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

DEPARTMENT OF THE INTERIOR
Denver Miners's Administration
RECEIVED
MAR 14 1955

224 New Customhouse
Denver 2, Colorado

March 9, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA assistance (Uranium), Urado Uranium, Inc., Fort Knox Sublease, Lower San Miguel Mining District, San Miguel County, Colorado

Enclosed are the original and two copies of the subject application in the amount of $69,329.00.

One copy of the application has been retained in this office.

W. M. TRAVER,

W. M. Traver

Enclosures

RDB:pw

cc: Subject
Administrator ✓
Harsh an
Chron

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 14 1955

DMEA
Date Rec'd.
MAR 1 1955
BUREAU OF MINES
Denver, Colorado

APPLICATION FOR DMEA PROJECT

ON THE

FORT KNOX LEASE

February 28, 1955

Prepared for

URADO URANIUM, INC.

304 MAIN STREET

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 FORT KNOX LEASE, PREPARED FOR URADO URANIUM, INC., 304 MAIN STREET, GRAND JUNCTION

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FOR LIST OF SCHEDULES, FIGURES AND EXHIBITS SEE NEXT PAGE

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LIST OF EXHIBITS

Title	Exhibit No.
Completed DMEA Form MF-103	1
Sublease on Fort Knox Lease	2

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Grand Junction, Colorado

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INTRODUCTION

This report, written by Geo-Engineering for the purpose of applying for a DMEA loan on the FORT KNOX SUBLEASE, is prepared for URADO URANIUM, INC. DMEA Form MF-103 has been signed and is attached as Exhibit 1. Numbers and letters in front of the headings of this report refer to parts of the MF-103.

ABSTRACT

This report, with Form MF-103 (numbers and letters in front of headings used in this report refer to parts of Form MF-103) attached as Exhibit 1, is an application for a Defense Mineral Exploration Administration project contract of the short form or unit cost type. A $69,329.00 project is recommended for exploring uranium lands in northern San Miguel County, Colorado (see Schedule No. 5). Unit cost of $4.918 per foot of core drilling is estimated for the work. Not included in this unit cost is as estimated $2100.00 for custom assaying that is, however, included in the total proposed expenditure. Twenty-five percent of the total expenditure or $17,333.00 will be paid by URADO URANIUM, INC., the applicant. The Defense Mineral Exploration is asked to loan $51,996.00.

Location for 15 holes to be drilled in Stage I drilling is shown on Figure 4. As the work progresses, however, it will likely become evident that some of the proposed holes might fall in areas that are geologically unfavorable for ore. URADO URANIUM, INC., would, therefore, like the privilege of deciding whether any previously proposed hole should be drilled. It is requested that the footage saved where the proposed holes are omitted, be transferred, with the permission of the DMEA Field Team, to other parts of the Lease that might be more favorable for ore.

The Fort Knox Sublease lies on the west edge of 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 and Dove Creek areas. Personnel of Geo-Engineering will act as consulting geologists for the project.

1. NAME OF APPLICANT

(a) Urado Uranium, Inc., 304 Main Street, Grand Junction, Colorado. (Please address all correspondence regarding application to Geo-Engineering, Room 15, 304 Main Street, Grand Junction, Colorado).

(b) Urado Uranium, Inc., is a Colorado corporation with its principal address at 304 Main Street, Grand Junction.

(c) The officers are:

President and Director
M. E. Newlove
Aspen, Colorado

Vice-President and Director
Louis P. Gaggini
Norwood, Colorado

Secretary-Treasurer and Director
Albert Merle Echternach
Palisade, Colorado

Directors
Roy Stone
Olathe, Colorado

Harold A. Culp
1200 Texas Avenue
Grand Junction, Colorado

Lewis D. Anderson
312 Hill Avenue
Grand Junction, Colorado

(d) Omitted - Not a partnership.

2. GENERAL

The following report, which is the completed DMEA application written in accordance with the instructions given in the DMEA Order No. 1, includes the completed form MF-103 and all of the necessary substantiating papers.

The letters and numbers used for the headings herein refer to the letters and numbers used on Form MF-103, as this report is designed to fill in the information that, due to space limitations, could not be placed on the MF-103 Form.

In accordance with instructions given on Form MF-103, this report will be filed, in quadruplicate, at the office of Mr. W. M. Traver, Executive Officer, DMEA Field Team, Region IV, 224 New Customhouse, Denver 2, Colorado.

3. APPLICANT'S PROPERTY RIGHTS

a. & b. Legal Description and Name of Property

Exploration work is to be performed on a sublease (covering approximately 300

acres) referred to in this report as the Fort Knox Sublease. This Sublease is located in the Northwest Quarter of Section 29 and the Northeast Quarter of Section 30, Township 45 North, Range 18 West, New Mexico Principal Meridian, in the Lower San Miguel Mining District of San Miguel County, Colorado (see Figure 3).

c. & d. Interest

URADO URANIUM, INC., has subleased this ground from the Simpson Mining Company of Grand Junction, Colorado (see Exhibit 2). This sublease is a portion of Mining Lease No. AT (05-1)-OG-10 by and between the United States Atomic Energy Commission and Simpson Mining Company (see Exhibit 2).

e. Outstanding Liens

A Consent to Lien by lessors is available if required.

f. Record of Title

The land consists of a portion of Government Mining Lease No. AT (05-1)-OG-10 (see Exhibit 2).

4. PHYSICAL DESCRIPTION OF PROPERTY

a. Operations

There has been no mining or exploration operations on the property. Access roads will have to be built before any such operations can be conducted. An improved road passes within 700 feet of the lease.

b. Production and Ore Reserves

There has been no past production and there are no proven ore reserves.

c. Geologic Features

Stratigraphy: The proposed Stage I drill holes (see Figure 4 and Schedule 2) will be collared in the Salt Wash or the Brushy Basin members of the Jurassic Morrison formation or in landslide area. All holes will be drilled to the red clay underlying the lowest sandstone lense in the ore horizon as determined from data accumulated in the near by Bull Canyon District. The ore horizon in the Fort Knox area lies between two stratigraphic planes that are about 120 feet apart. The lower plane lies about 150 feet above the base of the Salt Wash member. The upper plane lies about 160 feet below the top of the Salt Wash member. The sandstone lenses at this stratigraphic interval have been the host rocks for most of the area's uranium production.

Information on the thickness of the beds was obtained from geologic maps of the area, and from the nearby Bull Canyon quadrangle that has been mapped by the U.S.G.S.

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

Structure: This lease is located on the northwest end of the Gypsum Valley Graben, a collapsed salt anticline. The beds dip approximately 7 degrees to the northeast.

Justification of Exploration: The Fort Knox Sublease lies on the west edge of the Gypsum Valley section of the "Uravan Mineral Belt" (see Figure 1). The "Uravan Mineral 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."

The lease is almost completely surrounded by claims and mines that are currently producing or have produced uranium ores in the past.

About 1 mile to the northeast is the Wedding Bell Mountain Mining District, consisting of the Jack Knife, Ground Hog, Rim Rock and many other mines. These mines have been among the most prolific in the area, producing both a good grade and tonnage of uranium ores.

One and one quarter miles to the southeast is the Lost Group, formerly operated by Elbert Stout. This area is still in production.

Four miles to the southwest is the Lower Group or Cougar Canyon mining area, which includes such producers as the Cougar Mine, the Helen, Knoll and Alice mines of the San Juan Lease, and the well-known Tailholt, owned by Tom Skidmore. Three miles farther lies the Radium 7 Group operated by the Dulaney Mining Company, which is one of the better uranium ore producing areas in the Morrison formation.

One and one quarter miles to the northwest the Golden Eagle mine recently purchased by Twin Arrow Petroleum Corporation is producing fairly large tonnages of good grade uranium ore.

Four miles to the northwest Vanadium Corporation of America's Raven mine has been and still is a good producer.

It is interesting that a straight line drawn between the Bull Canyon area in the northeast and the Radium 7 Group in the southeast passes through the Wedding Bell Mountain Mining District, the Fort Knox Sublease, and the Lower Group mining area.

This DMEA project should be removed from the category of a prospecting program to that of a true exploratory one because the possibility of finding ore on the lease is greatly augmented by the adjacent uranium deposits.

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d. Accessibility

This lease is located on the southwest side of the Dolores River approximately $1\frac{1}{2}$ miles from where the main road into Gypsum Valley crosses the river. There is an unimproved road which passes within 700 feet of the lease.

Acess roads will have to be built to the area, and all drill sites prepared. Surface elevations vary between 5400 feet above sea level in the northeastern to 6400 feet in the southwestern part of the property. Some explosives will have to be used to build these roads.

Ore haulage distances are about 40 miles to Vanadium Corporation of America uranium treatment mill at Naturita, Colorado; 55 miles to the U. S. Vanadium Company mill at Uravan, Colorado; 55 miles to the Atomic Energy Commission mill at Monticello, Utah; and 150 miles to the V. C. A. mill at Durango, Colorado.

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

Manpower and equipment for 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, and at Grand Junction, Colorado, 60 miles and 185 miles respectively from the property.

Supplies and equipment can be obtained at Dove Creek, Monticello, Naturita, and Uravan. Railroad and airline terminals are located at Grand Junction, Colorado, a distance of 185 miles by road and 80 miles by air.

Drilling water will be hauled from the Dolores River, about $\frac{1}{4}$ mile away.

5. THE EXPLORATION PROJECT

a. The Mineral

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 6 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.

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Proposed holes are shown on Figure 4. Estimated hole depths are listed in Schedule 1 and 2. 15 core drill holes are listed in Schedule 3 for Stage I drilling. 22 core drill holes are listed for Stage II. Intelligent selection of locations for all of these holes is impossible at this time. It is recommended, therefore, that a DMEA contract be allowed for a 37 core drill 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 the Stage II locations will be in areas where Stage I drilling has revealed favorable geology.

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 assayors for percentage determination of U_3O_8, V_2O_5 and $CaCO_3$.

Geologic Control of Drilling: URADO URANIUM, INC., asks the privilege of not drilling any of the proposed holes shown on Figure 4 if, in the opinion of the company's geologist, 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 area 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 Carnotic Deposits on Colorado Plateau. U. S. Geological Survey Bulletin 988-B), and the reader is referred to this writing for the information lacking in this brief discussion.

The presence of gray-green mudstone at the base of a potential ore-bearing sandstone has been an excellent guide to ore. When Stage I holes penetrate one foot or more of the gray-green mudstone at the base of a potential ore-bearing sandstone which is over 30 feet thick, URADO URANIUM, INC., might recommend to the Field Team Stage II drilling around such holes.

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Drilling Plan: The drilling plan recommended to the Defense Minerals Exploration Administration and to URADO URANIUM, INC., is as follows:

(1) The 15 proposed Stage I drill holes, as shown on Figure 4, would be arranged on a 600 foot by 1000 foot grid in a pattern to cut the predominating trend or orientation of ore bodies in the district. The holes are oriented so that the 600 foot dimension is normal to the trend and staggered so that a hole in one row in between two 600 foot spaced holes in the next row.

(2) 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.

c. Time of Exploration Project Contract

The work will start within 30 days and be completed within 7 months from the date of an exploration project contract.

d. Ability of Applicant

The officers and directors of URADO URANIUM, INC., have had many years of experience in metal and uranium mining. Most of the field and supervisory work will be done by the consulting firm of Geo-Engineering.

Mr. M. E. Newlove, the President of URADO URANIUM, INC., a mining engineer and graduate of Stanford University, has had more than 25 years of mining experience. He was for many years associated with Newmont Mining Corp. For 5 years he was Superintendent of Newmont's North Star Mine in California, and for 8 years he was General Manager of their Resurrection Mining Company in Leadville, Colorado. Subsequently he was Managing-Director of American Smelting and Refining Company's mining operations in West Africa.

Mr. Albert Merle Echternach, Secretary-Treasurer of URADO URANIUM, INC., is well known in the Grand Junction, Colorado, district through his association with the United Fruit Growers Association. He was graduated from Southwestern College, Winfield, Kansas, in 1906. Between 1906 and 1921, Mr. Echternach worked in the accounting field, including four years as Assistant Cashier of the Palisade, Colorado, bank. From 1923 to 1944, he was Executive Secretary-Treasurer of the United Fruit Growers Association. He was also Manager of the Association for the period 1935 to 1944. He served as a director of the Association from 1945 to 1948. Since that time, he has developed a very productive peach orchard.

Geo-Engineering, a firm of professional engineers and geologists, with offices conveniently located at Norwood, Colorado, 75 miles from the property, and at Grand Junction, 200 miles from the property, will act as consultants to URADO URANIUM, INC., for this project. A brief description of the experience background of the three general partners of Geo-Engineering is given below.

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Louis P. Gaggini, the Vice-President of URADO URANIUM, INC., and 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, a Director of URADO URANIUM, INC., 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, 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 application 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, a Director of URADO URANIUM, INC., and a mining engineer, is a graduate from the Colorado School of Mines (registered engineer No. 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.

Mr. Roy Stone, a Director of URADO URANIUM, INC., has had a long and varied career in mining on the Colorado Plateau. He freighted radium ore in 1914 from the Mexico group of claims in the Hamm Canyon area. From 1917 to 1921, he packed and freighted radium ore for the Vanadium Corporation of America. He operated a live stock ranch in Telluride, Colorado, area between 1921 and 1948. From 1948 to 1955, Mr. Stone has been very active in uranium mining. As principal owner and operator Mr. Stone produced more than $330,000 worth of uranium ore from the Corvusite mine on Beaver Mesa, Utah, west of Gateway, Colorado. During part of the same period, he operated under lease the Pond and Shubert properties on Beaver Mesa.

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6. ESTIMATE OF COSTS

It is the desire of URADO URANIUM, INC., that this exploration project contract be placed on a unit cost basis. Schedule 5 gives the exact amount bid per unit by URADO URANIUM, 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 estimate. 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. Wagon drilling is impractical in the Fort Knox Lease area due to the caving of the walls of the drill hole thus necessitating the use of core drilling and casing.

Drilling: The drilling will be done by private contractors. The prices quoted by firms active in the uranium field are used in Schedule 2 and 3 in the unit cost columns. Estimate for the cost of the holes proposed for Stage II drilling were pro-rated on the same basis as the estimated Stage I drilling. The drilling cost for Stage I is $13,037.50 and Stage II is $20,025.00 (see Schedule 3). An estimated cost of $6,105.00 is made for reaming of holes necessary to the setting of casing with $1,620.00 allowed for casing that will be left in place.

Bulldozer and Tractors: These 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 is estimated that it will be necessary to have a bulldozer hauled to the group at least 6 different times at a cost of $100.00 for each round trip. It is estimated that the tractor will work at least 5 days during each visit to the Fort Knox Lease. It is also estimated that a certain amount of rock blasting will have to be done in the preparation of roads and drill sites. An estimated allowance of $500.00 is made for this work.

b. Labor, Supervision, Consultant

Geo-Engineering will supervise, direct and act as technical consultants for $1,000.00 per month and reasonable expenses (see Schedule 4). A draftsman and stenographer will be employed on a part time basis to prepare necessary project reports (see Schedule 4). The field assistant will be employed by Geo-Engineering or URADO URANIUM, INC., at a minimum of $15.00 per day, to help with surveying and to act as a sampler.

c. Operating Materials & Supplies

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

$200.00 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 & Repairs

None needed.

f. New Buildings, Improvements & Installations

It will be necessary for the project personnel to live on the property as it is some distance from a town. Provisions are here made for the rental of one house trailer that will be moved to the Fort Knox property (see Schedule 4).

g. Miscellaneous

$100.00 per month is allowed to cover office and miscellaneous supervision to be performed by the personnel of URADO URANIUM, 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 & 3). A glance at Schedules 2 and 3 will show that it is possible that some of the Stage II drilling may exceed estimation. 15% is added to cover this possible increase.

Estimates to cover payments to contractors for trail building and drill site preparation may be inadequate. It is possible that some of the trails crossing sandstone ledges might require more rock drilling and blasting than is estimated. This contingency is, also, covered in the above 15%.

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 unforeseen consumption of materials and supplies might easily increase the cost of this item 20%.

New buildings, improvements, etc: In the event of any prolonging of the project, some personnel would have to remain on the property. 20% is added for this contingency.

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Miscellaneous costs are estimated at $158.00 per month. 50% is added to provide for any extra help and for unforseen taxes.

7. APPLICANT'S SHARE OF COST

a. & b.

In accordance with the Defense Minerals Exploration Administration regulations, URADO URANIUM, 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

Lewis D. Anderson

LEWIS D. ANDERSON

Harold A. Culp

HAROLD A. CULP

GEO-ENGINEERING
304 Main Street
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APPLICATION FOR DMEA PROJECT ON THE FT KNOX LEASE, PREPARED FOR URADO URANIUM, INC., 304 MAIN STREET, GRAND JUNCTION

SCHEDULE 1

CORE DRILL HOLE DEPTHS

Hole No.	Estimated Collar Elev.	Estimated Bottom Elev.	Estimated Depth
1	6140	5650	490
2	6200	5700	500
3	6300	5770	530
4	6400	5820	580
5	5920	5580	340
6	6015	5620	395
7	6040	5660	380
8	6210	5705	505
9	5780	5505	275
10	5800	5550	250
11	5980	5590	390
12	6100	5625	475
13	5590	5490	100
14	5600	5525	75
15	5820	5575	245
		TOTAL FOOTAGE	5,530

CORE DRILL HOLE DEPTHS

SCHEDULE 1

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SCHEDULE 2

DRILLING SUMMARY

Hole	Est. Hole Depth	Est. Non-Coring	Est. 0'-200'	Est. 200'-300'	Est. 300'-400'	Est. 400'-500'	Est. 500'-600'
1	490	290		10	100	90	
2	500	300			100	100	
3	530	330			70	100	30
4	580	380			20	100	80
5	340	140	60	100	40		
6	395	195	5	100	95		
7	380	180	20	100	80		
8	505	305			95	100	5
9	275	75	125	75			
10	250	50	150	50			
11	390	190	10	100	90		
12	475	275		25	100	75	
13	100		100				
14	75		75				
15	245	45	155	45			
TOTALS	5,530	2,755	700	605	790	565	115
Price per foot		2.00	2.25	2.50	2.75	4.00	5.00
Costs		5,510.00	1575.00	1512.50	2172.50	2260.00	575.00

TOTAL COST, STAGE I - - - - $13,605.00

DRILLING SUMMARY

SCHEDULE 2

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE FT KNOX LEASE, PREPARED FOR URADO URANIUM, INC., 304 MAIN STREET, GRAND JUNCTION

SCHEDULE 3

ESTIMATE OF AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS

Explanation	Unit	No. of Units	Cost per Unit	Total cost each Item	Grand Total
Drilling Contractor					
Stage I Drilling (see Schedule 2)	Feet	5,530	$ 2.36		$13,037.50
Stage II Drilling					
22 Holes at 370 feet (aver. depth)					
Non-coring	Feet	4,050	2.00	$ 8,100.00	
Coring 0'-200'	Feet	1,040	2.25	2,340.00	
Coring 200'-300'	Feet	890	2.50	2,225.00	
Coring 300'-400'	Feet	1,160	2.75	3,190.00	
Coring 400'-500'	Feet	830	4.00	3,320.00	
Coring 500'-600'	Feet	170	5.00	850.00	
Total Stage II Drilling		8,140	$ 2.36		$20,025.00
Reaming (50% Total Footage)	Feet	4,070	1.50		6,105.00
Casing (20% of Reaming Footage)	Feet	810	2.00		1,620.00
Road & Drill Site Preparation					
Moving Dozer to & from Property	Round Trip	6	100.00		600.00
Dozer Rental per day	Day	30	100.00		3,000.00
Compressor & Blasting	Day	10	50.00		500.00
TOTAL ESTIMATED AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS	Feet	13,670	$ 3.284		$44,887.50

ESTIMATE OF AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS

SCHEDULE 3

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE FT KNOX LEASE, PREPARED FOR URADO URANIUM, INC., 304 MAIN STREET, GRAND JUNCTION

SCHEDULE 4

ESTIMATED COSTS UNDER 6b, 6c, 6f & 6g, MF-103

Explanation - Heading and Letter	Cost per Hour	Cost per Day	Cost per Month	Cost per Project	Unit Cost per MF-103 Heading
6 (b) Labor, Supervision and Consultants					
Geo-Engineering Fees			$1000.00	$ 6,000.00	
Geo-Engineering Expenses		$10.00	250.00	1,500.00	
Draftsman 50 hrs/month	$3.00		150.00	900.00	
Typist 50 hrs/month	2.25		112.50	675.00	
Sampler & Field Assistant		15.00	375.00	2,250.00	
Total under 6 (b) of MF-103 (13,670')				$11,325.00	$0.83
6 (c) Operating Materials & Supplies					
Office supplies, map & drill log reproductions for Monthly reports & other correspondence with DMEA			150.00	900.00	
Survey stakes & other field supplies				200.00	
Total under 6 (c) of MF-103 (13,670')				$ 1,100.00	$0.08
6 (f) New Building, Installations, etc.					
1 trailer house for project personnel (Rental)			50.00	300.00	
Total under 6 (f) of MF-103 (13,670')				$ 300.00	$0.02
6 (g) Miscellaneous					
Accounting expense, etc.			100.00	$ 600.00	
Payroll taxes estimated at 10% of $637.50			63.75	382.50	
Total under 6 (g) of MF-103 (13,670')				$ 982.50	$0.07

ESTIMATED COSTS UNDER 6b, 6c, 6f & 6g, MF-103

SCHEDULE 4

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

APPLICATION FOR DMEA PROJECT ON THE FT KNOX LEASE, PREPARED FOR URADO URANIUM, INC., 304 MAIN STREET, GRAND JUNCTION

SCHEDULE 5

SUMMARY OF COSTS

	Units	No. of Units	Cost per Unit	Total Cost per Item	Grand Total
6a-Independent Contractors (Sch. 3)	Feet	13,670	$3.284	$44,887.50	
6b-Labor, Supervision & Consultants (Schedule 4)	Feet	13,670	0.83	11,325.00	
6c-Operating Materials & Supplies (Schedule 4)	Feet	13,670	0.08	1,100.00	
6d-Operating Equipment	None				
6e-Rehabilitation & repair	None				
6f-New Buildings, Installations (Schedule 4)	Feet	13,670	0.02	300.00	
6g-Miscellaneous	Feet	13,670	0.07	982.50	
6h-Contingencies					
For (a) above - 15%				6,733.00	
For (b) above - 10%				1,133.00	
For (c) above - 20%				220.00	
For (f) above - 20%				60.00	
For (g) above - 50%				491.00	
Calculated Unit Cost	Feet	13,670	$4.918		$67,232.00
Calculated Cost of Project using Unit Cost Bid and before allowance for Analytical Work	Feet	13,670	$4.918		$67,229.00
Analytical Work					
U_3O_8 Analysis	Sample	350	3.50	1,225.00	
V_2O_5 Analysis	Sample	350	1.50	525.00	
$CaCO_3$ Analysis	Sample	350	1.00	350.00	2,100.00
					$69,329.00
Total Cost of Project during DMEA Participation - - - - - - - - - - - - - -					$69,329.00
Less 25% to be paid by URADO URANIUM, INC. - - - - - - - - - - - - - - - - -					17,333.00
AMOUNT OF DMEA LOAN REQUESTED - - - - - - - - - - - - - - - - - -					$51,996.00

SUMMARY OF COSTS

SCHEDULE 5

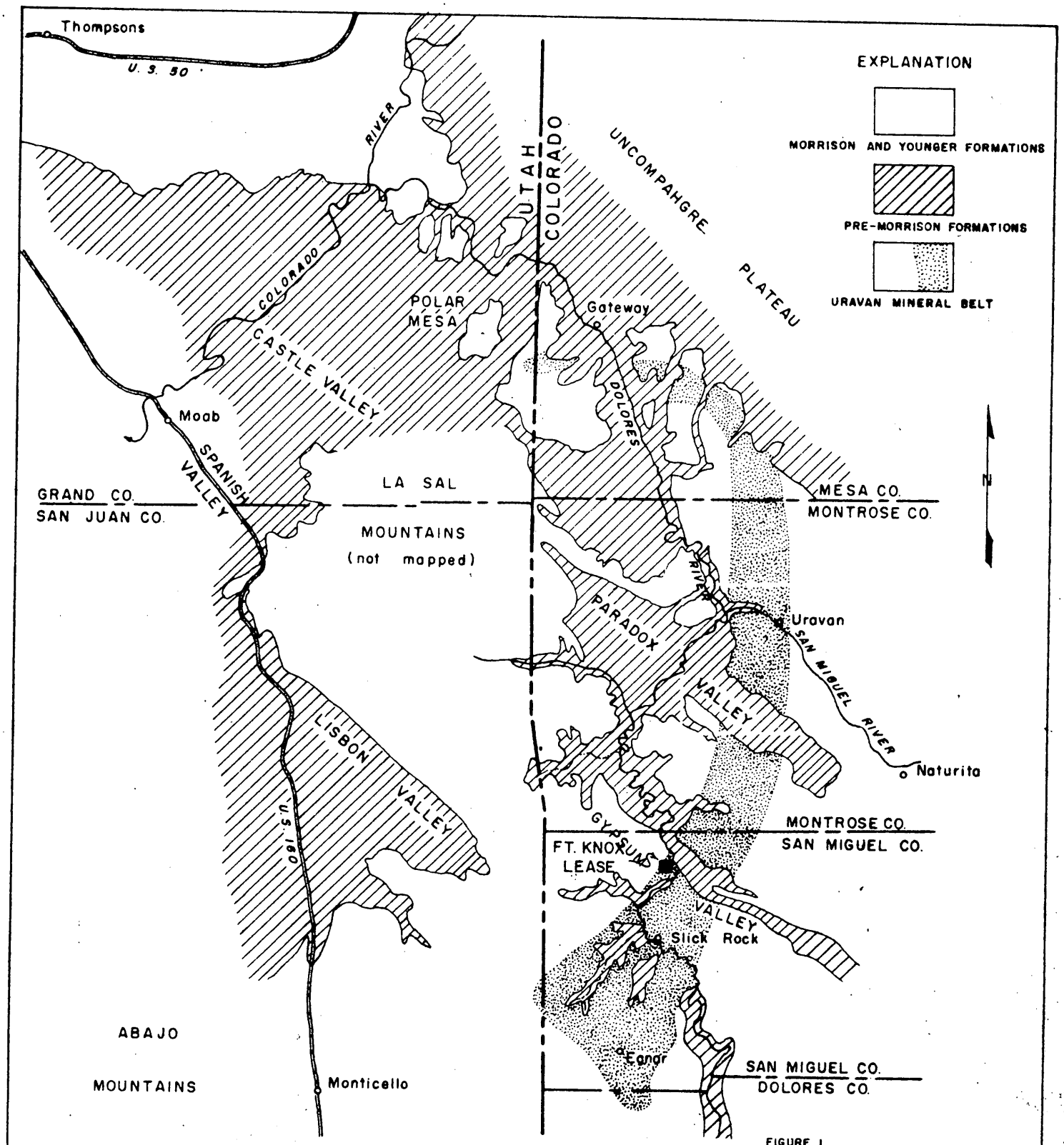
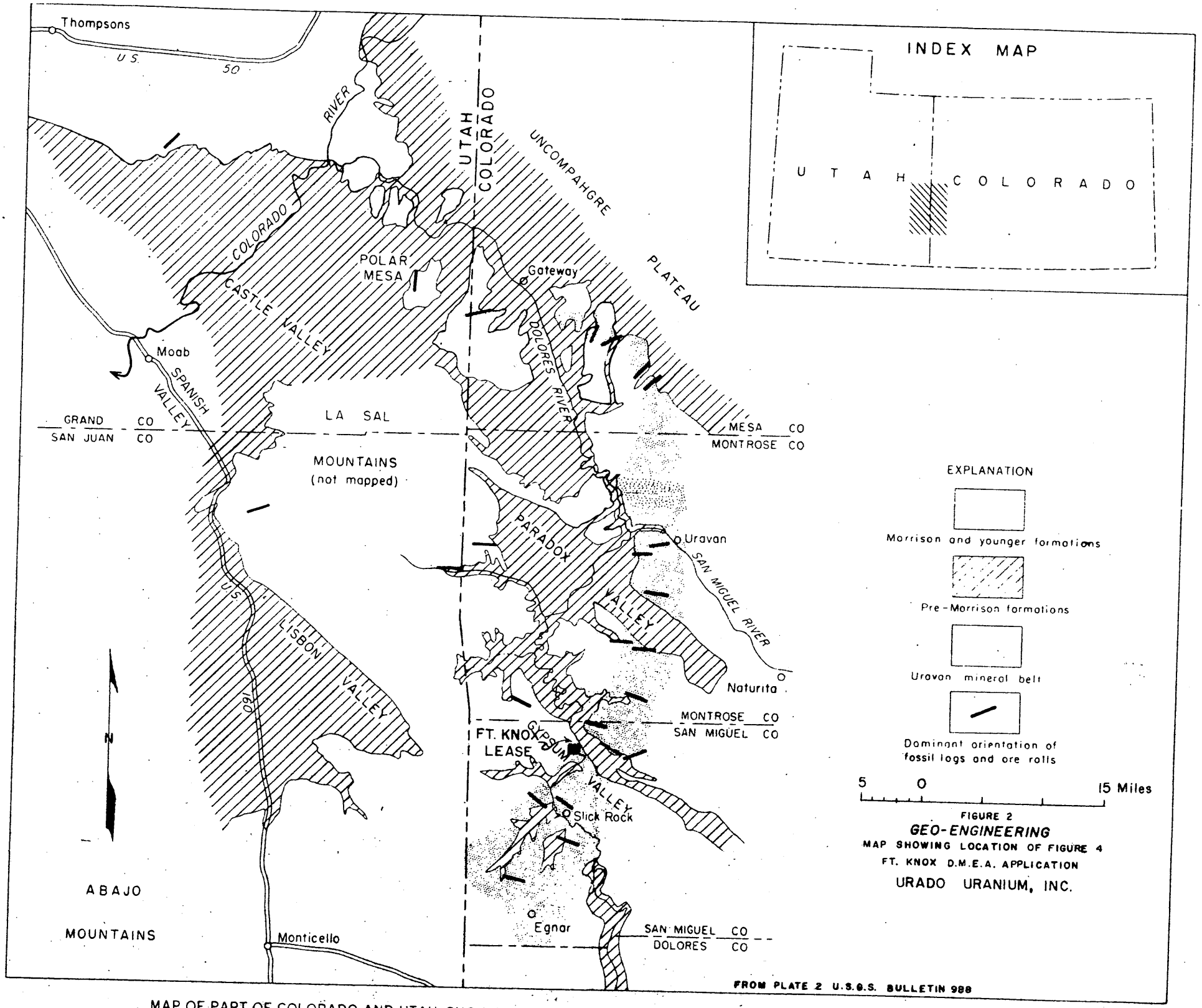


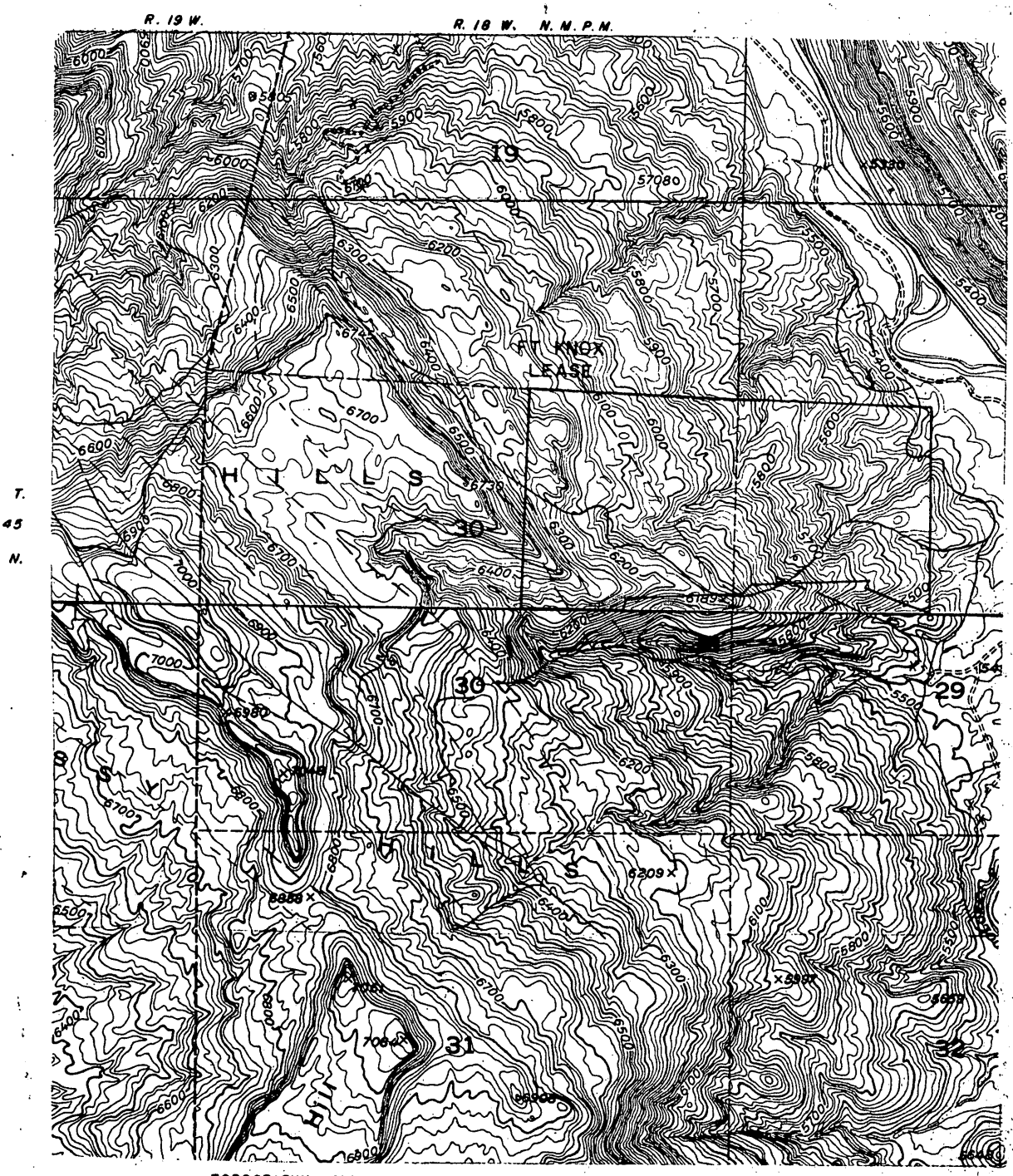
FIGURE I
GEO-ENGINEERING
MAP OF URAVAN MINERAL BELT
SHOWING
LOCATION OF
FT. KNOX D.M.E.A. APPLICATION
URADO URANIUM, INC.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 4 1955



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

MAR 1 4 1955



TOPOGRAPHY FROM U.S.G.S. QUADRANGLE MAP ANDERSON MESA

FIGURE 3

GEO-ENGINEERING

MAP

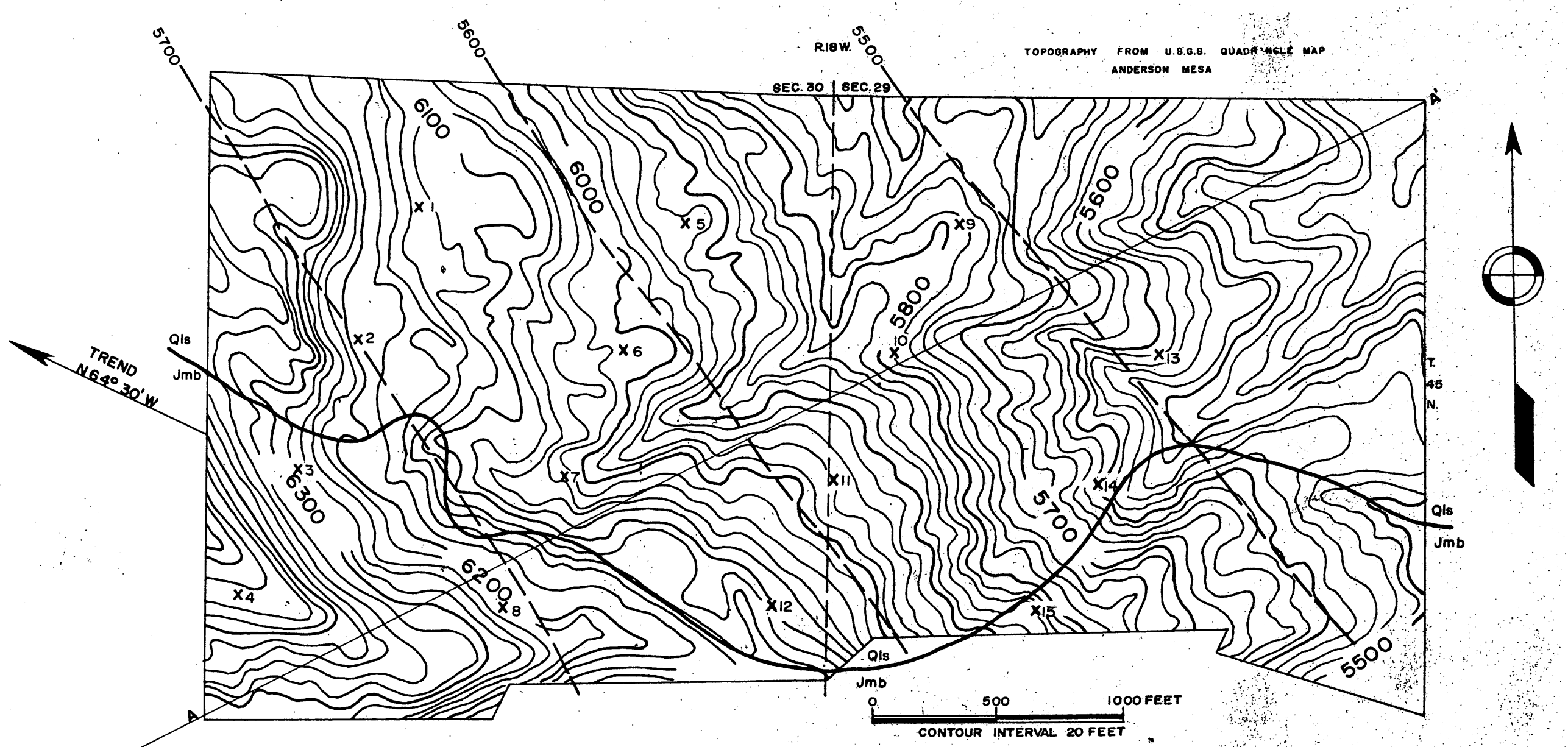
SHOWING

FT. KNOX LEASE

URADO URANIUM, INC.

Scale: 1" = 2000'

DEPARTMENT OF THE INTERIOR
Leasing Minerals Administration
RECEIVED
MAR 14 1955



SEE FIGURE 5

FIGURE 4.

GEO-ENGINEERING

GEOLOGIC MAP

D.M.E.A. APPLICATION

ON

FORT KNOX LEASE

SAN MIGUEL COUNTY, COLORADO

PREPARED for URADO URANIUM INC.

EXPLANATION

X^2	PROPOSED DRILL HOLE
5500 — —	SUBSURFACE CONTOUR INTERVAL AT BOTTOM OF FAVORABLE ORE ZONE 100'
———	Qls – Jmb CONTACT
Qls	LANDSLIDE AREA
Jmb	BRUSHY BASIN

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 14 1955

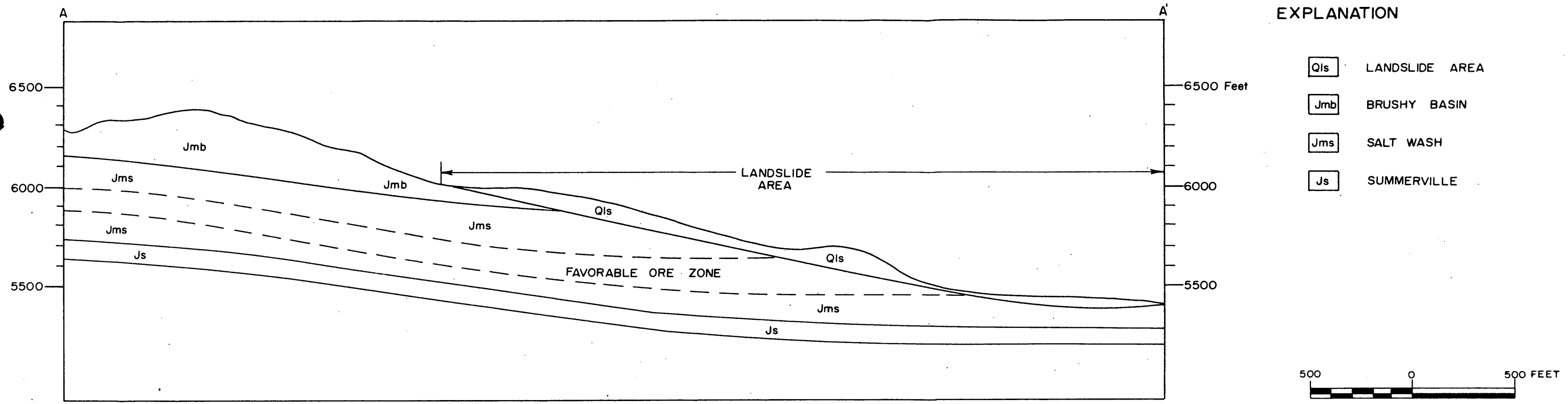


FIGURE 5.

GEO-ENGINEERING

SECTION A-A' FROM FIGURE 4

D.M.E.A. APPLICATION

ON

FORT KNOX LEASE

SAN MIGUEL COUNTY, COLORADO

PREPARED for URADO URANIUM INC.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 4 1955

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

RECEIVED
MAR 14 1955

Not to be filled in by applicant

Docket No. 3721
Metal or Mineral Uranium
Date Received 3-14-55
Estimated Cost $69,329
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: URADO URANIUM, INC.
304 Main Street
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 Most of lands in North West Quarter of Section 29 and North East Quarter of Section 30 Township 45 North Range 18 West N.M.P.M. in San Miguel County, Colorado. A sublease of Simpson Mining Company's Atomic Energy Commission Lease

(*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 Sublease of ans A. E. C. Lease to Simpson Mining Company, 304 Main Street, Grand Junction, Co

(*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 (See Exhibit 2)

(*e*) If you own the land, describe any liens or encumbrances on it Liens A. E. C. Lease

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. February 20 5

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. URADO URANIUM, INC. Vice-President

(*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 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 30 days and be completed within 7 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 February 28, 1955

URADO URANIUM, INC
(Applicant)

By Louis P. Bruzzini

Vice-President

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

Division of the Interior
Colorado Minerals Administration
RECEIVED
MAR 14 1955

AGREEMENT OF SUBLEASE

THIS AGREEMENT, Made and entered into in duplicate as of November 9, 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 URADO URANIUM, INC., a Colorado corporation whose address is 304 Main Street, Grand Junction, Colorado, party of the second part, hereinafter called Lessee, WITNESSETH:

Lessors are the owners of Mining Lease No. AT(05-1)-OG-10 under date of March 1, 1953, from the United States Atomic Energy Commission. A true copy of said lease being hereto attached and made a part hereof. Lessee desires to sublease a portion of the lands and premises described in said lease. Lessors are willing to sublease said described premises for the period, and upon the following terms and conditions. Accordingly, the Lessors, in consideration of the sum of One Thousand Dollars ($1000.00), receipt of which is hereby acknowledged, and the delivery of 100,000 shares of capital stock as hereinafter set forth, and of the royalties hereinafter reserved and the covenants and agreements hereinafter expressed and by Lessee to be kept and performed, hereby transfer, assign and sublease to Lessee:

Northwest Quarter (NW $\frac{1}{4}$) of Section Twenty-nine (29) and the Northeast Quarter (NE $\frac{1}{4}$) of Section Thirty (30), Township Forty-five (45) North, Range Eighteen (18) West, N. M. P. M. in County of San Miguel, Colorado.

EXCLUDING Therefrom all conflicts with the Haymaker, Haymaker Extension and Sunset Lodes (U. S. Mineral Survey No. 20586), and excluding such portion of said premises embraced within the area described by metes and bounds as follows, to wit:

Beginning at corner No. 3 of the Haymaker Extension Lode, U. S. Mineral Survey No. 20586;
thence N 17° -51' E, 651.09 feet;
thence N 85° E, 1500.00 feet;
thence N 17° -51' E, 119.89 feet;
thence N 87° -15' E, 1500.00 feet;
thence S 17° -51' W, 133.38 feet;
thence S 72° -09' E, 1500.00 feet;
thence S 17° -51' W, 600.00 feet to corner No. 4 of the Sunset Lode, U. S. Mineral Survey No. 20586;
thence N 72°- 09' W, 1500.00 feet to corner No. 3 of Sunset Lode;
thence N 17°- 51' E, 92.4 feet to corner No. 4 of Haymaker Lode;
thence S 87°- 15' W, 1500.00 feet to corner No. 3 of Haymaker Lode;
thence S 17°- 51' W, 130.00 feet to corner No. 4 of Haymaker Extension lode;
thence S 85° W, 1500.00 feet to corner No. 3 of Haymaker Extension lode, the place of beginning.

TO HAVE AND TO HOLD Unto Lessee for a term of five (5) years from the date hereof and thereafter so long as merchantable ores are mined and sold from said premises, unless sooner forfeited through the violation of any covenant herein required to be performed by Lessee with the right to surrender this sublease as hereinafter set forth.

In consideration of such sublease, Lessee COVENANTS AND AGREES with Lessors as follows, to wit:

1. To deliver to Lessors On Hundred Thousand (100,000) Shares, par value of one cent ($0.01) per share, of the capital stock of Urado Uranium, Inc., within seven (7) days after the Securities And Exchange Commission has approved the sale of capital stock in said corporation, such certificates to be issued in the following names and amounts:

Simpson Mining Company	25,000 Shares
Arthur Hamilton	9,000 Shares

Exhibit No. 42

Otis Phillips, Jr.	9,000 Shares
John W. Harris	9,000 Shares
W. D. McDavid	30,000 Shares
Rex Phillips	9,000 Shares
Graham B. Ladd	9,000 Shares

2. To strictly observe and comply with each of the terms and covenants of the attached lease as they relate to the lands heretofore described.

3. To make application to U. S. Government for a Defense Minerals Exploration Administration Loan on said leased premises, on or before February 15, 1955. To furnish Lessors with a true copy of said application on or before date of submission.

4. To enter upon said premises and to do and perform exploration and development work by expending not less than Eight Thousand Dollars ($8,000.00) on or before the 14th day of May, 1955, and to thereafter perform exploration and development work by expending a minimum of Four Thousand Dollars ($4000.00) each three (3) months and, if commercial ores are discovered, to mine and ship ores of a minimum value of Four Thousand Dollars ($4000.00) each three (3) months period, it being understood and agreed that if Lessee is unable to mine ores of Four Thousand Dollars ($4000.00) in value during each three (3) months, but shall mine some ores, it shall expend in exploration and development to make up the difference between the value of such ores and said minimum of Four Thousand Dollars ($4000.00). The first three (3) month period shall commence on May 15, 1955.

5. To cause to be paid to Lessors a royalty of fifteen (15%) percent of the proceeds of ores mined and sold from any of said premises, including fifteen (15%) percent 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.

6. 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 agents, at all reasonable times, and to permit Lessors, or their agent, full and free access to said lands for the purpose of inspection or otherwise. To furnish Lessors with true copies of all drilling records, maps, assays and other relevant information with respect to Lessee's mining operations.

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

7. 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 its mining operations hereunder.

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

MUTUAL COVENANTS

1. IT IS MUTUALLY AGREED That Lessee shall have the right to surrender this lease at any time upon giving Lessors at least thirty (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 its machinery, equipment and personal property from said lands, and upon surrender or cancellation Lessee shall leave all excavations made by it 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, of any part of said premises, without the written consent of Lessors first had and obtained.

2. IT IS FURTHER AGREED That Lessors will execute the "Owner's Consent to Lien" in order that Lessee may obtain a Defense Minerals Exploration Administration loan; however, it being understood and agreed that any royalty payment to the United States shall, in no event, reduce the royalty payment heretofore specified to be paid by Lessee.

3. IT IS FINALLY AGREED That upon violation by Lessee of any of the covenants in the foregoing sublease, the term of this sublease shall, at the option of Lessors, expire, and the same and said premises shall become forfeited to Lessors, and Lessors, or their agent, may thereupon enter upon said premises 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 twenty (20) days notice in writing, by registered mail, sent to Lessee at 304 Main Street, Grand Junction, Colorado notifying it 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 twenty (20) days from the receipt of such notice, Lessee shall surrender and deliver up the possession of all of said premises and its rights under this sublease shall thereupon case 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.

Certified a true copy.
C. M. SLOAD

(signed) Julian E. Simpson
By a partner of the Simpson Mining Company

(signed) Arthur Hamilton

(signed) Otis Phillips, Jr.

(signed) John W. Harris

(signed) W. D. McDavid

(signed) Rex Phillips

(signed) Graham B. Ladd
(Lessors)

(SEAL)

ATTEST

BY (signed) Lewis D. Anderson
Secretary

URADO URANIUM, INC.

BY (signed) Louis P. Gaggini
President, Thereunto duly authorized
(Lessee)

Exhibit No. 42

FORM OG
2/12/53

MINING LEASE NO. AT(05-1)-OG-10

Colorado Mineral Administration
RECEIVED
MAR 14 1955

This AGREEMENT OF LEASE, effective as of the First of March, 1953, by and between the United States ATOMIC ENERGY COMMISSION (hereinafter called the "Commission"), acting as agent of and on behalf of the United States of America, and Simpson Mining Company, a partnership, whose address is 1236 South Fifth Street, Grand Junction, Colorado (hereinafter called the "Lessee");

WITNESSETH THAT:

WHEREAS, the Lessee desires to develop and produce uranium ore on certain lands which would be open to location under the mining laws except for the existence of an oil and gas lease on such property, issued under the provisions of the Act of February 25, 1920, (41 Stat. 437, 30 U.S.C., Sec 181 et seq.) , as amended; and

WHEREAS, the Commission desires to acquire source materials from those certain lands; and

WHEREAS, this agreement is authorized by and has been negotiated under the Atomic Energy Act of 1946, as amended, in the interest of the common defense and security;

NOW, THEREFORE, the parties hereto do mutually agree as follows:

1. The Commission, for and in consideration of the performance by the Lessee of the covenants and agreements hereinafter expressed, does hereby lease unto the said Lessee for the purpose of mining uranium bearing ores those certain mineral lands descri ed as follows:

E ½ of section 30, W ½ of section 29, N ½ of the NE ¼ of section 31, N ½ of the NW ¼ of section 32, all in T. 45 N., R. 18W., N. M. P. M., San Miguel County, Colorado, excepting all mining claims within such area which were located prio to the effective date of this agreement. The Lessee is responsible for determining the location of such prior claims within the above described area.

The rights hereby granted are limited to mining within the vertical planes of the boundary lines of the above described premises.

2. The term of this lease shall be for so long as the Lessee shall comply with the lease terms.

3. In consideration of this lease, the Lessee agrees as follows:

(a) To enter upon the premises and commence work on or before May 1, 1953, working the property in a manner consistent with good and economical practice and to conduct all operations with due regard for good land management and avoidance of unnecessary damage or waste.

(b) Throughout the life of the lease to sustain with reasonable diligence, skill and care, a program of development and mining of uranium deposits or a program of prospecting and exploration for such deposits in such manner as to achieve and maintain maximum production of uranium ore from the leased premises, consistent with good mining practice and the size of the deposit.

(c) To comply with all requirements of pertinent State and Federal laws applicable to the conduct of mining operations.

(d) To allow the Commission and its representatives at all reasonable times to enter upon the property and into all parts of the mine for purposes of inspection, drilling, sampling and mapping.

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(e) To keep proper records of (1) shifts worked, (2) tonnage and grade of ore developed and mined, and (3) development work and drilling performed and assay data pertaining thereto.

(f) To submit reports to the Commission covering the matters referred to in 3(e) above, when requested to do so.

(g) To permit the Commission to inspect Lessee's mine maps and assay records relating to the leased premises.

(h) To conduct operations hereunder in such manner as not to interfere with the lawful operations of any third party having an interest in the premises.

4. The lease of premises for mining purposes pursuant to this agreement includes (subject to the provisions of paragraph 3(h) above) rights to use the surface of the area described only insofar as such use is reasonably necessary for the conduct of prospecting, development and mining operations for uranium, including the right of way over the surface for access to the workings. The Lessee shall have the right, to the extent required for operations, to erect buildings and structures and install machinery, and upon termination or expiration of this lease agreement it may remove any such buildings, structures and machinery placed by it on the property; provided, however, that this right of removal shall not extend to the removal of mine timbering. The Lessee hereby waives all rights, title and interest to and in all ore and tailings which have not been removed from the leased premises pursuant to Commission licensing regulations within ninety (90) days after the termination or expiration of this lease and all equipment, appurtenances, fixtures and other personal property not removed from the leased premises within such time.

5. (a) It is understood that the Commission shall not be responsible for any mechanics' or miners' liens or other liens, encumbrances or liabilities incurred by the Lessee in connection with the operation of the leased premises, and the Lessee assumes all responsibility for all claims of whatsoever nature arising from the operation or occupancy of the premises. The Lessee shall forthwith post, and at all times keep posted, in some conspicuous place upon the premises a notice stating that the premises are leased to the Lessee and that the interest of the Commission shall not be subject to any liens, claims or encumbrances arising in connection with the occupancy and operation of the premises, and that the Commission shall not be liable to any person not a party to this lease for any claims arising in connection with this lease of the leased premises.

(b) The Lessee agrees to protect and indemnify the Commission against any claims arising in connection with activities of the Lessee under this lease. The Lessee also agrees to provide (at its own cost and expense) for each workman employed by it in the conduct of its activities under the lease such protection as is required by applicable laws relating to workmen's compensation and employers' liability insurance.

6. This agreement or any interest herein may be assigned or transferred by the Lessee only upon prior written authorization from the Commission.

7. The term of this agreement shall expire, at the option of the Commission, upon failure of the Lessee to comply with any of the obligations in this lease within ninety (90) days after the receipt of a notice from the Commission specifying such failure and requesting compliance. Thereupon, the Commission or its representative may, after demand of possession in writing, enter upon the leased premises and dispossess all persons occupying the same. This lease may be terminated at any time by the Lessee by written notification to the Commission, such termination to be effective upon receipt by the Commission of the notification.

8. The Lessee does not waive any right to which he would otherwise be entitled because of the passage of subsequent legislation by entering into this agreement.

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9. The provisions of the Commission's Domestic Uranium Program Circular 6 shall be applicable to ores produced from the leased premises to the same extent as if the Lessee held such land by reason of valid location under Federal and State mining laws.

10. The Lessee warants that it has not employed any person to solicit or secure this lease upon any agreement for a commission, percentage, brokerage, or contingent fee. breach of this warranty shall give the Commission the right to terminate this lease, or, in its discretion, charge to the Lessee the amount of such commission, percentage, brokerage, or contingent fee.

11. No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this lease or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this lease if made with a corporation for its general benefit.

12. It is expressly agreed between the parties that should any legal proceedings be instituted which would interfere with the possession and enjoyment of the premises, the Lessee shall not attempt to hold the Commission liable in damages or otherwise to the Lessee on account of such disturbed and interrupted possession and enjoyment.

13. As used in this lease agreement, the term "Commission" includes the Commission and its authorized representative or representatives.

14. In performance of work under this agreement, the Lessee agrees not to discriminate against any employee or applicant for employment because of race, creed, color or national origin.

15. The Commission agrees that the Lessee by executing this agreement does not waive any right to assert any prior existing property interest in the leased tract which could have been asserted in the absence of this lease.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the day and year first above written, intending to be legally bound thereby.

Witnesses:

Harriet J. Ballard (signed)

Hazel M. Henderson (signed)

THE UNITED STATES OF AMERICA
UNITED STATES ATOMIC ENERGY COMMISSION

Frank H. MacPherson (signed)

Director, Production Division
(Title)

SIMPSON MINING COMPANY

Julian E. Simpson (signed)

Alan M. Simpson (signed)

Certified a true copy.
C. W. SHOAD

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