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

224 New Customhouse
Denver 2, Colorado

June 9, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Field Team, Region III

Subject: Report of Examination, Docket DMEA-3719 (Uranium), Urado Uranium, Inc., Topaz group, San Miguel County, Colorado

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

We concur with the recommendations of the field examiners that the application be denied without prejudice.

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

DMEA
Date Rec'd.
JUN 8 1955

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JUN 9 1955

BUREAU OF MINES
DENVER, COLORADO

Building 20, Room 137
Denver Federal Center
Denver 2, Colorado
June 7, 1955

Region III

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw

Subject: Engineering Report, DMEA 3719 (Uranium), Urado Uranium, Inc., Topas group, San Miguel County, Colorado

Enclosed are the original and eleven copies of a "Summary, Conclusions, and Recommendations" by C. M. Harrer, mining engineer, and H. F. Albee, geologist, and the original and eleven copies of an engineering report by C. M. Harrer, covering docket DMEA 3719.

Urado Uranium, Inc., applied for exploration assistance in the amount of $117,976.00 to explore the Topas group of claims with 55 diamond drill holes totaling 21,985 feet. The property was examined on May 10, 1955, by an examining team consisting of C. M. Harrer and H. F. Albee. The applicant is now engaged in drilling the group of claims. However, the examining team concluded that there was not sufficient evidence to indicate a possibility of a significant amount of uranium being disclosed by the proposed work.

It is recommended that the application for exploration assistance be denied.

W H King
W. H. King
for
John F. Shaw
Supervising Mining Engineer

Enclosures

cc 11
DMEA 3719
Chron

JFS/cm

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

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DMEA 3719, Tomas Group

Uranio Uranium, Inc.

San Miguel County, Colorado

Uranium

C. M. Harrer, Mining Engineer
Bureau of Mines

Howard F. Albee, Geologist
Geological Survey

June 3, 1955

DMRA 3719

TOPAZ GROUP
URADO URANIUM, INC.
SAN MIGUEL COUNTY, COLORADO

Summary, Conclusions, and Recommendations

By C. M. Harper
Mining Engineer
Bureau of Mines

Howard F. Albee
Geologist
Geological Survey

DMEA 3719

TOPAZ GROUP
URADO URANIUM, INC.
SAN MIGUEL COUNTY, COLORADO

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By C. M. Harrer and Howard F. Albee

Urado Uranium, Inc., 304 Main Street, Grand Junction, Colo., has applied for Defense Minerals Exploration Administration assistance to explore the Topaz group of claims, with 55 diamond drill holes totaling 21,985 feet at an over-all cost of $117,976.00.

The property was examined on May 10, 1955, by a team consisting of members of the Geological Survey and Bureau of Mines. H. A. Culp, consulting geologist and a director in the applicant company, accompanied the examiners and represented the applicant.

The Topaz group of unpatented lode claims Nos. 1, 10, 11, 13, 22, 23, 24 and 25 are in secs. 9, 10, 15 and 16, T. 44 N., R. 18 W., New Mexico principal meridian, in the Lower San Miguel Mining District, San Miguel County, Colo.

The rocks exposed on the Topaz group of claims are the Brushy Basin and the Salt Wash members of the Upper Jurassic Morrison formation, and landslide debris derived mostly from the Brushy Basin. Exposures of the Salt Wash are few and show the sandstone lenses to be thin. No mineralized material crops out on the claims.

A series of southerly trending, parallel, normal faults cross the claims. The down thrown sides are all to the north, which has caused a steep, rough slope that presents difficult geologic and drilling problems.

Two holes have been drilled on the Topan No. 1 claim. Their logs show thin sandstone units mostly underlain by red mudstone. The drill holes should be classified as unfavorable.

Known ore deposits in the general area are small and difficult to find.

While there is a possibility that uranium deposits may exist on the property, insufficient evidence is presented by the applicant and by a surface examination to show this to be an encouraging geologic probability. The applicant is now core drilling the group of claims. If this drilling program, at the applicant's expense, shows favorable criteria or mineralized material, further consideration of the applicant's exploration program is warranted.

The examining team, therefore, recommends that this application for exploration assistance be denied without prejudice.

DMRA 3719

TOPAZ GROUP
URADO URANIUM, INC.
SAN MIGUEL COUNTY, COLORADO

Engineering Report

By C. H. Hecht
Mining Engineer
Bureau of Mines

DMEA 3719

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TOPAZ GROUP
UNADO URANIUM, INC.
SAN MIGUEL COUNTY, COLORADO

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DMEA 3719

TOPAZ GROUP
URADO URANIUM, INC.
SAN MIGUEL COUNTY, COLORADO

ENGINEERING REPORT

By C. M. Harrer

INTRODUCTION

Urado Uranium, Inc., a Colorado corporation with offices at 304 Main Street, Grand Junction, Colo., has requested Defense Minerals Exploration Administration assistance to explore their Topaz group of 8 unpatented lode claims for uranium. They propose a two stage diamond drilling program consisting of 55 holes, totaling 21,985 feet, at an over-all cost of $117,976.00. The proposed exploration is to test the approximate middle third of the Salt Wash member of the Jurassic Morrison formation.

A joint field examination was made by a Geological Survey and Bureau of Mines examining team on May 10, 1955.

ACKNOWLEDGMENTS

Harold A. Culp, consulting geologist and a director in the applicant company, accompanied the examining team and represented the applicant.

W. P. Williams, geologist, Colorado Plateau District, Geological Survey, Grand Junction, Colo., assigned H. F. Albee, geologist, to make the examination as the Geological Survey member of the team. Albee was accompanied by D. R. Shawe and Gene Boudette, geologists, of the Grand Junction Branch, Geological Survey.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Topaz group of 8 unpatented lode claims (figs. 1 and 2), with the exception of Topaz No. 13, are a contiguous group. All claims are in secs. 9, 10, 15 and 16, T. 44 N., R. 18 W., New Mexico principal meridian, in the Lower San Miguel Mining District in San Miguel County, Colorado, figures 1 and 2. The claims are in the southern part of the Uravan mineral belt at altitudes between 5,600 and 6,300 feet above sea-level. The claims are along the southwest slope of Big Gypsum valley in an extremely faulted area.

Precipitation is moderate to light and year around operations are feasible. The climate is semi-arid. Water for drilling purposes is obtainable from the Dolores River, about 4 miles distant. Water for domestic use is obtainable from Naturita or Slick Rock.

The claims are accessible over 12 miles of gravelled and dirt roads that connect with Colorado State Highway 90 at Gypsum Gap. The nearest mills and ore depots are at Naturita 40 miles distant, Uravan 55 miles distant, Monticello, Utah, 75 miles distant and Durango 155 miles distant.

Labor, supplies and light equipment can be obtained in Naturita, Norwood and Uravan. Heavy equipment can be obtained at Grand Junction. The nearest railroad is the Denver and Rio Grand Western at Ridgway.

HISTORY AND PRODUCTION

Intermittent mining of vanadium ore has been carried on in the Gypsum Valley area for a considerable period of time, however, it was not until the start of the Government buying schedules in 1948 that prospecting for uranium became of interest. The Topaz claims were

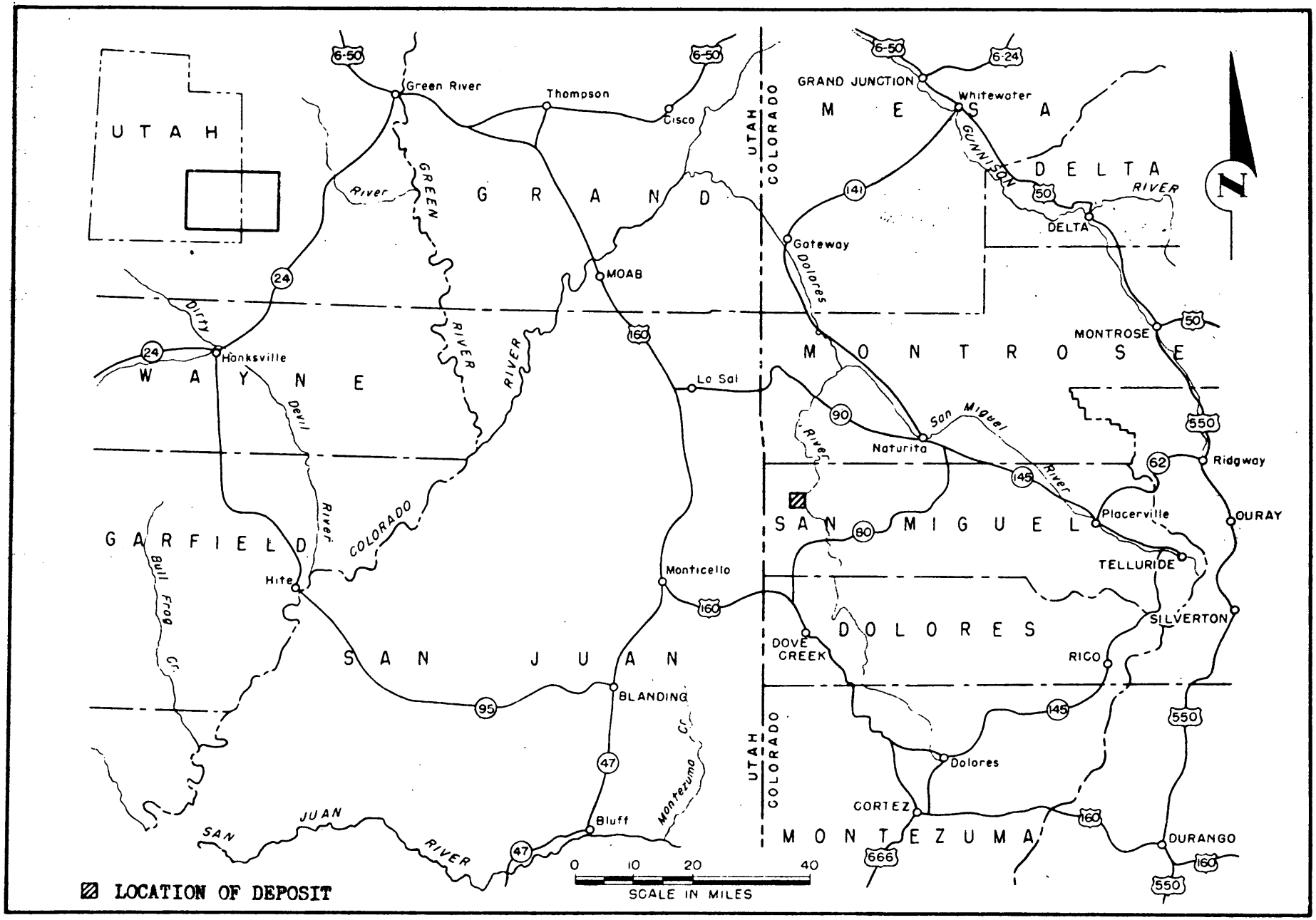

FIGURE 1 - LOCATION MAP, TOPAZ CLAIMS, URADO URANIUM, INC., SAN MIGUEL COUNTRY, COLO. DMEA 3719

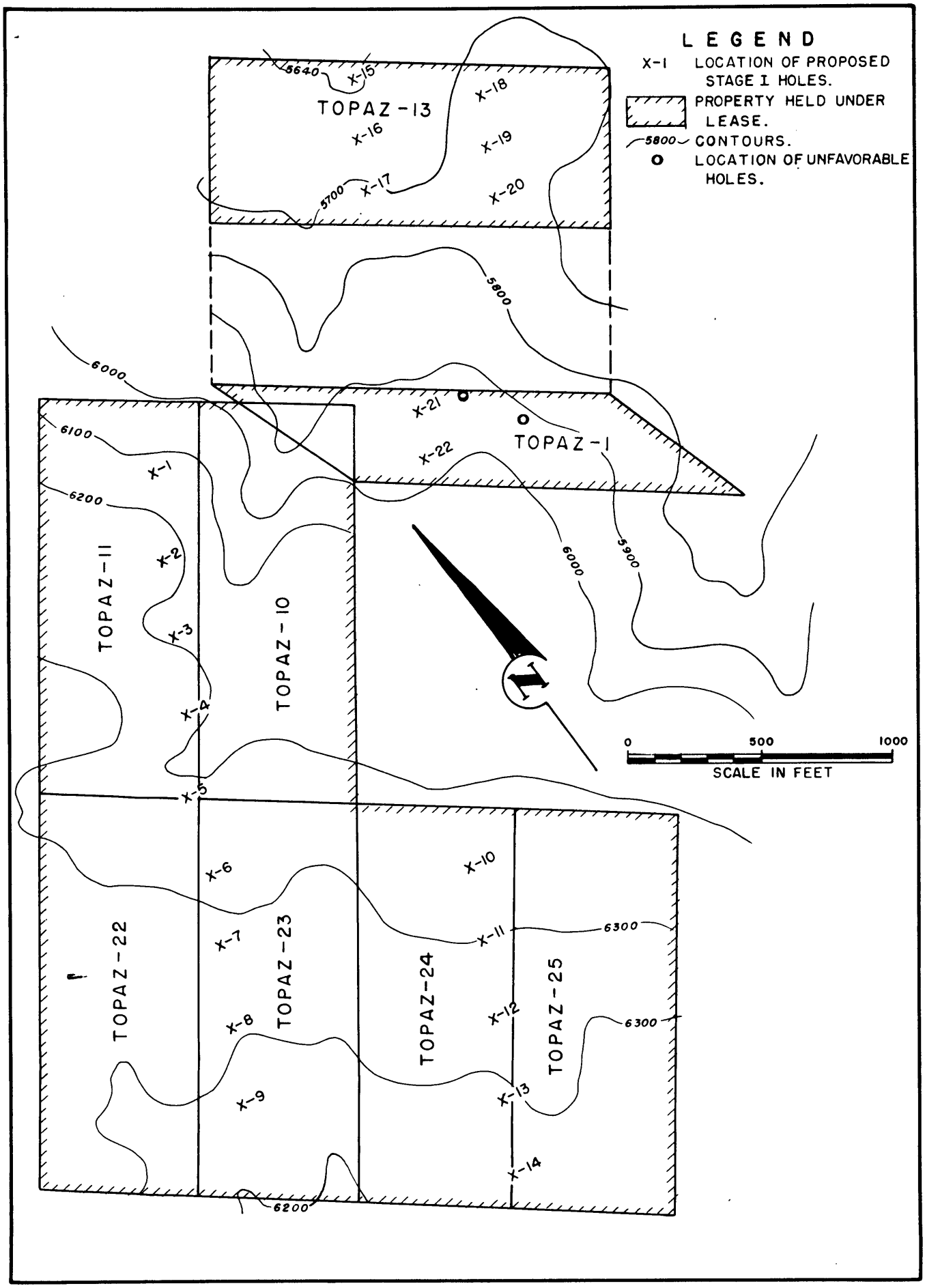

FIGURE 2 – PROPERTY MAP SHOWING PROPOSED EXPLORATION, TOPAZ CLAIMS, URADO URANIUM, INC., SAN MIGUEL COUNTY, COLO. DMEA 3719

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located during January 1953 by a partnership consisting of Simpson Mining Company of Grand Junction, Colo., and various partners in Texas. There are no mine workings on the property which has had no production to date.

OWNERSHIP AND EXTENT

Uranio Uranium, Inc., controls the unpatented lode locations Topaz Nos. 1, 10, 11, 13, 22, 23, 24 and 25 (fig. 2) under two lease agreements for 5 years, dated March 16 and November 9, 1954. The leases include options for renewal for additional 5-year periods.

The lessees, Uranio Uranium, Inc., are closely affiliated with Geo-Engineering, a firm of mining consultants at Grand Junction. Officers of the applicant company are also members of Geo-Engineering.

The lessors are a partnership consisting of Alan M. and Julian E. Simpson, partners in Simpson Mining Co., of Grand Junction; Arthur Hamilton and Otis Phillips, Jr., of Dallas, Texas; J. W. Harris, W. D. McDavid, Rex Phillips and G. R. Ladd, of San Antonio, Texas.

The claims are in secs. 9, 10, 15 and 16, T. 44 N., R. 18 W., in the lower San Miguel Mining District of San Miguel County, Colo. The claims are recorded in the office of the County Clerk and Recorder of San Miguel County at Telluride, Colo., as follows:

Claim	Type of Instrument	Book	Page	Date of Location	Date Recorded
Topaz-1	Lode location	216	421	1/19/53	4/17/53
	Amended lode location (Public law 585)	240	499	8/18/54	8/27/54
Topaz-10	Lode location	216	425	1/19/53	4/17/53
	Amended lode location (Public law 585)	240	508	8/19/54	8/27/54

Claim	Type of Instrument	Book	Page	Date of Location	Date Recorded
Topaz-11	Lode location	216	426	1/19/53	4/17/53
	Amended lode location (Public law 585)	240	509	8/19/54	8/27/54
Topaz-13	Lode location	216	426	1/19/53	4/17/53
	Amended lode location (Public law 585)	240	510	8/19/54	8/26/54
Topaz-22	Lode location	216	430	2/12/53	4/30/53
	Amended lode location (Public law 585)	240	518	8/19/54	8/26/54
Topaz-23	Lode location	216	431	2/12/53	4/30/53
	Amended lode location (Public law 585)	240	519	8/19/54	8/26/54
Topaz-24	Lode location	216	431	2/11/53	4/30/53
	Amended lode location (Public law 585)	240	520	8/19/54	8/26/54
Topaz-25	Lode location	216	432	2/11/53	4/30/53
	Amended lode location (Public law 585)	240	521	8/19/54	8/26/54

There are no known liens or encumbrances on the property.

DESCRIPTION OF THE DEPOSITS

Rocks exposed on the claims are the Brushy Basin and Salt Wash members of the Jurassic Morrison formation. The area is cut up by numerous faults and partly masked by landslide debris. Exposures of the potentially ore bearing Salt Wash member are few and indicate that the sandstone lenses are probably thin. No mineralized material crops out on the claims although some uranium bearing float has been noted. The logs of two holes drilled on the Topaz No. 1 claim showed thin sands underlain by red mudstone and no uranium mineralization and are classed as unfeverable.

MINABLE ORE RESERVES

There are no estimable ore reserves on the property.

PRESENT STATUS

Exploration and Development

There are no active mining operations on the Topaz group of claims and no evidence of prior exploration. On the day of examination, May 10, 1955, Grade Uranium, Inc., had contracted for diamond drilling with Minerals Engineering of Grand Junction and one drill was started on the Topaz No. 1 claim. K. A. Culp of Grade Uranium, Inc., stated that they propose to do some exploration drilling on their Topaz group of claims and their Fort Knox sublease (DMEA 3721).

The logs of two holes drilled on the Topaz No. 1 claim were submitted by the applicant.

Mining, Milling and Other Facilities

There are no facilities on the property other than steep and rough access roads.

PROJECT PROPOSAL AND COSTS

Grade Uranium, Inc., proposes to explore the approximate middle third of the Salt Wash member of the Jurassic Morrison formation for uranium with a two stage drilling program, using a single diamond drill on a single shift basis. Stage I would consist of 22 holes on a roughly 300- by 1,000-foot grid (fig. 2). Holes would be 30 to 690 feet deep, totaling 8,785 feet. Stage II would be dependent upon the results obtained from Stage I and would consist of a maximum of 33 holes averaging 400 feet deep and totaling 13,200 feet. The over-all cost of drilling the total of 21,985 feet of hole, including all services has been estimated at $117,976.00. Government participation of 75 percent would be $88,482.00.

The applicant has submitted costs which are generally too high for the work to be accomplished: They are distributed as follows:

Independent contracts: (6a)

Stage I

5,165 feet non core (AX) drilling at $2.00 per foot	$10,330.00	
775 feet (AX) core drilling (0-200 feet) at $2.25 per foot	1,743.75	
440 feet (AX) core drilling (200-300 feet) at $2.50 per foot	1,100.00	
455 feet (AX) core drilling (300-400 feet) at $2.75 per foot	1,251.25	
730 feet (AX) core drilling (400-500 feet) at $3.25 per foot	2,372.50	
850 feet (AX) core drilling (500-600 feet) at $4.00 per foot	3,400.00	
370 feet (AX) core drilling (600-700 feet) at $5.00 per foot	1,850.00	
8,785 feet Total		$22,047.50

Stage II

7,760 feet non core (AX) drilling at $2.00 per foot	$15,520.00	
1,160 feet (AX) core drilling (0-200 feet) at $2.25 per foot	2,610.00	
660 feet (AX) core drilling (200-300 feet) at $2.50 per foot	1,650.00	
690 feet (AX) core drilling (300-400 feet) at $2.75 per foot	1,897.50	
1,095 feet (AX) core drilling (400-500 feet) at $3.25 per foot	3,558.75	
1,280 feet (AX) core drilling (500-600 feet) at $4.00 per foot	5,120.00	
555 feet (AX) core drilling (600-700 feet) at $5.00 per foot	2,775.00	
13,200 feet Total		$33,131.25

Reaming 6,600 feet at $1.50 per foot	9,900.00
Casing 1,320 feet at $2.00 per foot	2,640.00
Road and drill site preparation	6,100.00
Total cost of independent contracts	$73,818.75

The applicant's costs for diamond drilling are comparable with standard drilling bids in the area. Reaming and casing are probably

justifiable in the severely faulted area. The cost of preparing roads and drill sites is high and a fair estimate would not exceed $5,000.00.

Labor, supervision and consultants: (6b)		Cost for Project
Geo-Engineering fees at $1,000.00 per month	$12,000.00	
Geo-Engineering expenses at $250.00 per month	3,000.00	
Draftsman at $3.00 per hour or $150.00 per month	1,800.00	
Typist at $2.25 per hour or $112.50 per month	1,350.00	
Sampler-field assistant at $375.00 per month	4,500.00	
Total		$22,650.00

The above costs are excessive and should not exceed $11,000.00 under any circumstances and assuming a full time field geologist or engineer at $500.00 per month.

Operating materials and supplies: (6c)		Cost for Project
Office supplies, map and drill log reproductions, etc. at $150.00 per month	$1,800.00	
Survey stakes and field supplies	200.00	
Total		$2,000.00

These costs are excessive and would be about $300.00 for the job.

New buildings, installations, etc.: (6f)		Cost for Project
1 trailer house for project personnel at $50.00 per month		$600.00

This cost is not allowable as living quarters but may be acceptable for use as a field office.

Miscellaneous: (6g)		Cost for Project
Accounting expenses at $100.00 per month	$1,200.00	
Payroll taxes at 10 percent of $637.50	765.00	
Analytical work (350 samples for U_3O_8, V_2O_5 and $CaCO_3$)	2,100.00	
Total		$4,065.00

Accounting for a project using one drill on a single shift basis is excessive and should not be allowed. Payroll taxes in this case would be 5 percent of $11,000.00 or $550.00. Chemical analyses are standard for the area.

Contingencies: (6h)		Cost for Project
for 6a above 15 percent of $73,818.75	$11,073.00	
for 6b above 10 percent of $22,650.00	2,265.00	
for 6e above 20 percent of $ 2,000.00	400.00	
for 6f above 20 percent of $ 600.00	120.00	
for 6g above 50 percent of $ 1,965.00	982.00	
Total		$14,842.00

The contingencies are not allowable.

Total cost of the project	$117,975.75
The applicant's estimate is	$117,976.00

Total cost of drilling 21,985 feet of size AX hole, including the preparation of access roads and drill sites but not analysis of samples is estimated by the applicant at $5.27 per foot. This is very high.

Total over-all cost per foot of hole is estimated as $5.37 per foot.

CONCLUSIONS

The property is largely covered by landslide debris and is cut by numerous faults and presents difficult geologic and exploration drilling problems.

Exposures of the potentially ore bearing Salt Wash formation are few and indicate that sandstone lenses are probably thin.

While a few pieces of uranium float were reported, no mineralized material crops out on the claims.

The logs of two drill holes on the Topaz No. 1 claim show thin sandstones underlain by red mudstone, and no uranium mineralization. They are considered unfavorable.

While there is a possibility that uranium deposits occur on the property, the lack of evidence and the severe faulting make this a questionable geologic possibility and places the search for uranium here in the prospecting or "wild-cat" class. It, therefore, does not meet the standards set up by DMEA.

The applicant is now core drilling the Topaz claims at his own expense and may be able to present favorable criteria or evidence of uranium mineralization. If this is so, the applicant's proposals for additional exploration may warrant further consideration.

RECOMMENDATIONS

The application of Uranio Uranium, Inc., for assistance to explore their Topaz group of claims is recommended denied without prejudice and may be re-considered if the results of his prospect drilling prove favorable.

/em

IN REPLY REFER TO:

RECEIVED
JUN 15 1955
DMEA
Date Rec'd.

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

JUN 7 1955
BUREAU OF MINES
Denver, Colorado

June 7, 1955

TRANSMITTED
JUN 9 1955

Memorandum

To: Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 3719 (uranium), Urado Uranium, Inc., Topaz group, San Miguel County, Colorado

Enclosed are 10 copies of a geologic report by N. F. Albee, U. S. Geological Survey, recommending denial without prejudice of the request for exploration assistance on the subject property.

The recommendation is based on factors as follows:

1) There are no known targets on the claims and no mineralized outcrops are known to exist on them.

2) The logs of two holes drilled on the Topaz No. 1 claim indicate that the Salt Wash sandstone in that area is unfavorable for uranium deposits.

3) Extensive faulting and considerable landslide debris make geologic interpretations difficult and will complicate drilling.

I concur with the recommendation that the application be denied without prejudice. Should drilling now being done by the applicant indicate the presence of certain favorable areas, a reexamination of the property might be warranted.

A report (DMEA Docket 3576) on another Topaz group of claims, lying immediately east of the subject claim group, also recommended denial of that request for exploration assistance.

E. N. Harshman

E. N. Harshman
Member, Field Team

Enclosures (10)

ENHarshman:arh

MINERAL DEPOSITS
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U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

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

JUN 9 1955

June 3, 1955

RECEIVED
JUN 15 1955

MEMORANDUM

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

From: W. P. Williams

Subject: DMEA 3719, Urado Uranium, Inc., Topaz group, San Miguel County, Colo.

Transmitted herewith are 12 copies of a geologic report by H. F. Albee, covering a field examination of the above-referenced property.

The Salt Wash sandstone member of the Morrison formation, the ore host, crops out only on part of Topaz No. 13 claim. The Brushy Basin member of the Morrison and landslide material cover the remaining surface of the claims. The claims are in a highly faulted area; consequently, drilling of any kind would be extremely difficult and the problem of estimating drill hole depths is a difficult, if not an impossible one. The ore-bearing sandstone, from outcrops and from two drill holes on the property, is unfavorable for uranium ore deposits on the basis of sand thickness and color of associated mudstone. The applicant has not shown that the probability is good that either mineralized material or favorable geologic conditions will be found by an exploration program. Albee recommends that the application be denied without prejudice until such time as the applicant can show that favorable geologic conditions are present on the property and that an exploration program would have a good chance of finding a significant uranium ore deposit. I concur with his recommendations.

Members of the Exploration Division, U. S. Atomic Energy Commission, Grand Junction Operations Office, were asked for advice in evaluating the property. The Commission had no specific data about the property.

We are returning herewith the brochure covering this application.

W P Williams

W. P. Williams
Geologist

WPW/mlr

Enclosures

UNITED STATES DEPARTMENT OF THE INTERIOR

DOUGLAS McKAY, SECRETARY

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

DMEA 3719, Urado Uranium, Inc., Topaz group, San Miguel County, Colorado

Uranium

Geologic Report

by

Howard F. Albee
U. S. Geological Survey

June 3, 1955

DMEA 3719

INTRODUCTION

Urado Uranium, Inc., 304 Main Street, Grand Junction, Colorado, has submitted an application, prepared by Geo-Engineering, 304 Main Street, Grand Junction, Colorado, to the Defense Minerals Exploration Administration. The application, Docket No. 3719, requests DMEA assistance in exploration for uranium ore on part of the Topaz group of claims, Big Gypsum Valley area, secs. 9, 10, 15, and 16, T. 44 N., R. 18 W., New Mexico Principal Meridian, Gypsum Valley mining district, San Miguel County, Colorado.

The claims were examined May 10, 1955, by C. M. Harrer, U. S. Bureau of Mines, D. R. Shawe, E. L. Boudette, and Howard F. Albee, U. S. Geological Survey, and Harold A. Culp, Geo-Engineering, representative for the applicant.

GEOLOGY AND ORE DEPOSITS

The Topaz group of claims lies across a fault zone on the southwest side of Gypsum Valley. The valley was formed by the subsidence of an anticlinal crest during partial solution of underlying salt bed. The claims are on the Brushy Basin and Salt Wash members of the Upper Jurassic Morrison formation.

The Brushy Basin member consists of about 400 feet of green, brown, and gray mudstone and minor lens-shaped beds of siltstone, sandstone, and conglomeratic sandstone. The contact with the underlying Salt Wash member is commonly gradational, but in places it is placed at the base of the lowermost conglomeratic sandstone in the Brushy Basin.

The Salt Wash sandstone member consists of about 350 feet of light gray and pale brown, fine- to medium-grained sandstone and red and greenish gray mudstone. The sandstone and mudstone, in the Gypsum Valley area, are in about equal proportions.

The Salt Wash sandstone crops out on part of one claim, Topaz No. 13, whereas the Brushy Basin and landslide material derived from the Brushy Basin covers the surface within the remaining claims. No exposure of mineralized material is known within the group of claims.

The area is on the southwest dipping limb of the ancestral anticline, and is entirely within the fault zone that resulted from the subsidence of the anticlinal crest. Topaz Nos. 22, 23, 24, and 25, although they are cut by 3 southwest trending normal faults, appear to be on the least disturbed part of the area. At least three north trending, parallel, normal faults with vertical displacements of from 20 feet to 100 feet are in Topaz Nos.10 and 11. Field evidence indicates that these faults are cut by an east trending diagonal slip fault with a fault surface dip to the south of about 75°. The amount of displacement is not determinable but is, at the minimum, several tens of feet. A U. S. Geological Survey map shows other faults in the area, some of which pass through the group of claims.

Two diamond drill holes, 80 feet and 135 feet deep, on the Topaz No. 1 had no mineralized material. Both holes were logged and on the basis of sand thickness and color of mudstone should be classified as unfavorable. The thickest sand is logged at 14.4 feet thick and is underlain by red mudstone. No exact minimum figure can be given for a sand thickness to remain favorable, but as a sand decreases in thickness from about 25 to 30 feet it becomes increasingly unfavorable.

Although several patented claims are in the immediate vicinity of the Topaz group, no production has been reported from them since the beginning of AEC records in 1948. Core drill logs of holes drilled in one of the patented claims, the Uncle Sam, indicates two ore bodies about 100 feet apart and with their long axes in one west trending line. One ore body is indicated to be about 1,500 tons and one about 500 tons, each with a grade of about 0.20 percent U_3O_8 or better and a vanadium-uranium ratio of about 8 to 1. The ore bodies in the Gypsum Valley mining district range from about 100 tons to 10,000 tons and average about 2,000 tons. The discovery of ore deposits within this range on the subject claims is a possibility, but because of the poor exposures and absence of mineralized material, the geologic probability cannot be evaluated as good.

PROPOSED EXPLORATION

Twenty-two drill holes are proposed for stage I drilling, to be placed on a 300-foot by 1,000-foot grid. The grid is to be oriented such that the 300-foot dimension is normal to the ore trend (projected by the applicant into the area from the drill holes on the Uncle Sam claim) and staggered so that a hole in one row is between two 300-foot spaced holes in the next row. Thirty-three holes are proposed for stage II drilling, and are to be placed in the areas judged to be favorable as delineated by stage I holes.

CONCLUSIONS AND RECOMMENDATIONS

Some of the proposed drill holes fall in an area of many faults where no prediction can be made as to depths or geology. The estimated depths are based on a favorable zone that was projected by information from districts both nearby and several miles distant. Such information cannot be projected more than a few tens or a few hundreds of feet. The resulting cross-section that delineates the favorable zone is an idealized generalization. However, the applicant currently is drilling on the group of claims and if this drilling program, at his expense, can show favorable criteria or mineralized material, the claims would warrant a re-examination.

It is recommended that the application be denied without prejudice for the following reasons: 1) The applicant has proposed a drilling program which is of a wildcat nature; 2) the drill logs from Topaz No. 1 indicate unfavorable host rock criteria; 3) extensive faulting and landslide debris presents difficult drilling and geologic problems; and 4) no mineralized material is known on the claims.

If the applicant can show mineralized material in a favorable environment by his current drilling program, it is recommended that the application be re-examined.

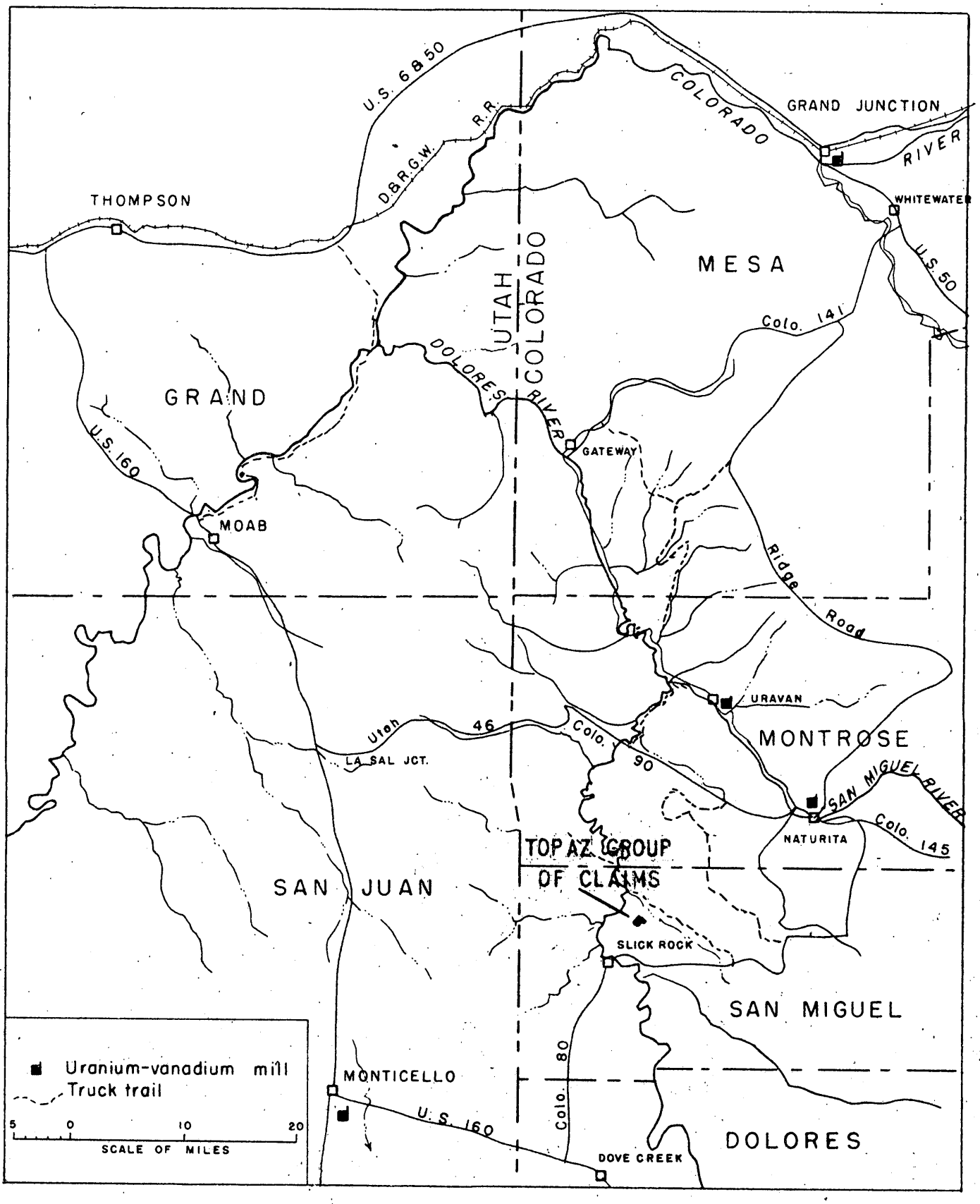
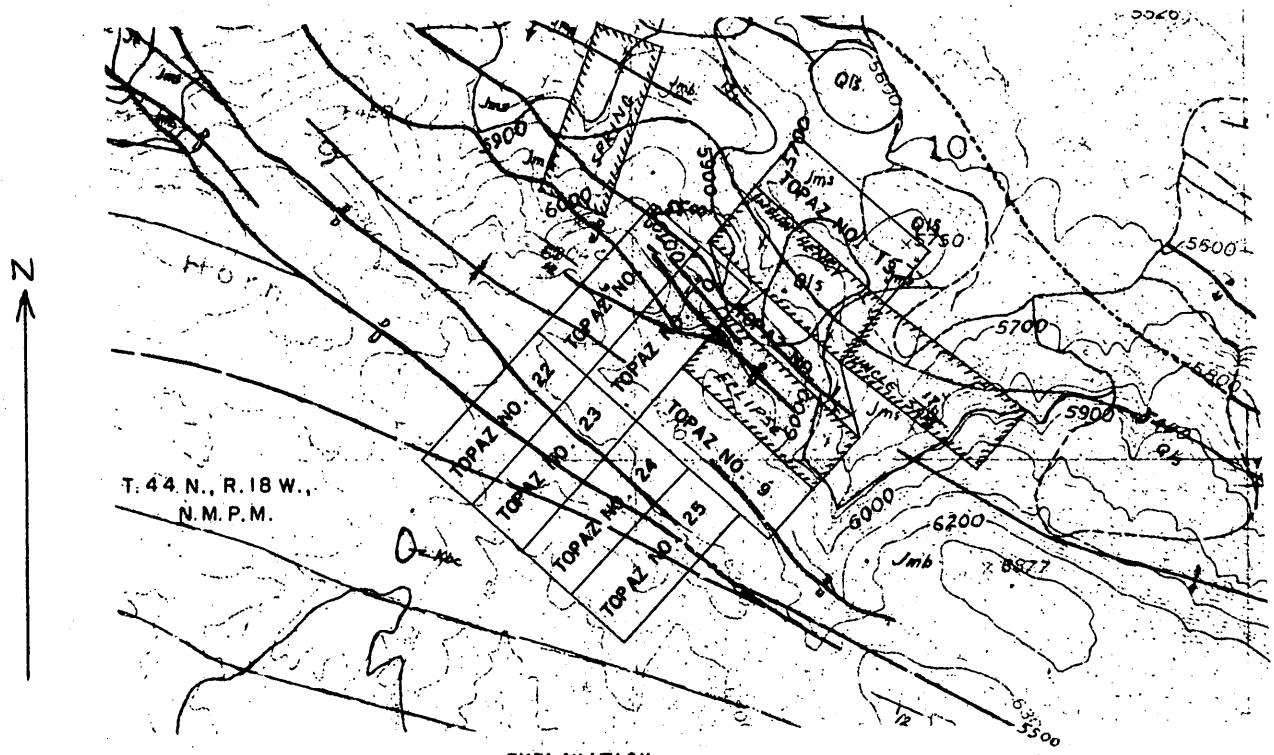


Figure 1. INDEX MAP OF PART OF THE COLORADO PLATEAU SHOWING LOCATION OF TOPAZ GROUP OF CLAIMS, URADO URANIUM INC., SAN MIGUEL COUNTY, COLORADO



EXPLANATION

Qls — QUATERNARY LANDSLIDE DEBRIS	AXIS OF SYNCLINE
Kbc — CRETACEOUS BURRO CANYON	FORMATION CONTACT, DASHED WHERE INFERRED
Jmb — JURASSIC BRUSHY BASIN MEMBER OF MORRISON FORMATION	FAULT, SHOWING RELATIVE MOVEMENT
Jms — JURASSIC SALT WASH MEMBER OF MORRISON FORMATION	5700 — SURFACE CONTOUR LINE
STRIKE AND DIP OF BEDS	5500 — STRUCTURE CONTOUR ON TOP OF ENTRADA SANDSTONE
	PATENTED CLAIM BOUNDARY

Note: BASE FROM U.S.G.S. PRELIMINARY GEOLOGIC QUADRANGLE MAP HAMM CANYON

2000 0 4000 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, URADO URANIUM INC., SAN MIGUEL COUNTY, COLORADO

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JUN 15 1986