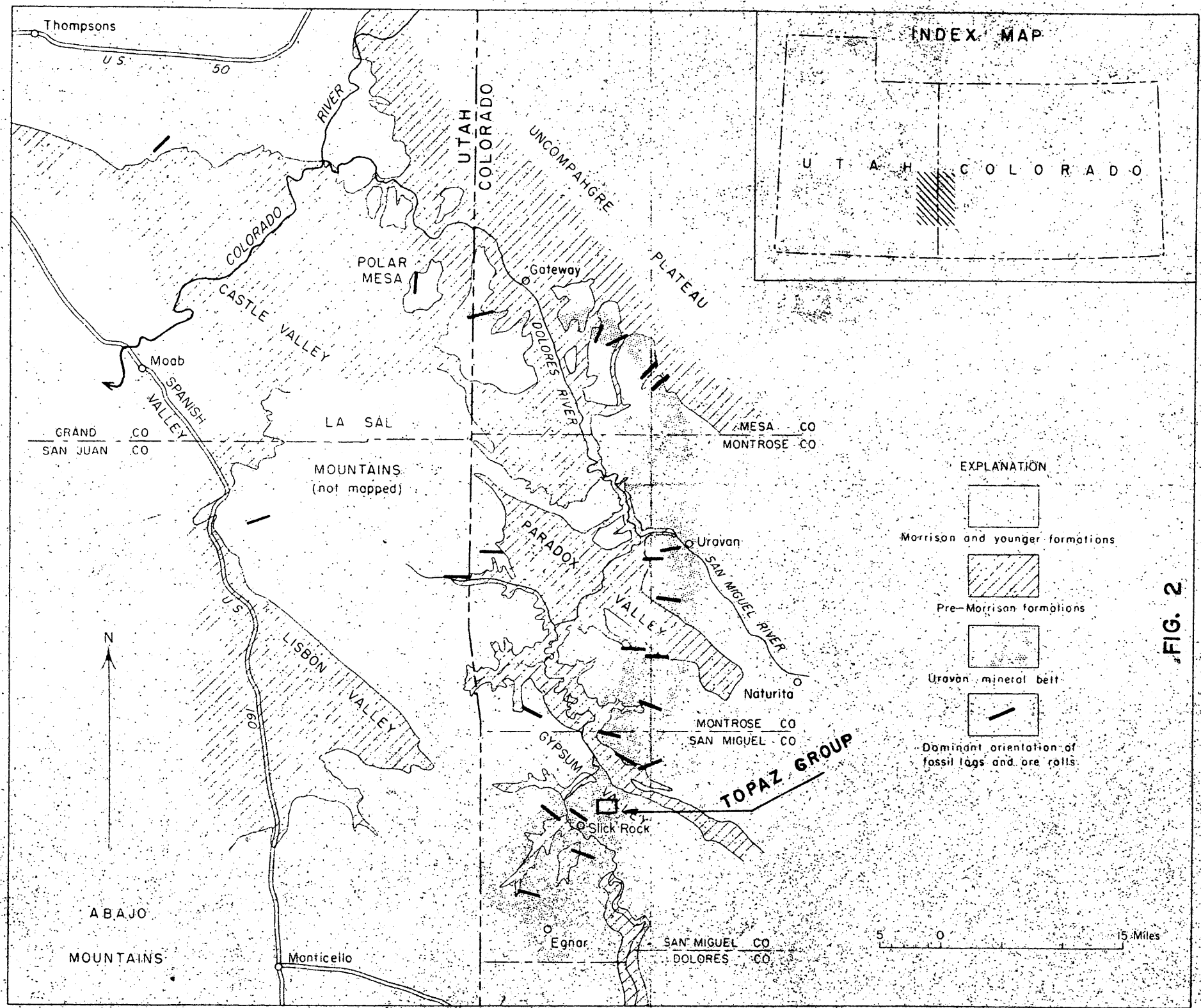
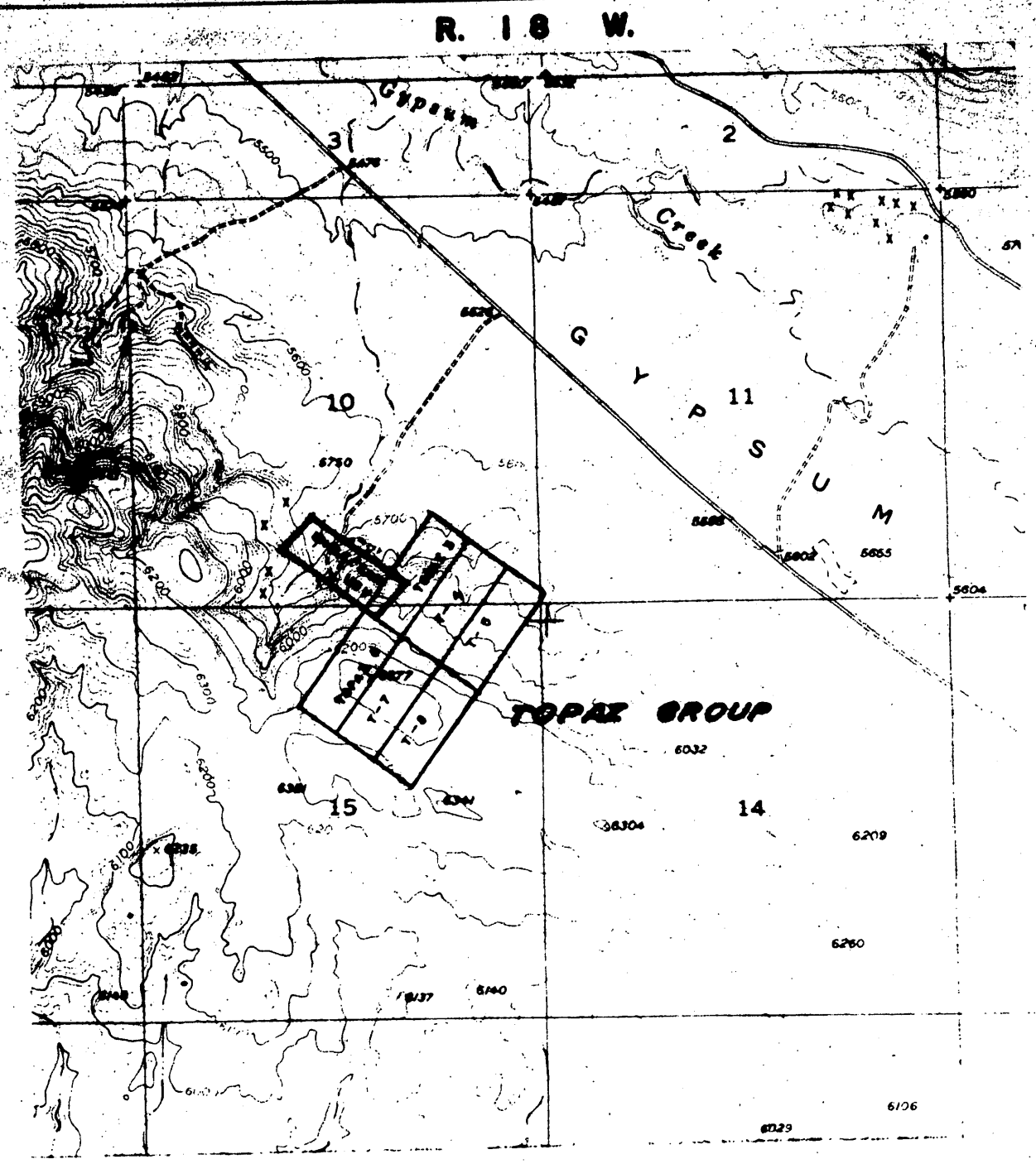


FIG. 2

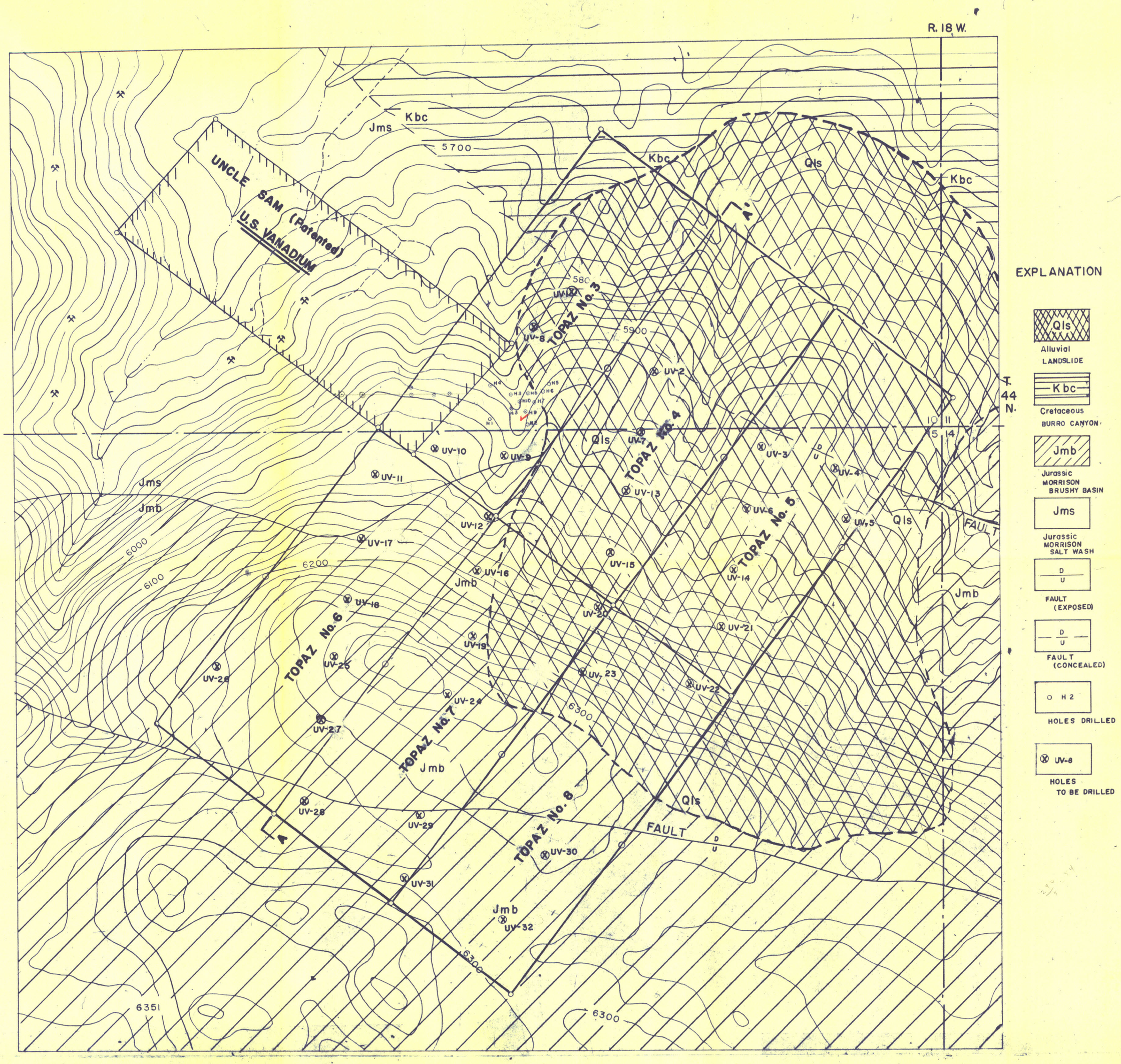
MAP OF PART OF COLORADO AND UTAH SHOWING THE DOMINANT ORIENTATION OF THE FOSSIL LOGS AND ORE ROLLS

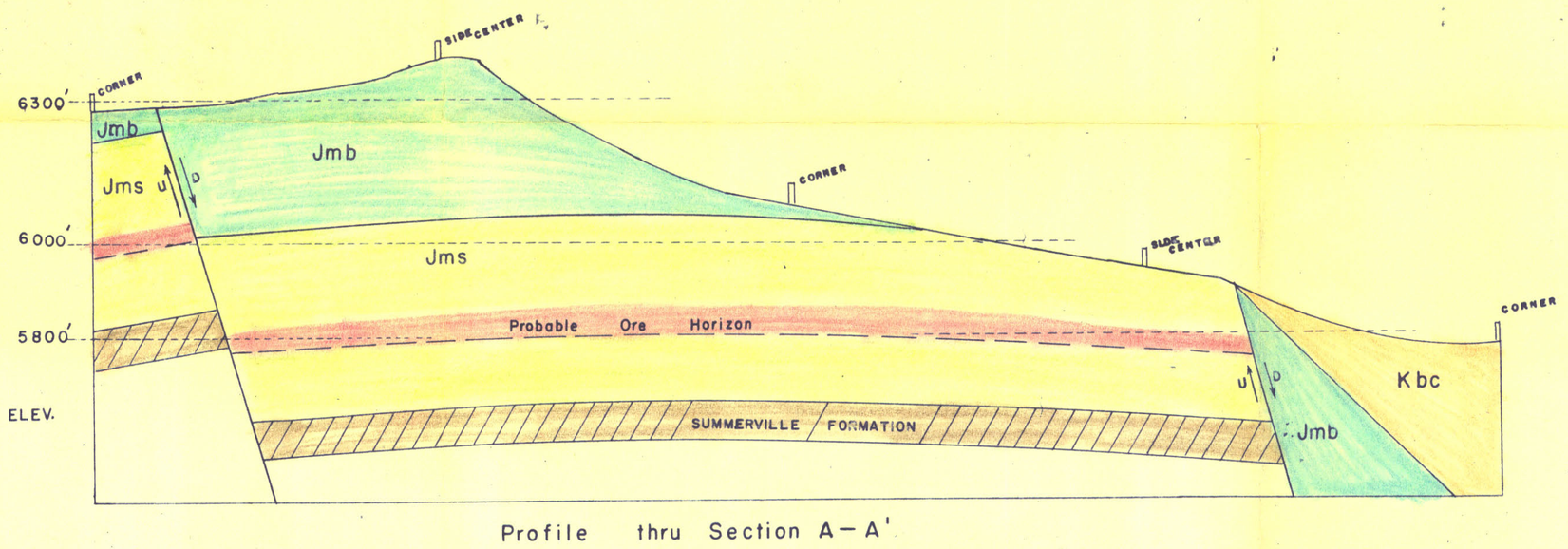


U.S.G.S. TOPOGRAPHICAL MAP
showing
BIG GYPSUM VALLEY AREA
around
TOPAZ GROUP

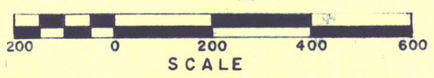
SCALE 1" = 2,000'

Fig. 3





Profile thru Section A – A'



CONTOUR INTERVAL = 20 FT

⚒ MINE OR PROSPECT

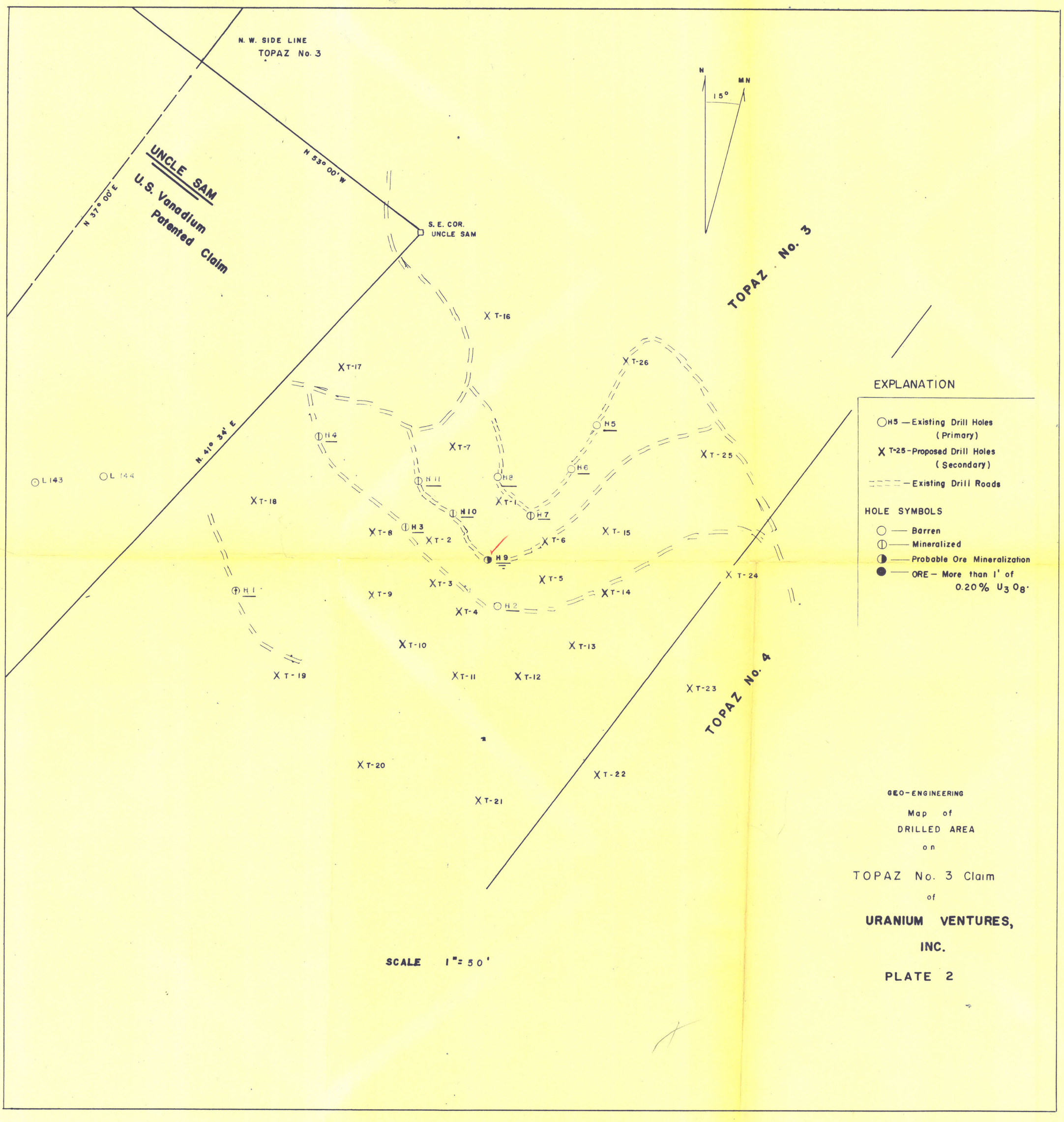
GEOLOGY taken from U.S.G.S. EGNAR-GYPSUM VALLEY map
by W. L. STOKES

GEO-ENGINEERING
Claim Map
of

TOPAZ CLAIMS
BIG GYPSUM VALLEY
SAN MIGUEL COUNTY
COLORADO
for

URANIUM VENTURES
INC.

PLATE I



GEO-ENGINEERING

Map of
DRILLED AREA
on

TOPAZ No. 3 Claim
of

URANIUM VENTURES, INC.

PLATE 2