R-17E

R-20-E

T.

12

13

24

23

Pilot

27

26

25

30

27

26

25 sheen

36

31

35

36

264'

4 miles

7 miles

2175'N
3521

6

"DARNINGTON" No. 9 158 K & E CO., N.Y.
46000

DMEA-3633

MEMORANDUM

for

[illegible]

on

[illegible]

for

[illegible], U.K.
710 [illegible] Building
Denver, Colorado

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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SCHEDULES

1. Drill Hole Depth
2. Drilling Summary
3. Estimates of Amounts to be paid to Independent Contractors
4. Other Costs
5. Summary of Costs and Calculation of Unit Costs

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EXHIBITS

Exhibit No. 1. Executed form [illegible]-103
Exhibit No. 2. Copy of Lease (locators to applicant)
Exhibit No. 3. Owner's Executed Consent to Lien, Form [illegible]-203

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MAPS AND PLATES

Figure 1. Index Map
Plate I. Claim Map - Pilot Group
Plate II. Claim Map - Sheen Group

[illegible]
204 Main Street
Grand Junction, Colo.

December 23, 1954

[illegible]

Prepared for

[illegible], Inc.
71[illegible] Majestic Building
Denver, Colorado

[illegible].

This application, prepared by [illegible] Engineering, is for the purpose of obtaining a [illegible] project loan on two groups of claims, totaling 1[illegible] claims in the [illegible] area of San Juan County, Utah, for the applicant, Apex Uranium, Inc.

AEC form [illegible]-103 has been executed and is attached as Exhibit 1. Numbering (and lettering) of the paragraphs of this report refer to and correspond with the paragraphs of Form [illegible]-13X.

[illegible].

This application is for a [illegible] project contract of the short form or unit cost type. The project proposed is $202,[illegible].50 for exploration of 1[illegible] claims lying in two groups in the [illegible] (unorganized) Mining District in San Juan County, Utah. A total of 60,000 feet of drilling, including 12,000 feet of core drilling, is proposed at a unit cost of $3.2287 per foot. Additionally, 1,000 lineal feet of rim-stripping is proposed on the [illegible] claims at a unit cost of $1.20 per lineal foot, and [illegible],[illegible] feet of rim-stripping is proposed on the [illegible] group at a unit cost of $24 per lineal foot; and provision is made for assaying at $[illegible].00 per sample, the latter items being included in the total cost of the project but not included in calculation of the unit cost of the drilling. 28% of the total estimated expenditure or $50,[illegible] will be furnished by the applicant, Apex Uranium, Inc. The Division of Minerals Exploration Administration is requested to loan the rest, or $151,[illegible].62.

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for [illegible] project on the Lee and Flat Top [illegible] for Apex Uranium, Inc., 710 Majestic Building, Denver, Colorado

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The claim groups referred to lie within what appears at this time to be a mineral belt in the Shinarump formation. Extensive exploration in such inferred belt has produced some very large mines to the northeast and to the southwest.

The project is submitted as involving two Stages. Stage I provides for rim-stripping of the Moenkopi-Shinarump* contact followed by drilling along the trend of all channels exposed thereby. Where rim-stripping is not available, Stage I holes will be in wide spaced grid pattern. The project provides for 300 Stage I holes. Average depth of the holes is estimated at 100 feet. As the program advances and more information becomes available the holes will be located with approval of the [illegible] field team where the geology appears most favorable.

Stage II of the proposed project provides for the drilling of an additional 30,000 feet, 300 holes, average depth 100 feet, to be located with the approval of the [illegible] field team in areas where the Stage I operations produce evidence of mineralization or favorable geology.

Drilling to date in the area indicates that moisture and clay will preclude wagon drilling. Other drilling with air or water is contemplated. Approximately 40% of the holes will be cored, averaging 50 feet of coring per hole. Thus approximately 20% of the entire footage will be cored.

Personnel of Geo-Engineering will act as consulting geologists and will supervise the execution of the project.

---

*As here used, the term "Shinarump formation" includes all of the cap rock-forming sandstones that lie at the base of the Chinle formation or between the Chinle and Moenkopi formations. The units which have by some been called "Ossback", "Chinle" and "Temple Mountain Sandstone" are all included here in the term "Shinarump formation".

Geo-Engineering, 504 Main Street, Grand Junction, Colorado

Application for [illegible] project on the [illegible] Pilot Maps prepared for Gex Oberin, Inc., 713 Majestic Building, Denver, Colorado

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<u>Paragraph 1.</u> Name of applicant, etc.

(a) [illegible], Inc.
713 Majestic Building, Denver, Colorado

(b) Applicant is a Colorado corporation, duly qualified to do business in Colorado and in process of qualifying to do business in the State of Utah.

(c) Officers of the corporation (all also are directors) are:

Lawrence [illegible] Schwab, President
601 Sherman Street, Denver, Colorado

[illegible] Bowdle
2430 South Lincoln Street, Denver, Colorado

Homer L. Doerrayer, Vice-President
2073 Forest Street, Denver, Colorado

NOTE:

As above stated, Geo-Engineering will be in active charge of the project for applicant. It is therefore requested that correspondence regarding this application be addressed to:

[illegible]
504 Main Street
Grand Junction, Colorado

(d) Not applicable.

<u>Paragraph 2.</u> Not applicable.

Geo-Engineering, 204 East Street, Grand Junction, Colorado

Application for [illegible] project on the Sheen and Pilot Groups prepared for Apex Uranium, Inc., 713 Majestic Building, Denver, Colorado

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Paragraph 3. Applicant's property rights, etc.

(a) Legal description.

Lode mining claims in [illegible] (unorganized) Mining District in San Juan County, Utah, referred to as the Pilot and Sheen Groups, as follows:

Pilot 11 to 15, inclusive (5 claims) in Sections 22, 23, 26 and 27, T. 33 S., R. 19 E. (See location map, Plate I). Location certificates recorded Book 109, pp. 28-31, and re-recorded Book 133, pp. 414-416.

Sheen 1 to 10, inclusive (ten claims) in Sections 29, 32 and 33, T. 33 S., R. 20 E. (See location map, Plate II) Location certificates recorded Book 111, pp. 351-356.

Location of both groups shown on attached index map (Figure 1).

Applicant holds lease on 15 additional claims and option to lease on 20 claims in immediate area, described in applications for [illegible] projects similar to the instant application which are presently being prepared and will be submitted shortly.

(b) Name of property.

Property has no name other than the claim names and is herein referred to as the Pilot and Sheen Groups.

(c) Applicant's interest in property.

Applicant holds a lease upon the above described 15 claims from Lyle [illegible] Campbell and Julian [illegible] Simpson, both of Grand Junction, Colorado. Lease (copy) attached hereto as Exhibit 2.

(d) Lease - copy attached, Exhibit 2.

Consent to lien, form [illegible]-203, executed by owners-lessors, is attached hereto as Exhibit 3.

(e) Liens - none.

Geo-Engineering, 804 [illegible] Street, Grand Junction, Colorado

Application for [illegible] Project on the [illegible] and Pilot Groups prepared for [illegible] Uranium, Inc., 711 [illegible] Building, Denver, Colorado

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(f) Land consists of unpatented claims. Location certificates recorded, San Juan County, Utah, in the names of the above-mentioned lessors as above stated under item (a). Photo copies will be furnished by applicant on request.

Para graph 4. Physical description of property.

(a) Operations, etc.

There are no mine workings and there has been no exploratory work on the property.

(b) Production, reserves.

There are no known deposits on the property.

(c) Geologic features and justification for exploration.

The claims are located in what appears to be a uranium mineral belt in the Chinarump formation similar to the belt which has been defined for the Morrison formation. Areas to the northeast and to the southwest of the property have, under extensive exploration, produced some very large mines. (See Index Map, Figure 1). Drilling programs in White Canyon and on Deer Flat have been reduced, proving the belt northward toward the [illegible]. Bin-strength on neighboring claims (owned by [illegible] Engineering, Grand Junction, Colorado) has exposed several mineralized sandstone lenses which have not to date been explored. If the inferred mineral belt exists, and applicant's consulting geologists have expressed the opinion that it does, the prospects for this property are very good. Relatively shallow drilling depths justify systematic exploration.

Geology Stratigraphy: The two groups of claims are located on the Monument Upwarp, a broad flattened anticline with a north-south axis. [illegible] is the northern nose and eastern flank of the anticline.

The resistant Chinarump formation of late Triassic age is the only economically important ore-bearing formation underlying the two groups. Ore has been found in the Permian Cutler formation which also underlies the claims. Exploration of this formation is not included in this project because of the prohibitive drilling depths. (Note: We have used the term "Chinarump Formation" including all of the cap rock forming sandstones that lie at the base of the Chinle formation or between the Chinle and Moenkopi formations. The units which have by some been called "Moenkopi", "Shinarump" and "Commission Sandstone" are all included here in the term "Chinarump Formation".)

Geo-Engineering, 201 Main Street, Grand Junction, Colorado

Application for Exploration Project on the Sheen and Pilot Group owned for Apex Uranium, Inc., 711 Majestic Building, Denver, Colorado

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The Pilot claims lie on a mesa which has been from which erosion has stripped all of the post-Chinarump formations leaving a clean Chinarump cap rock upon which drill sites may be prepared with minimum effort and expense. On the Sheen Group the drills will stand on a broad bench formed by the resistant Chinarump formation and site preparation will be relatively inexpensive. The east end lines of the claims, however, lie along the toe of a ridge formed by red mudstone and sandy siltstones of the Chinle formation, capped by the hard, rocky, resistant red sandstones of the Jurassic Wingate formation.

(d) Accessibility

The claims lie about 20 airline miles west of Monticello, Utah, and about 55 miles southwest of Moab. Actual distance to the U.V.M. plant at Monticello is about 65 miles - 10 miles on an excellent paved highway and 55 miles over better than average mine roads. Moab and Monticello have adequate mine supply houses.

(e) Availability of manpower, etc.

Manpower, skilled in performing the type of drilling and exploration planned, is readily available in the area. Operable sources of material and supplies are also available. Equipment will be furnished by private contractors.

Geo-Engineering, a professional engineering firm, will supply surveying instruments and transportation for technical personnel.

Paragraph 5. The exploration project.

(a) The mineral for which this project will explore is Uranium.

(b) Proposed work, etc.

The Exploration Plan recommended to the Atomic Energy Commission and to Apex Uranium, Inc., is as follows:

Stage I:

Approximately 1,000 lineal feet of rip-stripping by bulldozer should be done on the Pilot claims in the approximate location shown on Plate I; and approximately 2,500 lineal feet on the Sheen claims in the approximate location shown on Plate II.

Radiometric surveys to be made in areas where it is not feasible to expose the contact pit by stripping.

Drilling of 300 proposed holes at sites to be selected and submitted to the AEC field team for approval as data from rip-stripping is obtained. Depth of the holes is estimated to range from 50 feet to 100 feet and the average depth of each 300 holes is estimated to be 100 feet, the aggregate footage thus being 30,000 feet.

Stage II:

Drilling of 300 additional test holes following the usual pattern of fifty feet spacing in and around the areas where the stage I stripping and drilling has revealed favorable geology. Locations of such Stage II holes to be made with the approval of the AEC field team as data from the preliminary work is accumulated and evaluated. Estimated depths of the Stage II holes is the same as for Stage I drilling, i.e., 100 feet per hole, and the proposed 300 holes will thus involve an aggregate of 30,000 feet.

Geologic Control of Drilling.

Applicant's consulting geologists will maintain close geologic control over the drilling and will locate and relocate proposed drill sites, with prior AEC approval, in the light of continually developing information.

Logging and Sampling.

A sampler who will also act as a field assistant for surveying will be employed to do the logging and sampling. An accurate log will be maintained by the driller. Barren core will be arranged on the ground or otherwise preserved and properly identified 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 and will be carefully examined by the sampler or other competent individual, using a field gamma ray detection 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 properly preserved until the geologist can properly sample the same. Core losses will be prorated proportionately regardless of lithology. Each sample will be carefully described by the geologist in a bound field book, as it is placed in the sample sack. 11

samples will be sent to commercial assayers for percentage determination of U_3O_8, P_2O_5, and $CaCO_3$. In addition, all holes will be checked by probe by the sampler, geologist or other competent individual.

(c) Duration of Project.

The work will start within 30 days from the date of an exploration contract. It is estimated that it will require 18 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.

(d) Ability, Operating Experience, etc.

Applicant's president, R. Schwab, is President and General Manager of International Fire Insurance Company; Mr. Howdle is President and General Manager of the Howdle Sheet Metal Company; and Mr. Hochmayer is President and General Manager of the Hochmayer Printing Company. Such officers and directors have demonstrated successful business management of their respective companies, and are experienced executives.

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

Louis F. Bagnini, who is Chief Geologist for Geo-Engineering, began working in uranium in 1941, as geologist for the Union Mines Development Corporation, a contractor for the United States Army Manhattan Engineering Project. Subsequent experience in carnotite exploration included almost two years with the Exploration Branch of the Atomic Energy Commission in Grand Junction and six months with the United States Vanadium Company. Mr. Bagnini was for two years Mining Superintendent of the Delaney 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 1953, Mr. Bagnini was Manager of the Colorado Uranium Division of the J. K. Mullet Company. During this period Mr. Bagnini successfully prepared applications for and administered for several months two large U.A. projects.

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Harold [illegible]. Gulo is a geologist and geophysicist and a co-partner in Geo-Engineering with Mr. Gagini and Mr. Lewis [illegible] Anderson. Since graduating with a degree in economic geology from Oregon State College in 1941, Mr. Gulo has, in addition to uranium, worked with gold, oil, copper, cobalt and tungsten; this includes [illegible] years' experience in metal mining and [illegible] 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 1/8 investment interest. His work has included the preparation of Defense Materials Acquisition Administration projects and, after approval of loan applications by that agency, supervision of the project. During 1953-54, Mr. Gulo was project geologist and then acting superintendent of the Gull Canyon mines of the J. M. Simplot Company.

Lewis [illegible]. Anderson, mining engineer, is a graduate from the Colorado School of Mines (registered mining engineer 1954 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 1948 through April 1950, he worked as mining engineer in the General Chemical Division of Allied Chemical and Dye. He was mine foreman of the Blue-Star Gating Mining Company, Idaho, Colorado, from June 1950 to October 1951. Mr. Anderson then accepted employment as Division Engineer for the Delaney Mining Company in the Gateway, Dove Creek, Monticello, and Lisbon Valley area. From June 1952 to 1954, Mr. Anderson's duties as mining engineer covered both the mining and milling of vanadium-uranium ores and included jurisdiction over the United States Vanadium Company's uranium operations in the adjacent, Slickrock area.

Paragraph C. Estimate of Costs.

Applicant requests that this exploration project contract be placed upon a unit cost basis. Costs of the project are calculated in terms of the cost per foot of drilling, except for the costs of sample analysis and of rim-stripping, reflected by separate units of cost.

[illegible] DRILLING [illegible]

(a) Independent Contracts.

Drilling will be done by qualified private contractors. The prices quoted by competent firms active in the Kramer field are used as the unit cost in estimating the drilling at $2.05 per foot. Such cost is estimated upon the basis of an average drilling depth of 100 feet, assuming maximum depth of 150 feet. The prices quoted for hole depths 0' to 200' are $4.00 per foot for drilling (rotary rig with air or water as may be required) and $2.25 for coring. It is estimated that 40% of the holes will be cored and that there will be 50 feet of coring in each hole cored. The project provides for 500 Stage I holes and 300 Stage II holes, being a total of 800 holes of 100 feet over-all depth, or 80,000 feet, making a drilling cost of $165,000.00. See Schedules 1, 2 and 3.

Road building and drill site preparation is estimated at sixty days of bulldozer work spread over the period of the drilling. Rental, with an operator, is quoted at $100 per day. Because many hole locations will be made after evaluating results of previous drilling, it will be necessary to transport the equipment to the project several times. An allowance of six such trips at $100 per round trip is believed necessary. See Schedule 3.

(b) Labor, Supervision and Consultants.

Co-Engineering will supervise, direct and act as consulting geologists for $1,000 per month and expenses. Draftsmen and a stenographer will be provided on a monthly basis to prepare necessary project reports. Field assistants will be employed by Co-Engineering or Apex Geophysics, Inc. to help with surveying and act as samplers. Such costs for six months are estimated at $32,732.40 for the project. See Schedule 4, Item 6(b).

Geo- Engineering, 534 Main Street, Grand Junction, Colorado

Application for AEC project on the Sheen and Pilot Knob prepared for Apex Uranium, Inc., 710 Majestic Building, Denver, Colorado.

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(c) Operating Materials, Supplies, etc.

Expenses for office supplies, map and drill log reproduction, for monthly reports and correspondence with AEC, etc., are estimated at $150.00 per month or $2,700.00 for the project. Expenses for survey stakes, timber cribbing, water bags, sample containers, etc., are estimated at $100.00 for the project. See Schedule 4, Item C(c).

(d) Operating Equipment.

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

(e) Rehabilitation and Repairs.

None needed.

(f) New Buildings, Improvements and Installations.

Rental of one trailer house for field office and quarters for supervisory personnel at $50.00 per month for 18 months is included in the estimated cost of the project. Schedule 4, Item C(f).

(g) Miscellaneous.

Expense of Apex Uranium, Inc. for accounting and record keeping for project, etc. is estimated at $100.00 per month. Additional expenses for payroll taxes, estimated at 10% of items in (b) supra - wages of draftsman, steno, field assistant, are included at $67.15 per month. Schedule 4, Item C(g).

(h) Contingencies.

Drilling contractors vary the drilling charge with depth of the hole. Estimate for drilling cost is based upon an average depth of 100 feet. However, it is probable that few, if any, holes will be less than 50 to 75 feet while many may exceed 100 or even 150 feet. In such event, the drilling cost will exceed $2.35 per foot. Estimates for road, trail and site construction may be inadequate in that they are based merely upon hourly rates for tractor and bulldozer work, whereas some rock drilling and blasting may be required. 15% is added for such contingencies. Labor, supervision and consultant payments are based on monthly or hourly

charges. Any event which might prolong the project will increase such costs. 10% is added to cover such contingencies. Operating materials and supplies have been estimated at a minimum. Unforeseen destruction or consumption could easily increase these costs by 20%. Miscellaneous costs, supra, are increased 5% to cover omitted items, unforseeable extra help requirements, taxes, etc. Schedule 4, Item 6(h).

Analytical Work.

The cost of analytical work is not included in or covered by the drilling costs, supra, or in the cost per foot of drilling. A separate unit cost of $6.00 per sample is included in the project. It is estimated that 1200 samples may be assayed. The contract price of independent assayers is $6.00 being:

U_3O_8	3.50
V_2O_5	1.50
$CaCO_3$	1.00
	6.00

It is estimated that the project will require an average of 2 assays per hole or analysis of 1200 samples at $6.00 each.

Rim-Stripping.

Rim-stripping will be done by qualified private contractors. The prices quoted in the area by competent firms for operator and rental of heavy equipment are $150.00 per day. It is estimated that approximately 2500 feet of rim-stripping in the Sheen group will require 3 days, whereas the 1000 feet on the Pilot group, because of deeper overburden, will require 7 days. One day each way is allowed for moving on and off the property. Costs and unit costs per lineal foot are estimated for the Pilot group at 7 days plus one moving day, or 8 days at $150.00 per day, and for the Sheen group at 3 days plus one moving day, or 4 days at $150.00 per day. The approximate locations of rim-stripping are shown on Plates I and II.

Geo-Engineering, 504 Main Street, Grand Junction, Colorado

Application for [illegible] Project on the Sheen and Pilot Groups prepared for Apex Uranium, Inc., 713 Majestic Building, Denver, Colorado

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Summary of Costs (from Schedule 5)

I. Costs of drilling, including all costs of project except analytical work and film-stripping, shown separately - - - - - - - - - -	193,615.00
Calculated unit cost: 60,000 feet drilling at $3.2267 per foot.	
II. Analytical Work, - contract unit cost 1200 samples at $6.00 each	7,200.00
III. Cost of film-stripping, supra	
Pilot Group - 1,000 feet at $1.20	1,200.00
Sheen Group - 2,500 feet at $ .24	600.00
TOTAL COST OF PROJECT	202,615.00
Amount to be paid by Apex Uranium, Inc. (25%)	50,653.25
Amount of Defense Minerals Exploration Administration Loan requested	151,961.00

(Note: Detail of estimated costs shown on Schedules 1, 2, 3 and 4, and summary shown on Schedule 5.)

Geo- ngineering, 104 Main Street, Grand Junction, Colorado

Application for A Project on the Geo and Plot Groups reserved for Pox Uranium, Inc., 718 Majestic Building, Denver, Colorado

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Paragraph 7. Applicant's Share of Cost.

In accordance with the Defense Minerals Exploration Administration Regulations, applicant, Pox 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 of the company by the DMEA will be pursuant to the schedule of costs immediately hereinabove, less 25%, i.e., the amount to be loaned by the Government will be 75% of the above shown unit costs for each of the units of work performed.

Respectfully submitted as a part of "Application for Mining Exploration Project" upon Form -105, attached hereto and made a part hereof.

Pox Uranium, Inc.

By Harry Schwab
President

Application prepared, approved and recommended by:

Geo- Engineering (a partnership)
Louis A. Marshall
Harold A. Culp
Lewis A. Anderson

By Harold A Culp

Geo-Engineering, 604 Main Street, Grand Junction, Colorado

Application for [illegible] Project on the Green and Colorado Prospects for Apex Uranium, Inc., 712 Majestic Building, Denver, Colorado.

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Schedule 1.

DRILLING DEPTH

It is estimated that drilling depths will range from 50 150 feet and will average 100 feet. Stage I drilling proposes 300 holes, average depth 100 feet:

Stage I Drilling:

300 holes - average depth 100 feet (est'd.)--- total 30,000 feet

Stage II Drilling:

300 holes - average depth 100 feet (est'd.)--- total 30,000 feet

TOTAL [illegible] 60,000 feet

eo- n ineerin , 004 ain street, r nd unction, olorado

pplic tion for AEC Project on the heen and ilot roups prepared for Apex ranium, nc., 71 ajestic uildin , enver, olorado

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chedule 2.

DRILLING SUMMARY

	olis	st. oth per ole	st. ch Core rillin er ole	st. Cor in er ole
ta e I:	120	100'	50'	50'
	130	100'	100'	0'
ta e II:	120	100'	50'	50'
	130	100'	100'	0'
Total	500			

	olis	st. otal eet rillin	st. on Core rillin	st. Core rillin
ta e 1:	120	12,000	6,000	6,000
	130	13,000	13,000	-0-
ta e II:	120	12,000	6,000	6,000
	130	13,000	13,000	-0-
		50,000	38,000	12,000
Price per foot		2.05	2.00	2.25
Cost		123,000.00	96,000.00	27,000.00

chedule 2.

Geo-Engineering, 804 [illegible] Street, [illegible] Junction, Colorado

Application for [illegible] Project on the [illegible] Pilot Grounds [illegible] for [illegible] Uranium, Inc., 71[illegible] Majestic Building, Denver, Colorado

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Schedule 3.

ESTIMATE OF AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS (excluding Dim-Stripping Analysis).

Explanation	Units	No. of Units	Cost/Unit	Total Cost/Item	Grand Total
Drilling Contractor:					
Stage I Drilling (see Schedule 2)					
300 holes @ 100 feet	feet	(30,000)			
non-core drilling	feet	24,000	2.00	48,000.00	
core drilling	feet	6,000	2.25	13,500.00	
Stage II Drilling (see schedule 2)					
300 holes @ 100 feet	feet	(30,000)			
Non-core drilling	feet	24,000	2.00	48,000.00	
Core drilling	feet	6,000	2.25	13,500.00	
Total Drilling		60,000		123,000.00	123,000.00
Bulldozer & Tractor Contractor:					
Moving on & off property	Ad. trip	6	100.00	600.00	
Rental with operator	day	60	100.00	6,000.00	
					6,600.00
Total estimated to be paid to Independent Contractors	feet	60,000	2.16		129,600.00

(Note: Amounts to be paid contractors for Dim-Stripping and analytical work are shown separately; See Schedule 3).

Geo-Engineering, 204 Main Street, Grand Junction, Colorado

Application for OEA Project on the Green and Pilot Groups Prepared for Apex Uranium, Inc., 71 Majestic Building, Denver, Colorado

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Schedule 4 - Other Costs

Item & sub-item heading letter	Cost per month	Cost Project	Unit Cost 20,000 ft.
6(b) Labor, Supervision & Consultants.			
Geo-Engineering fees	1,000.00	15,000.00	
Expenses (other than personnel)	250.00	4,500.00	
Draftsman (48 hrs. per mo. x 3.00)	144.00	2,592.00	
Steno-typist (24 hrs. per mo. 2.20)	52.80	950.40	
Sampler - field assistant	375.00	7,700.00	
Total, Item 6(b)	1,821.80	32,742.40	.5465
6(c) Operating Materials, Supplies, etc.			
Office supplies, map and drill log reproductions for monthly reports and correspondence with OEA, etc.	160.00	2,700.00	
Survey stakes, timber crossings, water gages, sample containers, etc.		1[illegible].11	
Total, Item 6(c)		2,[illegible].00	.0450
6(d) Operating Equipment.			
All operating equipment will be provided by independent contractors or by Geo-Engineering		None	
6(e) Rehabilitation and Repairs.			
None needed		None	
6(f) New Buildings, Improvements and Installations.			
Rental of one trailer house	50.00	900.00	.015

Geo-engineering, [illegible] Street, [illegible] Section, Colorado

Application for [illegible] Project on the Green [illegible] Pilot [illegible] Tom Pex Premium, Inc., 71[illegible] Majestic Building, Denver, Colorado

- 0 - 0 - 0 - 0 - 0 -

Schedule 4 - cont'd.

Item [illegible] AF-103 heading letter	Cost per unit	Cost Project	Unit cost [illegible],000 ft.
C(j) Miscellaneous.			
Expense for accounting and record keeping for project, etc.	100.00	1,[illegible]00.00	
Payroll taxes, estimated at 10% of items in (i) supra - wages of draftsman, [illegible], field assistant	[illegible]	1,[illegible]	
Total, Item C(j)	157.1[illegible]	[illegible]	.0471
C(k) Contingencies.			
15% of 1[illegible],800.00	1[illegible],440.00	(Item C)	
10% of 32,752.40	3,[illegible]	(Item C(b))	
20% of 2,000.00	400.00	(Item C(e))	
50% of 2,828.24	1,414.[illegible]	(Item C( ))	
Total, Item C(h)	24,[illegible]	24,[illegible]	.4110

------ 0 -------

Recapitulation, Schedule 4

Item	Cost Project	Unit cost
C(b)	32,752.40	0.5465
C(c)	2,000.00	0.0468
C(d)	None	
C(e)	None	
C(f)	600.00	0.0140
C( )	2,828.24	0.0471
C(h)	24,[illegible]	0.4110
	64,01[illegible]	1.0[illegible]

Schedule 4 - cont'd.

Geo-Engineering, 404 Main Street, Grand Junction, Colorado

Application for [illegible] project on the Deep and Pilot Groups Proposed for [illegible] Uranium, Inc., 710 Majestic Building, Denver, Colorado

- 0 - 0 - 0 - 0 -

Schedule 5

Summary of Costs and Calculation of Unit Costs

Letter Reading	Description of Item	No. of Units	Unit Cost	Cost Project
6(a)	Drilling - Independent Contractor See Schedule III	60,000 feet	2.1000	126,000.00
6(b)	Labor, Supervision & Consultants See Item 6(b) Schedule 4	"	0.5475	32,703.40
6(c)	Operating Materials, Supplies See Item 6(c) Schedule 4	"	0.0476	2,[illegible].00
6(d)	Operating Equipment, etc. See Item 6(d) Schedule 4	"		none
6(e)	Rehabilitation and Repairs See Item 6(e) Schedule 4	"		none
6(f)	New Buildings, etc. See Item 6(f) Schedule 4	"	0.0150	900.00
6(g)	Miscellaneous See Item 6(g) Schedule 4	"	0.0471	2,[illegible]
6(h)	Contingencies See Item 6(h) Schedule 4	"	0.411[illegible]	24,[illegible]
	Total Project and Calculated Unit Cost before Rim-Stripping and Analytical Work	60,000 feet	3.2267	196,913.00
	Analytical	1200 samples	6.00	7,200.00
	Rim-Stripping: Pilot Group Shaft Group	1,000 feet 2,500 feet	1.20 0.24	1,200.00 600.00
	Total Project			206,613.00

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

Not to be filled in by applicant

Docket No. DMEA-3633
Metal or Mineral Uranium
Date Received 1-10-55
Estimated Cost $ 202,615.50
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: Apex Uranium, Inc. (a Colorado corporation)

(*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. Statement attached.

(*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 See Statement attached, paragraph 3, p 3.

(*b*) State any mine name by which the property is known. Statement attached.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee of 15 claims - see Statement attached and Lease attached as Exhibit.

(*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. Lease attached as Exhibit.

(*e*) If you own the land, describe any liens or encumbrances on it None

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. See Statement attached, paragraphs 3(a) and 3(f).

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

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

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

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

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

16—66551-1

See paragraph 4 of Statement attached, (a) to (e) inclusive.

Exhibit 1

See paragraph 5 of Statement attached, (a) to (e) inclusive

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 90 days and be completed within 21 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.

See paragraph 6 of Statement attached (a) to (h) inclusive.

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)? Yes - See Statement attached paragraph 7.

(*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 December 20, 1954

APEX URANIUM, INC.
(Applicant)

By Lary Schwab
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

MINING LEASE

THIS AGREEMENT, made and entered into in duplicate as of November 2, 1954, between LYLE F. CAMPBELL and JULIAN E. SIMPSON, of Grand Junction, Colorado, hereinafter called Lessors, and APEX URANIUM, INC., 718 Majestic Building, Denver, Colorado, hereinafter called Lessee, WITNESSETH:

That the Lessors, in consideration of the sum of Three Thousand Dollars ($3000.00), receipt of which is hereby acknowledged, and of the royalties hereinafter reserved and the covenants and agreements hereinafter expressed and by the Lessee to be kept and performed, hereby grant, demise and lease to Lessee the following described lode mining claims in Elk Ridge (Unorganized) Mining District, County of San Juan, State of Utah, the Location Certificates thereof being duly of record in the office of said County as follows:

NAME OF CLAIM	RECORDED		RE-RECORDED	
	BOOK	PAGE	BOOK	PAGE
Pilot 11	109	29	195	414
Pilot 12	109	29	195	414
Pilot 13	109	30	195	415
Pilot 14	109	30	195	415
Pilot 15	109	31	195	416
Sheen 1	111	351		
Sheen 2	111	352		
Sheen 3	111	352		
Sheen 4	111	353		
Sheen 5	111	353		
Sheen 6	111	354		
Sheen 7	111	354		
Sheen 8	111	355		
Sheen 9	111	355		
Sheen 10	111	356		

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 any of said mining claims, unless sooner forfeited through the violations of any covenant herein required to be performed by Lessee, with a right to surrender this lease as hereinafter set forth.

In consideration of such lease, LESSEE COVENANTS AND AGREES With Lessors as follows, to wit:

1. To enter upon said mining claims and to do and perform exploration and development work by expending a minimum of Three Thousand Dollars ($3000.00) each six (6) months and, if commercial ores are discovered, to mine and ship ores of a minimum value of Three Thousand Dollars ($3000.00) each six (6) months period; it being understood and agreed that if Lessee is unable to mine ores of Three Thousand Dollars ($3000.00) in value during each six (6) 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 Three Thousand Dollars ($3000.00). The first six (6) months period shall commence on November 1, 1954.

2. To cause to be paid to Lessors a royalty of fifteen per cent (15%) of the proceeds of ores mined and sold from any of said claims, including fifteen per cent (15%) of any bonus payment paid by the Atomic Energy Commission, less, HOWEVER, development and haulage allowances. All such ores shall be shipped in the joint names of Lessors and Lessee and payment of such royalties shall be made as follows: 10.5% to Lyle F. Campbell, Box 1698, Grand Junction, Colorado, and 4.5% to Julian E. Simpson, Box 127, Grand Junction, Colorado.

3. To keep full and accurate records of all operations carried on hereunder, including drilling records, maps and assays, open to inspection of Lessors, or their agent, at all reasonable times, and to permit Lessors, or their agent, full and free access to said claims for the purpose of inspection and otherwise. To furnish Lessors with true copies of all drilling records, maps, assays, 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 six (6) months period, showing gross value of ores shipped and cost of development work performed during such period.

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

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

6. So long as this lease may be in effect, to do and perform within the time prescribed by law the annual labor required for the retention of possessory rights upon said mining claims, and to make and file affidavits so stating, beginning with the period ending June 30, 1955; all of such work and expenditure to be completed on or before June 1 of each year.

MUTUAL COVENANTS

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 Lyle F. Campbell, Box 1698, 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 materials should not be required in order to continue mining at such point or points.

IT IS FURTHER AGREED That Lessee shall have the right to assign or sublet this lease, or any part or portion of said mining claims, without first obtaining consent of Lessors thereto; provided however, that such assignment or sublease shall not be valid until fifteen (15) days after Lessee has delivered a fully executed, true copy of such assignment or sublease to Lessors.

IT IS FURTHER AGREED That in the event Lessee wishes to obtain a Defense Minerals Exploration Administration loan from the U. S. Government, that the Lessors will execute the necessary Owners' Consent to Lien.

IT IS FINALLY AGREED That upon violation by Lessee of any of the covenants in the foregoing lease, the term of this lease shall, at the option of Lessors, expire, and the same and said mining claims shall become forfeited to Lessors, and Lessors, or their agent, may thereupon enter upon said 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 718 Majestic Building, Denver, 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 defaults 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 lease shall thereupon cease and determine.

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

WITNESS Their names:

Lyle F. Campbell

Lyle F. Campbell

Julian E. Simpson

Julian E. Simpson

(Lessors)

APEX URANIUM, INC.

BY N. A. Dowdell

President

Thereunto duly authorized.

ATTEST:

By Charles J. Carroll

Secretary

surname copy

700

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

Ching
Ellis

NOV 10 1955

Mr. Louis P. Gaggini
Apex Uranium, Incorporated
c/o Geo-Engineering
304 Main Street
Grand Junction, Colorado

Re: Dockets Nos. DMEA-3633
and DMEA-3645 (Uranium)
Acme-Sheen Groups
San Juan County, Utah

Dear Mr. Gaggini:

Reference is made to Ernest Wm. Ellis' letter of July 29, 1955, to you regarding a revised application covering the Acme-Sheen Groups of claims.

Inasmuch as three months have now elapsed and we have not received the revised application, we assume that you no longer desire to proceed with the application. Accordingly, we are considering the subject dockets as closed, effective as of the date of this letter.

In the event you wish to submit a new application covering the subject claims, we shall assign a new docket number to such application.

Sincerely yours,

K. O. Mittendorf

Administrator

MChing/gla
11-9-55
cc to: Admr.'s Reading File
Docket No. DMEA-3633
Docket No. DMEA-3645
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Ching
DMEA Field Team, Region III (2)

R.C.L.

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

September 2, 1955

Memorandum

To: Mr. Ellis

From: Grace L. Ault

Re: DMEA-3751, National Exploration Co. (Geo-Engineering)
DMEA-3633, Apex Uranium, Inc.
DMEA-3645, Apex Uranium, Inc.
DMEA-3722, Apex Uranium, Inc.

During your absence today at noon, Mr. Louis Gaggini of Geo-Engineering telephoned from New York City, especially with respect to Docket DMEA-3751, National Exploration Company. Over Mr. Mittendorf's signature, we had advised them that the docket would be closed within 30 days from the date of our letter, August 3, 1955. He said the time was up today, and because he was in New York they could not, of course, get the information in by the deadline. I told him that as long as we had assurance that information would be submitted, the closing date was flexible and that the docket would be held open.

He said to tell you that he would be in the East for three weeks, and during that time he expects to make a trip to Washington, and would drop in to talk with you.

With respect to the first two Apex dockets listed above, he said he had submitted a new application to Apex Uranium for approval and signature, and he thought it should be coming along shortly.

On the last named Apex docket, Region III has conducted the field examination (he did not give the date), and he thought the report would be coming in before too long.

Grace Ault

Grace Ault

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

Surname copies

JUL 29 1955

Mr. Louis P. Gaggini
Apex Uranium, Incorporated
c/o Geo-Engineering
304 Main Street
Grand Junction, Colorado

Re: Docket Nos. DMEA-3633 and
DMEA-3645 (Uranium)
Acme-Sheen Groups
San Juan County, Utah

Dear Mr. Gaggini:

This will acknowledge receipt of Mr.Lewis D. Anderson's letter, dated July 5, 1955, wherein it is noted that you are presently revising the above-named applications which formerly included the Acme-Sheen Groups as well as the Pilot-Lace Groups. Now that just the latter Groups are covered under Docket DMEA-3722 only, the Acme-Sheen Groups will be included in one or both of the two dockets referred to above. Before submitting the revised application, please make sure it is complete in every detail, including Form MF-103. Furthermore, if a completely new application is submitted, it will be easier to process. The old docket numbers may then be discontinued and a new docket number assigned. This would save much confusion.

Mr. Anderson requests additional time after the thirty-day deadline of July 9, as was established by our letter of June 9, 1955. Accordingly, we will hold the subject dockets open for a reasonable time. It will be appreciated, however, if you will keep us informed as to the time we may expect the revised application, as we do not like to keep the applications in our active file indefinitely.

Sincerely yours,

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

EWEllis/gla 7-27-55
cc to: Admr.'s Reading File
Docket DMEA-3633
Docket DMEA-3645
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700

DMEA FT, Region III (2)

GEO-ENGINEERING
304 Main Street - Room 15
Grand Junction, Colorado

July 5, 1955

Mr. Ernest Wm. Ellis, Chief
Rare & Miscellaneous Metals Division
Defense Minerals Exploration Administration
U. S. Department of Interior
Washington 25, D. C.

Re: Docket No. DMEA 3722,
3633 and 3645
Pilot-Lace, Acme-Sheen Groups
San Juan County, Utah

Dear Mr. Ellis:

In reply to your letter of June 9, 1955, pertaining to the above Docket Numbers, we are forwarding the revised Pilot and Lace Groups DMEA application. This revised application will keep the Pilot and Lace Claims in their respective group.

On the revised Acme and Sheen Group application, we would like an extension on the time for its completion. Some exploratory drilling was done on these claims during the last part of June, 1955. We have not been able to obtain the completed radio-metric logs on these holes.

We will appreciate a time extension on the Acme and Sheen application, so that we may more fully comply with your request for additional information as set forth in your letter of January 27, 1955. That information has been obtained by doing more ground work in the form of assessment work.

Respectfully yours,

GEO-ENGINEERING

By Lewis D. Anderson
Lewis D. Anderson

LDA/ep

cc: William Dowdle
1804 South Pearl
Denver, Colorado

c
o
p
y

Surname 700

Ellis Mottendorf

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

Mr. Louis F. Gaggini
Apex Uranium, Incorporated
c/o Geo-Engineering
304 Main Street
Grand Junction, Colorado

JUN - 9 1955

Re: Docket No. DMEA-3633 (Uranium)
Sheen and Pilot Groups
San Juan County, Utah

Dear Mr. Gaggini:

This refers to our letter dated January 27, in which we requested additional information pertaining to the captioned application. Your letter of March 7 replied in part, but lacked the maps we requested, whereon would be shown the approximate location of the proposed drilling and other important data.

You will recall that you telephoned the writer from Montrose, Colorado, on March 22, regarding a number of applications prepared by your firm. During this conversation it was brought to our attention the difficulty we were having with the processing of the subject application due to the lack of sufficient information; also, you were informed the same difficulty was encountered in processing the two other Apex Uranium applications (Docket Nos. DMEA-3645 and DMEA-3722). You stated you would be in Washington, D. C., in April and we could discuss the three cases at that time.

The meeting was held in my office on April 15, and a very interesting discussion was had on the three applications and other pending cases, as well as the subject of Colorado Plateau activity in general. At that time you stated you would file two new applications covering the four groups of claims with the claims of each group retained in its respective group and not separated with part in one application and part in another application, as is the case at present. Included with the new applications, it was understood, would be the proper maps and other information requested in our letter of January 27.

Inasmuch as we have not received the new applications and supporting data, we assume that you no longer desire to proceed with the applications. We wish to co-operate with you in the matter of allowing ample time, but if the needed data has not been received

R.S.

within thirty days from the date of this letter, we will then consider the dockets closed.

Sincerely yours,

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

Copy to: Mr. Lawrence M. Schwab, President
Apex Uranium, Incorporated
718 Majestic Building
Denver, Colorado

EWEllis:am
6-8-55
cc to: Admr. Reading File
Docket - DMEA-3633
" - DMEA-3645
" - DMEA-3722
Messrs. J. E. Crawford, Rm. 3641
T. H. Kiilsgaard, Rm. 5224
J. O. Hosted, Rm. 3210, GSA
Code 700
DMEA Field Team, Region III, (2)

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

Docket DMEA-3633

April 29, 1955

Memorandum

To: Files

From: Ernest Wm. Ellis

Subject: Apex Uranium, Inc. applications (Uranium) docketed as follows:

Date application received		
January 10, 1955	-	DMEA-3633, Sheene and Pilot Groups
January 24, 1955	-	DMEA-3645, Lace and Acme Groups
March 14, 1955	-	DMEA-3722, Pilot, Lace, and Acme groups

First of all, see our letter of January 27 in Docket No. DMEA-3633, and the Applicant's reply dated March 7, 1955. Note also that Mr. Louis P.Gaggini of Geo-Engineering (Applicant's representative) stated that maps were being prepared, etc, etc. He also stated he would be in Washington "some time after March 12."

On March 22, Mr.Gaggini phoned from Montrose, Colorado. He called re status of W. A. Greer, Docket No. DMEA-3555. I told him the Field Team report had just been received and application was being processed accordingly. I told him we were having trouble with the three subject Apex Uranium, Inc. applications. I explained that we were awaiting the information requested in our letter of January 27. Mr. Gaggini replied that probably they would combine the three applications. He stated he would be in Washington "right after the 1st of April" and would discuss the subject applications together with the other applications ("Urado", etc.) filed by Geo-Engineering at that time. He asked us to withhold action until his arrival.

Mr. Gaggini arrived in our office on April 15. We had a long discussion with him on uranium exploration on the Colorado Plateau (present Ellis, Murphy, and Ching). We told him the Greer and Western Oil Fields(DMEA-3614) contracts were being drawn up. We also discussed the Urado applications (DMEA-3719 and DMEA-3721) (*) and told him these were being referred to the Field Team.

However, Gaggini was informed that the three subject Apex Uranium cases were still awaiting the map (or maps). He stated he would re-file two applications covering the four groups of claims shown in the three applications and would submit maps and other data, to be

(*) DMEA-3719 and DMEA-3721 were referred to Region III April 22 and 25, respectively. A third Urado application, DMEA-3706, was referred to Region III on March 18, 1955

substituted for the three subject applications. As of this date (April 29) nothing further has been received.

Recommendation: Wait for a week or so and then if nothing further is heard from Geo-Engineering, write the usual warning letter.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

APEX URANIUM, INC.

718 MAJESTIC BUILDING

DENVER, COLORADO

April 9, 1955

United States Department of the Interior
Defense Minerals Exploration Adminstration
Washington 25, D. C.

Attention: Mr. Ernest Wm. Ellis, Cheif
Rare and Miscellaneous
Metals Division

Re: Docket No. DMEA-3633 (Uranium)
Apex Uranium, Inc.
Sheen and Pilot Groups
San Jaun County, Utah

Dear Mr. Ellis:

Louis Gaggini of Geo-Engineering informs me that he had a telephone conversation with you about a week ago in which you mentioned that it would be desirable for the Defense Minerals Exploration Adminstration to place all of the Apex DMEA projects on Elk Ridge into one project. This is to inform you that the officers and directors of Apex Uranium Corporation have no objection to this procedure.

I understand that Louie is leaving for the east sometime this week and he will probably be getting in touch with you in Washington soon.

Let us know if there is anything else we can do to expidate our DMEA application.

Very truly yours,

APEX URANIUM CORPORATION

By Larry Schwab

Bill Dowdle, President

APEX URANIUM, INC.

718 MAJESTIC BUILDING

DENVER, COLORADO

April 9, 1955

United States Department of the Interior
Defense Minerals Exploration Adminstration
Washington 25, D. C.

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Rare and Miscellaneous
Metals Division

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Sheen and Pilot Groups
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Very truly yours,

APEX URANIUM CORPORATION

by Larry Edward

~~Bill Sowdie~~, President

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

April 9, 1955

Mr. William Dowdle
Apex Uranium, Inc
718 Majestic Building
Denver, Colorado

Dear Bill:

I am dictating this letter on Friday, April 1, 1955. I intend to be in New York City April 7th, and I will be calling Washington when I arrive there and will probably be proceeding to Washington within two or three days following my arrival at New York. I will do all I can for Apex at that time.

Please keep working in an attempt to give us a break on our stock. Thank you for all past favors.

Sincerely yours,

GEO-ENGIMEERING

by Louis P. Gaggini
Louis P. Gaggini

LPG:lm

WM. L. BRANCH
ATTORNEY AND COUNSELOR AT LAW
MAJESTIC BUILDING
DENVER, COLORADO

April 11, 1955

Mr. Larry Schwab
Larry Schwab Agency
901 Sherman
Denver, Colorado

DMEA-3633

Dear Larry:

I enclose herewith letter from Lou Gaggini which was received today, and which enclosures duplicate copies of letters for Apex to write to Mr. Ellis in regard to DMEA application. I am not keeping copies.

You should sign, as President of Apex, the letters directed to Mr. Ellis and mail the original direct to Washington.

Yours very truly,

Bill

Wm. L. Branch

WLB:g

Encl.

cc: Wm. R. Dowdle

700

Ellis, Selfridge, Homer, Matthews

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

MAR 29 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-3633 (Uranium)
Apex Uranium, Inc.
Sheen and Pilot Groups
San Juan County, Utah

Dear Mr. Traver:

Reference is made to your memorandum of March 21, in which you recommend that the captioned docket be closed since you assume that we have received no reply to our letter of January 27, 1955.

For your information, we received a letter, dated March 7, from Mr. Louis P. Gaggini of Geo-Engineering which partly replied to our January letter. The letter also stated that a map was being prepared showing the approximate locations of drill holes and giving the justification therefor. Mr. Gaggini stated in the letter that he planned to be in Washington some time after March 12. We are also withholding action on the other two Apex Uranium applications (Dockets Nos. DMEA-3645 and DMEA-3722). You will note that the three applications intermingle parts of the same groups of claims.

On March 22, Mr. Gaggini telephoned from Montrose, Colorado. We told him of the difficulty we were having with the three Apex Uranium applications, to which he replied that possibly now all three would be combined into one application. He asked us to withhold action until we heard further in the matter. He furthermore stated that he expected to arrive in Washington right after April 1st.

The chief purpose of Mr. Gaggini's call on March 22 was to ascertain the delay in processing the W. A. Greer application (Docket No. DMEA-3555). We told him that the field reports had been received and were being studied. However, now that a project is contemplated, we find we do not have the proper Owner's Consent to Lien and Subordination Agreement mentioned in our field referral letter of November 19, 1954. We are writing for these documents.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

APPROVED:

J. H. Hedges
Member, Bureau of Mines (JHB)

(S) R. D. Trace (JHB)
Member, Geological Survey

Copies in following Dockets:
DMEA-3633
DMEA-3645
DMEA-3722 DMEA-3555

R.G.S.

EWEllis/gla
cc: Admr.'s Reading File
Operating Committee
Code 700

Messrs. J.E.Crawford, Rm. 3641
T.H.Killsgaard, Rm. 5224
J.O.Hosted, Rm. 3210, GSA

3/25/55 gla

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

224 New Customhouse
Denver 2, Colorado

March 21, 1955

Memorandum

To: Chairman of the Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3633 (Uranium), (Sheen and Pilot groups), San Juan County, Utah

Reference is made to Mr. Ellis' letter of January 27, 1955 to the applicant on the captioned loan application, wherein he requested additional information.

It is assumed you have not received the requested data and almost two months have elapsed since the request was made. We therefore recommend that the docket be closed and the applicant notified to that effect.

W. M. Traver

W. M. Traver

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

224 New Customhouse
Denver 2, Colorado

March 21, 1955

Memorandum

To: Chairman of the Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3633 (Uranium), (Sheen and Pilot groups), San Juan County, Utah

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It is assumed you have not received the requested data and almost two months have elapsed since the request was made. We therefore recommend that the docket be closed and the applicant notified to that effect.

W. M. TRAVER.

W. M. Traver

3/11/55 glu

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

March 7, 1955

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 11 1955

United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Attention: Mr. Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

Re: Docket No. DMEA-3633 (Uranium)
Apex Uranium, Inc.
Sheen and Pilot Groups
San Juan County, Utah

Dear Mr. Ellis:

Your letter of January 27, 1955, has been in our office for some time awaiting my return from the field so that I could dictate a reply. We felt that it was evident from the text of our report that we were dealing with Uranium deposits in the Triassic Chinle formation.

We ask for rotary drilling, rather than wagon drilling, upon the suggestion of some of the government geologists who had been watching exploration projects in the Elk Mountain Area of Utah. Some other clients of Geo-Engineering will soon be attempting some wagon drilling in the area, and you may be assured that if Apex Uranium Corporation can effect their exploration by this cheaper method they will not hesitate to use it.

I do not understand what you mean by local geologic structure which might indicate the possibility of Shinarump filled channels. Our inference, as to the favorability of the area, is based on the type of data which some geologists, including myself, used to predict the Uravan Mineral Belt through Calamity and Outlaw Mesas long before it was made a reality by the large deposits discovered. Subsequently, the same type of thinking was used in the projecting of this belt through the Bull Canyon Area, in Colorado, with the resulting discovery of very large mines.

Structure, as such, has very little to do with the control of these deposits. I would like to provide you with a map, showing the structures which are important to the control but unfortunately, after 12 years experience in uranium, I have not been able to determine what they are.

The U.S.G.S. has just recently published photogeologic maps covering various parts of the Elk Mountain Area. These will permit us to show geology and the location of radioactive anomalies for a portion of the project described.

We will also submit maps showing the approximate location of drill holes. These maps are now being prepared in our office and Mr. Harold A. Culp will transmit them to you as soon as they are ready. He will, also, give his reasons for the orientation of drill hole pattern and explain the discrepancy between the concent to lien form and the maps.

I plan to be in Washington some time after March 12. The last time I was there, several years ago, I had the pleasure of talking to you on the telephone. I hope that on my next trip I might be able to talk to you personally.

Sincerely yours,

GEO-ENGINEERING

by Louis P. Gaggini
Louis P. Gaggini

LPG/ep

Copy to: Mr. L. M. Schwab, President
Apex Uranium, Inc.
718 Majestic Building
Denver, Colorado

Mr. William L. Branch
518 Majestic Building
Denver, Colorado

Surname 700

Murphy
Edlin
Mattendorf

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

Geo-Engineering
304 Main Street
Grand Junction
Colorado

JAN 27 1955

Re: Docket No. DMEA-3633 (Uranium)
Apex Uranium, Inc.
Sheen and Pilot Groups
San Juan County, Utah

Dear Sirs:

The above-docketed application for Federal aid in an exploration project has been reviewed.

It is evident that the land described lies on the southwestern edge of the Morrison-Indian Creek type of deposits and the northeastern edge of the known deposits in the White Canyon-Shinarump formation area. However, your application does not contain enough factual data on local possibilities of uranium mineralization to warrant the extensive exploration program outlined. Therefore, we request that you supply the following additional information:

1. Results of drilling in the area on which you base your conclusion that moisture and clay will preclude wagon-drilling (page 2 of application).

2. Maps showing:

a) Local geologic structure which might indicate the possibility of Shinarump filled channels.

b) Location of any radioactivity anomalies on the Shinarump outcrop areas.

c) Approximate location of the drill holes proposed in the application.

3. Supporting data giving the reason for the drill-hole pattern to be used and the approximate depth of the individual holes.

We note in the "Owner's Consent to Lien" attached to the application that the Sheen Group of claims are placed in Sections 28, 29, 32, and 33, T.33S., R.20E., while the claim map indicates the group is in Sections 25 and 36. The first description places the Pilot and Sheen groups 4 miles apart, the latter 7 miles.

R.C.B.

When an answer is received by this office regarding the above data we shall continue to process your application.

Sincerely yours,

SIGNED

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

Copy to: Mr. L. M. Schwab, President
Apex Uranium, Inc.
718 Majestic Building
Denver, Colorado

EWEllis:am
1-26-55
cc to: Admr. Reading File
Docket
Messrs. J. E. Crawford, Rm. 3641
T. H. Kiilsgaard, Rm. 5224
J. O. Hosted, Rm. 3210, GSA
Code 700
DMEA Field Team, Region III(2)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 21 1955

January 20, 1955

Memorandum

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

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

Subject: DMEA Application, Docket No. 3633, Apex Uranium, Inc., 718 Majestic Bldg., Denver, Colorado

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

We agree that the application be returned to Apex Uranium, Inc. There is no justification for an exploration-development program on the property held by the Apex company. The application gives no indications of uranium mineralization on property held by the company, and apparently little or no prospecting has been done on the property by the applicant. The fact that operating uranium mines are located on nearby claims and that the geology of the area is generally favorable is not sufficient cause for granting exploration assistance. ? ellie.

A copy of the application is attached.

John E. Crawford
John E. Crawford

Attachment

Copy to: Branch of Rare and Precious Metals
Division of Minerals
J. O. Hosted
J. E. Crawford
F i l e s

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 21 1955

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A copy of the application is attached.

John E. Crawford

Attachment

Copy to: Branch of Rare and Precious Metals
Division of Minerals
J. O. Hosted
J. E. Crawford
F i l e s

UNITED STATES
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BUREAU OF MINES
WASHINGTON 25, D. C.

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Defense Minerals Administration
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John E. Crawford

Attachment

Copy to: Branch of Rare and Precious Metals
Division of Minerals
J. O. Hosted
J. E. Crawford
F i l e s

1/19/55 glc

IN REPLY REFER TO:

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 18 1955

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

January 17, 1955

Re: DMEA-3633
Apex Uranium, Inc.
(Pilot & Sheen Claim Groups)
San Juan Co., Utah
$202,615.50
Uranium

Memorandum

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

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

Subject: Review of application

The applicant has proposed a two-stage project of stripping and drilling to explore for uranium in the Shinarump formation.

Stage I will include:

1.) 3500 feet of rim-stripping along Shinarump-Moenkopi contact.

2.) 300 holes to average depth of 100 feet.

Stage II will include:

1.) 300 holes to average depth of 100 feet.

The operator states there are no mine workings on the Pilot and Sheen claims and no exploration work has been done.

The proposed work is planned as prospecting which may eventually become an exploration project. The applicant's suggestion that his claims "appear to be in a uranium belt in the Shinarump formation similar to the belt which has been defined for the Morrison formation" is not sufficient justification for the extensive program planned for these properties.

I recommend this present application be denied. If at some future time the operator's prospecting and preliminary exploration efforts indicate the presence of uranium mineralization in the Shinarump on his property, then further consideration of possible DMEA assistance will be justified.

E. L. Newcomb

E. L. Newcomb

IN REPLY REFER TO:

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

Defense Minerals Administration
RECEIVED
JAN 18 1955

January 17, 1955

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Apex Uranium, Inc.
(Pilot & Sheen Claim Groups)
San Juan Co., Utah
$202,615.50
Uranium

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

E. L. Newcomb
ELNewcomb:hlm G-1/17/55

IN REPLY REFER TO:

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

Defense Minerals Administration
RECEIVED
JAN 18 1955

January 17, 1955

Re: DMEA-3633
Apex Uranium, Inc.
(Pilot & Shoon Claim Groups)
San Juan Co., Utah
$802,615.50
Uranium

Memorandum

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

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

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Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641 Int.

E. L. Newcomb

ELNewcomb:hlm G-1/17/55

IN REPLY REFER TO:

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

Defense Minerals Administration
RECEIVED
JAN 18 1955

January 17, 1955

Re: DMEA-3633
Apex Uranium, Inc.
(Pilot & Shasen Claim Groups)
San Juan Co., Utah
$202,615.50
Uranium

Memorandum

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

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

Subject: Review of application

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

E. L. Newcomb

ELNewcomb:hlm G-1/17/55

Geo-Engineering
304 Main Street
Grand Junction, Colorado

January 12, 1955
Subject: DMEA - 3633
Re: Apex Uranium, Inc.
Sheen and Pilot Groups

The receipt of your application dated December 20, 19tr for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3633 and referred to the Rare and Miscellaneous Division.

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

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

60932

January 12, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA - 3633 Apex Uranium, Inc.

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

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

RECEIVED

224 New Customhouse
Denver 2, Colorado

January 6, 1955

Memorandum

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Executive Officer, DMEA Field Team, Region IV

Subject: (Uranium), Application of Apex Uranium, Inc., Sheen and Pilot groups, San Juan County, Utah

Enclosed are three copies of the subject application in the amount of $202,615.50. One copy of the application is being retained in the Region IV office.

W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

January 6, 1955

Memorandum

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Executive Officer, DMEA Field Team, Region IV

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W. H. King

Enclosures

HMC:ld

sub
chron

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 JAN 10 1955

Not to be filled in by applicant

Docket No. DMEA 3633
Metal or Mineral Uranium
Date Received 1-10-55
Estimated Cost $202,615.50
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: Apex Uranium, Inc. (a Colorado corporation)

(*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. Statement attached.

(*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 See Statement attached, paragraph 3, p 3.

(*b*) State any mine name by which the property is known. Statement attached.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee of 15 claims - see Statement attached and Lease attached as Exhibit.

(*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. Lease attached as Exhibit.

(*e*) If you own the land, describe any liens or encumbrances on it None

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. See Statement attached, paragraphs 3(a) and 3(f).

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

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

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

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

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

16—66551-1

See paragraph 4 of Statement attached, (a) to (e) inclusive.

Exhibit 1

See paragraph 5 of Statement attached, (a) to (e) inclusive

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 90 days and be completed within 21 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.

See paragraph 6 of Statement attached (a) to (h) inclusive.

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)? Yes - See Statement attached paragraph 7.

(*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 December 20, 1954

APEX URANIUM, INC.
(Applicant)

By [signature]
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

atty for Co.
Wm. L. Branch
718 Majestic Bldg
CH 4-4601

Date Rec'd.
JAN 5 1955
BUREAU OF MINES
Denver, Colorado

Our Copy
DEPT. OF THE INTERIOR
Bureau of Mines Administration
Denver
JAN 10 1955

APPLICATION

for

DMEA PROJECT

on

SHEEN and PILOT GROUPS

for

APEX URANIUM, INC.
718 Majestic Building
Denver, Colorado

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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SCHEDULES

1. Drill Hole Depth
2. Drilling Summary
3. Estimates of Amounts to be paid to Independent Contractors
4. Other Costs
5. Summary of Costs and Calculation of Unit Costs

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EXHIBITS

Exhibit No. 1. Executed form MF-103
Exhibit No. 2. Copy of Lease (locators to applicant)
Exhibit No. 3. Owner's Executed Consent to Lien, Form MF-203

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MAPS AND PLATES

Figure 1. Index Map
Plate I. Claim Map - Pilot Group
Plate II. Claim Map - Sheen Group

GEO-ENGINEERING
304 Main Street
Grand Junction, Colo.

December 20, 1954

APPLICATION FOR DMEA PROJECT ON THE SHEEN AND PILOT GROUPS

Prepared for

APEX URANIUM, INC.
718 Majestic Building
Denver, Colorado

INTRODUCTION.

This application, prepared by Geo-Engineering is for the purpose of obtaining a DMEA project loan on two groups of claims, totaling 15 claims in the Elk Ridge area of San Juan County, Utah, for the applicant, Apex Uranium, Inc.

DMEA form MF-103 has been executed and is attached as Exhibit 1. Numbering (and lettering) of the paragraphs of this report refer to and correspond with the paragraphs of Form MF-103.

ABSTRACT.

This application is for a DMEA project contract of the short form or unit cost type. The project proposed is $202,615.50 for exploration of 15 claims lying in two groups in the Elk Ridge (unorganized) Mining District in San Juan County, Utah. A total of 60,000 feet of drilling, including 12,000 feet of core drilling, is proposed at a unit cost of $3.2267 per foot. Additionally, 1,000 lineal feet of rim-stripping is proposed on the Pilot claims at a unit cost of $1.20 per lineal foot, and 2,500 feet of rim-stripping is proposed on the Sheen group at a unit cost of 24¢ per lineal foot; and provision is made for custom assaying at $6.00 per sample, these latter items being included in the total cost of the project but not included in calculation of the unit cost of the drilling. 25% of the total estimated expenditure or $50,653.88 will be furnished by the applicant, Apex Uranium, Inc. The Defense Minerals Exploration Administration is requested to loan the rest, or $151,961.62.

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

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The claim groups referred to lie within what appears at this time to be a mineral belt in the Shinarump formation. Extensive exploration in such inferred belt has produced some very large mines to the northeast and to the southwest.

The project is submitted as involving two Stages. Stage I provides for rim-stripping of the Moenkopi Shinarump* contact followed by drilling along the trend of all channels exposed thereby. Where rim-stripping is not available, Stage I holes will be in wide spaced grid pattern. The project provides for 300 Stage I holes. Average depth of the holes is estimated at 100 feet. As the program advances and more information becomes available the holes will be located with approval of the DMEA field team where the geology appears most favorable.

Stage II of the proposed project provides for the drilling of an additional 30,000 feet, 300 holes, average depth 100 feet, to be located with the approval of the DMEA Field Team in areas where the Stage I operations produce evidence of mineralization or favorable geology.

Drilling to date in the area indicates that moisture and clay will preclude wagon drilling. Rotary drilling with air or water is contemplated. Approximately 40% of the holes will be cored, averaging 50 feet of coring per hole. Thus approximately 20% of the entire footage will be cored.

Personnel of Geo-Engineering will act as consulting geologists and will supervise the execution of the project.

---

*As here used, the term "Shinarump formation" includes all of the cap rock forming sandstones that lie at the base of the Chinle formation or between the Chinle and Moenkopi formations. The units which have by some been called "Mossback", "Chinle D" and "Commission Sandstone" are all included here in the term "Shinarump formation".

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Paragraph 1. Name of applicant, etc.

(a) APEX URANIUM, INC.
718 Majestic Building, Denver, Colorado

(b) Applicant is a Colorado corporation, duly qualified to do business in Colorado and in process of qualifying to do business in the State of Utah.

(c) Officers of the corporation (and also the directors) are:

Lawrence M. Schwab, President
901 Sherman Street, Denver, Colorado

Wm. R. Dowdle
2490 South Lincoln Street, Denver, Colorado

Homer F. Woehrmyer, Vice-President
2379 Forest Street, Denver, Colorado

NOTE:

As above stated, Geo-Engineering will be in active charge of the project for applicant. It is therefore requested that correspondence regarding this application be addressed to:

GEO-ENGINEERING
304 Main Street
Grand Junction, Colorado

(d) Not applicable.

Paragraph 2. Not applicable.

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Paragraph 3. Applicant's property rights, etc.

(a) Legal Description.

Lode mining claims in Elk Ridge (unorganized) Mining District in San Juan County, Utah, referred to as the Pilot and Sheen Groups, as follows:

Pilot #11 to 15, inclusive (5 claims) in Sections 22, 23, 26 and 27, T. 33 S., R 19 E. (See location map, Plate I). Location certificates recorded Book 109, pp. 29-31, and re-recorded Book 195, pp. 414-416.

Sheen #1 to 10, inclusive (ten claims) in Sections 28, 29, 32 and 33, T. 33 S., R 20 E. (See location map, Plate II) Location certificates recorded Book 111, pp. 351-356.

Location of both groups shown on attached Index Map (Figure 1).

Applicant holds lease on 15 additional claims and option to lease on 20 claims in immediate area, described in applications for DMEA projects similar to the instand application which are presently being prepared and will be submitted shortly.

(b) Name of property.

Property has no name other than the claim names and is herein referred to as the Pilot and Sheen Groups.

(c) Applicant's interest in property.

Applicant holds a lease upon the above described 15 claims from Lyle F. Campbell and Julian E. Simpson, both of Grand Junction, Colorado. Lease (copy) attached hereto as Exhibit 2.

(d) Lease - copy attached, Exhibit 2.

Consent to Lien, Form MF-203, executed by owners-lessors, is attached hereto as Exhibit 3.

(e) Liens - None.

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(f) Land consists of unpatented claims. Location certificates recorded, San Juan County, Utah, in the names of the above-mentioned lessors as above stated under item (a). Photo copies will be furnished by applicant on request.

Paragraph 4. Physical Description of Property.

(a) Operations, etc.

There are no mine workings and there has been no exploratory work on the property.

(b) Production, Reserves.

There are no known deposits on the property.

(c) Geologic Features and Justification for Exploration.

The claims are located in what appears to be a uranium mineral belt in the Shinarump formation similar to the belt which has been defined for the Morrison formation. Areas to the northeast and to the southwest of the property have, under extensive exploration, produced some very large mines. (See Index Map, Figure 1). Drilling programs in White Canyon and on Deer Flat have been gradually proving the belt northward toward Elk Ridge. Rim-stripping on neighboring claims (owned by Lance Engineering, Grand Junction, Colorado) has exposed several mineralized sandstone lenses which have not to date been explored. If the inferred mineral belt exists, and applicant's consulting geologists have expressed the opinion that it does, the prospects for this property are very good. Relatively shallow drilling depths justify systematic exploration.

Geology Stratigraphy: The two groups of claims are located on the Monument Upwarp, a broad flattened anticline with a north-south axis. Elk Ridge is the northern nose and eastern flank of the anticline.

The Resistant Shinarump formation of late Triassic age is the only economically important ore-bearing formation underlying the two groups. Ore has been found in the Permian Cutler formation which also underlies the claims. Exploration of this formation is not included in this project because of the prohibitive drilling depths. (Note: As here used the term "Shinarump formation" includes all of the cap rock forming sandstones that lie at the base of the Chinle formation or between the Chinle and Moeknopi formations. The units which have by some been called "Mossback", "Chinle D" and "Commission Sandstone" are all included here in the term "Shinarump formation".)

The Pilot claims lie on a broad flat mesa from which erosion has stripped all of the post-Shinarump formations leaving a clean Shinarump cap rock upon which drill sites may be prepared with minimum effort and expense. On the Sheen group the drills will stand on a broad bench formed by the resistant Shinarump formation and site preparation will be relatively inexpensive. The east end lines of the claims, however, lie along the toe of a ridge formed by red mudstone and sandy siltstones of the Chinle formation, capped by the hard, rocky, resistant red sandstones of the Jurassic Wingate formation.

(d) Accessability

The claims lie about 20 airline miles west of Monticello, Utah, and about 55 miles southwest of Moab. Haulage distance to the A.E.C. plant at Monticello is about 35 miles - 10 miles on an excellent paved highway and 25 miles over better than average mine roads. Moab and Monticello have adequate mine supply houses.

(e) Availability of Manpower, etc.

Manpower, skilled in performing the type of drilling and exploration planned, is readily available in the area. Dependable sources of material and supplies are also available. Equipment will be furnished by private contractors.

Geo-Engineering, a professional engineering firm, will supply surveying instruments and transportation for technical personnel.

Paragraph 5. The exploration project.

(a) The mineral for which this project will explore is Uranium.

(b) Proposed work, etc.

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

Stage I:

Approximately 1,000 lineal feet of rim-stripping by bulldozer should be done on the Pilot claims in the approximate location shown on Plate I; and approximately 2,500 lineal feet on the Sheen claims in the approximate location shown on Plate II.

Radiometric surveys to be made in areas where it is not feasible to expose the contact rim by stripping.

Drilling of 300 proposed holes at sites to be selected and submitted to the DMEA field team for approval as data from rim-stripping is obtained. Depth of the holes is estimated to range from 50 feet to 150 feet and the average depth of such 300 holes is estimated to be 100 feet, the aggregate footage thus being 30,000 feet.

Stage II:

Drilling of 300 additional test holes following the usual pattern of fifty foot spacing in and around the areas where the Stage I stripping and drilling has revealed favorable geology. Locations of such Stage II holes to be made with the approval of the DMEA field team as data from the preliminary work is accumulated and evaluated. Estimated depths of the Stage II holes is the same as for Stage I drilling, i.e., 100 feet per hole, and the proposed 300 holes will thus involve an aggregate of 30,000 feet.

Geologic Control of Drilling.

Applicant's consulting geologists will maintain close geologic control over the drilling and will locate and relocate proposed drill sites, with prior DMEA approval, in the light of continually developing information.

Logging and Sampling.

A sampler who will also act as a field assistant for surveying will be employed to do the logging and sampling. An accurate log will be maintained by the driller. Barren core will be arranged on the ground or otherwise preserved and properly identified 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 and will be carefully examined by the sampler or other competent individual, 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 properly preserved until the geologist can properly sample the same. Core losses will be prorated proportionately regardless of lithology. Each sample will be carefully described by the geologist in a bound field book, as it is placed in the sample sack. All

samples will be sent to commercial assayers for percentage determination of U_3O_8, V_2O_5, and $CaCO_3$. In addition, all holes will be checked by probe by the sampler, geologist or other competent individual

(c) Duration of Project.

The work will start within 90 days from the date of an exploration contract. It is estimated that it will require 18 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.

(d) Ability, Operating Experience, etc.

Applicant's president, Mr. Schwab, is President and general manager of International Fire Insurance Company; Mr. Dowdle is President and general manager of the Dowdle Sheet Metal Company; and Mr. Woehrmyer is President and general manager of the Woehrmyer Printing Company. Such officers and directors have demonstrated successful business management of their respective companies, and are experienced executives.

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

Lowis P. Gaggini, who is Chief Geologist for Geo-Engineering, began working in uranium in 1941, as geologist for the Union Mines Development Corporation, a contractor for the United States Army Manhattan Engineering Project. Subsequent experience in carnotite exploration included almost two years with the Exploration Branch of the Atomic Energy Commission in Grand Junction and six months with the United States Vanadium Company. Mr. Gaggini was for two years Mining Superintendent of the Dulaney Mining Company, where he was in charge of all mining and exploration. This company is at present mining large tonnages from ore bodies which were discovered during that period. From August 1952 to February 1953, 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.

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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

Lewis D. Anderson, mining engineer, is a graduate from the Colorado School of Mines (registered mining engineer #1844 in Colorado). From December 1946 through 1948, Mr. Anderson worked as engineer and shift boss for the Resurrection Mining Company at Leadville, Colorado. From January 1949 through April 1950, he worked as mining engineer in the General Chemical Division of Allied Chemical and Dye. He was mine foreman of the Rico-Argentine Mining Company, Rico, Colorado, from June 1950 to October 1951. Mr. Anderson then accepted employment as Division Engineer for the Dulaney Mining Company in the Gateway, Dove Creek, Monticello, and Gyp Valley Area. 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.

Paragraph 6. Estimate of Costs.

Applicant requests that this exploration project contract be placed upon a unit cost basis. Costs of the project are calculated in terms of the cost per foot of drilling, except for the costs of sample analysis and of rim-stripping, reflected by separate units of cost.

DETAIL OF COSTS OF PROJECT

(a) Independent Contracts.

Drilling will be done by qualified private contractors. The prices quoted by competent firms active in the uranium field are used as the unit cost in estimating the drilling at $2.05 per foot. Such cost is estimated upon the basis of an average drilling depth of 100 feet, assuming maximum depth of 150 feet. The prices quoted for hole depths 0' to 200' are $2.00 per foot for drilling (rotary rig with air or water as may be required) and $2.25 for coring. It is estimated that 40% of the holes will be cored and that there will be 50 feet of coring in each hole cored. The project provides for 300 Stage I holes and 300 Stage II holes, being a total of 600 holes of 100 feet average depth, or 60,000 feet, making a drilling cost of $123,000.00. See Schedules 1, 2 and 3.

Road building and drill site preparation is estimated at sixty days of bulldozer work spread over the period of the drilling. Rental, with an operator, is quoted at $100 per day. Because many hole locations will be made after evaluating results of previous drilling, it will be necessary to transport the equipment to the project several times. A minimum of six such trips at $100 per round trip is believed necessary. See Schedule 3.

(b) Labor, Supervision and Consultants.

Geo-Engineering will supervise, direct and act as consulting geologists for $1,000 per month and expenses. A draftsman and a stenographer will be provided on an hourly basis to prepare necessary project reports. A field assistant will be employed by Geo-Engineering or Apex Uranium, Inc. to help with surveying and act as sampler. Such costs and expenses are estimated at $32,792.40 for the project. See Schedule 4, Item 6(b).

(c) Operating Materials, Supplies, etc.

Expenses for office supplies, map and drill log reproductions for monthly reports and correspondence with DMEA, etc., are estimated at $150.00 per month or $2,700.00 for the project. Expenses for survey stakes, timber crayons, water bags, sample containers, etc., are estimated at $100.00 for the project. See Schedule 4, Item 6(c).

(d) Operating Equipment.

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

(e) Rehabilitation and Repairs.

None needed.

(f) New Buildings, Improvements and Installations.

Rental of one trailer house for field office and quartering supervisory personnel at $50.00 per month for 18 months is included in the estimated cost of the project. Schedule 4, Item 6(f).

(g) Miscellaneous.

Expense of Apex Uranium, Inc. for accounting and record keeping for project, etc. is estimated at $100.00 per month. Additional expenses for payroll taxes, estimated at 10% of items in (b) supra - wages of draftsman, steno, field assistant, are included at $57.18 per month. Schedule 4, Item 6(g).

(h) Contingencies.

Drilling contractors vary the drilling charge with depth of the hole. Estimate for drilling cost is based upon an average depth of 100 feet. However, it is probable that few, if any, holes will be less than 50 to 75 feet while many may exceed 100 or even 150 feet. In such event, the drilling cost will exceed $2.05 per foot. Estimates for road, trail and site construction may be inadequate in that they are based merely upon hourly rates for tractor and bulldozer work, whereas some rock drilling and blasting may be required. 15% is added for such contingencies. Labor, supervision and consultant payments are based on monthly or hourly

charges. Any event which might prolong the project will increase such costs. 10% is added to cover such contingencies. Operating materials and supplies have been estimated at a minimum. Unforseen destruction or consumption could easily increase these costs by 20%. Miscellaneous costs, supra, are increased 50% to cover omitted items, unforseeable extra help requirements, taxes, etc. Schedule 4, Item 6(h).

Analytical Work.

The cost of analytical work is not included in or covered by the drilling costs, supra, or in the cost per foot of drilling. A separate unit cost of $6.00 per sample is included in the project. It is estimated that 1200 samples may be assayed. The contract price of independent assayers is $6.00 being:

U_3O_8	$3.50
V_2O_5	1.50
$CaCO_3$	1.00
	$6.00

It is estimated that the project will require an average of 2 assays per hole or analysis of 1200 samples at $6.00 each.

Rim-Stripping.

Rim-stripping will be done by qualified private contractors. The prices quoted in the area by competent firms for operator and rental of heavy equipment are $150.00 per day. It is estimated that approximately 2500 feet of rim-stripping in the Sheen group will require 3 days, whereas the 1000 feet on the Pilot group, because of deeper overburden, will require 7 days. One day each way is allowed for moving on and off the property. Costs and unit costs per lineal foot are estimated for the Pilot group at 7 days plus one moving day, or 8 days at $150.00 per day, and for the Sheen group at 3 days plus one moving day, or 4 days at $150.00 per day. The approximate locations of rim-stripping are shown on Plates I and II.

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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Summary of Costs (From Schedule 5)

1.	Costs of drilling, including all costs of project except analytical work and rim-stripping, shown separately - - - - - - - - - -	$193,615.50
	Calculated unit cost: 60,000 feet drilling at $3.2267 per foot.	
II.	Analytical Work, - contract unit cost 1200 samples at $6.00 each	7,200.00
III.	Cost of Rim-stripping, supra	
	Pilot Group - 1,000 feet at $1.20	1,200.00
	Sheen Group - 2,500 feet at $ .24	600.00
	TOTAL FOR PROJECT	$202,615.50
	Amount to be paid by Apex Uranium, Inc. (25%)	50,653.88
	Amount of Defense Minerals Exploration Administration Loan Requested	$151,961.62

(Note: Detail of estimated costs shown on Schedules 1, 2, 3 and 4, and Summary shown on Schedule 5.)

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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Paragraph 7. Applicant's Share of Cost.

In accordance with the Defense Minerals Exploration Administration Regulations, applicant, Apex 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 of the company by the DMEA will be pursuant to the Summary of Costs immediately hereinabove, less 25%, i.e., the amount to be loaned by the Government will be 75% of the above shown unit costs for each of the units of work performed.

Respectfully submitted as a part of "Application for Aid in an Exploration Project" upon Form MF-103, attached hereto and made a part hereof.

APEX URANIUM, INC.

By _____
President

Application prepared, approved and recommended by:

Geo-Engineering (a partnership)
Louis P. Gaggini
Harold A. Culp
Lewis D. Anderson

By _____

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado.

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Schedule 1.

DRILL HOLE DEPTH

It is estimated that drilling depths will range from 50 150 feet and will average 100 feet. Stage I drilling proposes 300 holes, average depth 100 feet:

Stage I Drilling:

300 holes - average depth 100 feet (est'd.)---	total	30,000 feet

Stage II Drilling:

300 holes - average depth 100 feet (est'd.)---	total	30,000 feet
	TOTAL PROJECT	60,000 feet

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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Schedule 2.

DRILLING SUMMARY

	Holes	Est. Depth per Hole	Est. Non Core Drilling per Hole	Est. Coring per Hole
Stage I:	120	100'	50'	50'
	180	100'	100'	0'
Stage II:	120	100'	50'	50'
	180	100'	100'	0'
Total	600			

	Holes	Est. Total Feet Drilling	Est. Non Core Drilling	Est. Core Drilling
Stage 1:	120	12,000	6,000	6,000
	180	18,000	18,000	-0-
Stage II:	120	12,000	6,000	6,000
	180	18,000	18,000	-0-
		60,000	48,000	12,000
Price per foot		$2.05	$2.00	$2.25
Cost		$123,000.00	$96,000.00	$27,000.00

Schedule 2.

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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Schedule 3.

ESTIMATES OF AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS (excluding Rim-Stripping & Analysis).

Explanation	Units	No. of Units	Cost/Unit	Total Cost/Item	Grand Total
Drilling Contractor:					
Stage I Drilling (See Schedule 2)					
300 holes @ 100 feet	feet	(30,000)			
non-core drilling	feet	24,000	$ 2.00	$48,000.00	
core drilling	feet	6,000	2.25	13,500.00	
Stage II Drilling (see Schedule 2)					
300 holes @ 100 feet	feet	(30,000)			
Non-core drilling	feet	24,000	2.00	48,000.00	
Core drilling	feet	6,000	2.25	13,500.00	
Total Drilling		60,000		$123,000.00	$123,000.00
Bulldozer & Tractor Contractor:					
Moving on & off property	Rd. trip	6	$100.00	600.00	
Rental with operator	Day	60	100.00	6,000.00	
					6,600.00
Total Estimated to be paid to Independent Contractors	feet	60,000	$ 2.16		$129,000.00

(Note: Amounts to be paid Contractors for Rim-Stripping and analytical work are shown separately; See Schedule 5).

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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Schedule 4 - Other Costs

Item & MF-103 heading letter	Cost per Month	Cost Project	Unit Cost 60,000ft.
6(b) Labor, Supervision & Consultants.			
Geo-Engineering fees	$1,000.00	$18,000.00	
Expenses (other than personnel)	250.00	4,500.00	
Draftsman (48 hrs. per mo. @ $3.00)	144.00	2,592.00	
Steno-typist (24 hrs. per mo. @ $2.20)	52.80	950.40	
Sampler - Field Assistant	375.00	6,750.00	
Total, Item 6(b)	$1,821.80	$32,792.40	.5465
6(c) Operating Materials, Supplies, Etc.			
Office supplies, map and drill log reproductions for monthly reports and correspondence with DMEA, etc.	150.00	2,700.00	
Survey stakes, timber crayons, water bags, sample containers, etc.		100.00	
Total, Item 6(c)		$ 2,800.00	.0466
6(d) Operating Equipment.			
All operating equipment will be provided by independent contractors or by Geo-Engineering		None	
6(e) Rehabilitation and Repairs.			
None needed		None	
6(f) New Buildings, Improvements and Installations.			
Rental of one trailer house	50.00	900.00	.015

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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Schedule 4 - cont'd.

Item & ME-103 heading letter	Cost per Month	Cost Project	Unit Cost 60,000 ft.
6(g) Miscellaneous.			
Expense for accounting and record keeping for project, etc.	$ 100.00	$1,800.00	
Payroll taxes, estimated at 10% of items in (b) supra - wages of Draftsman, Steno, Field Assistant	57.18	1,029.24	
Total, Item 6(g)	$ 157.18	$2,829.24	.0471

6(h) Contingencies.

15% of $129,600.00	$19,440.00	(Sched. 3)		
10% of 32,792.40	3,279.24	(Item 6(b))		
20% of 2,800.00	560.00	(Item 6(c))		
50% of 2,829.24	1,414.62	(Item 6(g))		
Total, Item 6(h)	$24,693.86		$24,693.86	.4115

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Recapitulation, Schedule 4

Item	Cost Project	Unit Cost
6(b)	$32,792.40	$0.5465
6(c)	2,800.00	0.0466
6(d)	None	
6(e)	None	
6(f)	900.00	0.0150
6(g)	2,829.24	0.0471
6(h)	24,693.86	0.4115
	$64,015.50	$1.0667

Schedule 4 - cont'd.

Geo-Engineering, 304 Main Street, Grand Junction, Colorado

Application for DMEA Project on the Sheen and Pilot Groups Prepared for Apex Uranium, Inc., 718 Majestic Building, Denver, Colorado

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Schedule 5

Summary of Costs and Calculation of Unit Costs

Letter Heading	Description of Item	No. of Units	Unit Cost	Cost Project
6(a)	Drilling - Independent Contractor See Schedule III	60,000 feet	$2.1600	$129,600.00
6(b)	Labor, Supervision & Consultants See Item 6(b) Schedule 4	"	0.5465	32,792.40
6(c)	Operating Materials, Supplies See Item 6(c) Schedule 4	"	0.0466	2,800.00
6(d)	Operating Equipment, Etc. See Item 6(d) Schedule 4	"		none
6(e)	Rehabilitation and Repairs See Item 6(e) Schedule 4	"		none
6(f)	New Buildings, etc. See Item 6(f) Schedule 4	"	0.0150	900.00
6(g)	Miscellaneous See Item 6(g) Schedule 4	"	0.0471	2,829.24
6(h)	Contingencies See Item 6(h) Schedule 4	"	0.4115	24,693.86
	Total Project and Calculated Unit Cost Before Rim-Stripping and Analytical Work	60,000 feet	$3.2267	$193,615.50
	Analytical	1200 samples @	$6.00	7,200.00
	Rim-Stripping: Pilot group	1,000 feet @	$1.20	1,200.00
	Sheen group	2,500 feet @	$0.24	600.00
	Total Project			$202,615.50

MINING LEASE

THIS AGREEMENT, made and entered into in duplicate as of November 2, 1954, between LYLE F. CAMPBELL and JULIAN E. SIMPSON, of Grand Junction, Colorado, hereinafter called Lessors, and APEX URANIUM, INC., 718 Majestic Building, Denver, Colorado, hereinafter called Lessee, WITNESSETH:

That the Lessors, in consideration of the sum of Three Thousand Dollars ($3000.00), receipt of which is hereby acknowledged, and of the royalties hereinafter reserved and the covenants and agreements hereinafter expressed and by the Lessee to be kept and performed, hereby grant, demise and lease to Lessee the following described lode mining claims in Elk Ridge (Unorganized) Mining District, County of San Juan, State of Utah, the Location Certificates thereof being duly of record in the office of said County as follows:

NAME OF CLAIM	RECORDED		RE-RECORDED	
	BOOK	PAGE	BOOK	PAGE
Pilot 11	109	29	195	414
Pilot 12	109	29	195	414
Pilot 13	109	30	195	415
Pilot 14	109	30	195	415
Pilot 15	109	31	195	416
Sheen 1	111	351		
Sheen 2	111	352		
Sheen 3	111	352		
Sheen 4	111	353		
Sheen 5	111	353		
Sheen 6	111	354		
Sheen 7	111	354		
Sheen 8	111	355		
Sheen 9	111	355		
Sheen 10	111	356		

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 any of said mining claims, unless sooner forfeited through the violations of any covenant herein required to be performed by Lessee, with a right to surrender this lease as hereinafter set forth.

In consideration of such lease, LESSEE COVENANTS AND AGREES With Lessors as follows, to wit:

1. To enter upon said mining claims and to do and perform exploration and development work by expending a minimum of Three Thousand Dollars ($3000.00) each six (6) months and, if commercial ores are discovered, to mine and ship ores of a minimum value of Three Thousand Dollars ($3000.00) each six (6) months period; it being understood and agreed that if Lessee is unable to mine ores of Three Thousand Dollars ($3000.00) in value during each six (6) 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 Three Thousand Dollars ($3000.00). The first six (6) months period shall commence on November 1, 1954.

2. To cause to be paid to Lessors a royalty of fifteen per cent (15%) of the proceeds of ores mined and sold from any of said claims, including fifteen per cent (15%) of any bonus payment paid by the Atomic Energy Commission, less, HOWEVER, development and haulage allowances. All such ores shall be shipped in the joint names of Lessors and Lessee and payment of such royalties shall be made as follows: 10.5% to Lyle F. Campbell, Box 1698, Grand Junction, Colorado, and 4.5% to Julian E. Simpson, Box 127, Grand Junction, Colorado.

3. To keep full and accurate records of all operations carried on hereunder, including drilling records, maps and assays, open to inspection of Lessors, or their agent, at all reasonable times, and to permit Lessors, or their agent, full and free access to said claims for the purpose of inspection and otherwise. To furnish Lessors with true copies of all drilling records, maps, assays, 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 six (6) months period, showing gross value of ores shipped and cost of development work performed during such period.

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

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

6. So long as this lease may be in effect, to do and perform within the time prescribed by law the annual labor required for the retention of possessory rights upon said mining claims, and to make and file affidavits so stating, beginning with the period ending June 30, 1955; all of such work and expenditure to be completed on or before June 1 of each year.

MUTUAL COVENANTS

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 Lyle F. Campbell, Box 1698, 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 materials should not be required in order to continue mining at such point or points.

IT IS FURTHER AGREED That Lessee shall have the right to assign or sublet this lease, or any part or portion of said mining claims, without first obtaining consent of Lessors thereto; provided however, that such assignment or sublease shall not be valid until fifteen (15) days after Lessee has delivered a fully executed, true copy of such assignment or sublease to Lessors.

IT IS FURTHER AGREED That in the event Lessee wishes to obtain a Defense Minerals Exploration Administration loan from the U. S. Government, that the Lessors will execute the necessary Owners' Consent to Lien.

IT IS FINALLY AGREED That upon violation by Lessee of any of the covenants in the foregoing lease, the term of this lease shall, at the option of Lessors, expire, and the same and said mining claims shall become forfeited to Lessors, and Lessors, or their agent, may thereupon enter upon said 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 718 Majestic Building, Denver, 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 defaults 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 lease shall thereupon cease and determine.

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

WITNESS Their names:

Lyle F. Campbell

Lyle F. Campbell

Julian E. Simpson

Julian E. Simpson

(Lessors)

APEX URANIUM, INC.

BY N. R. Dowdle

President

Thereunto duly authorized.

ATTEST:

By Charles J. Carroll

Secretary

MF-203
(Revised July 1, 1953)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Utah, County of San Juan, described as follows:1/

Lode mining claims in Elk Ridge (unorganized) mining district identified as Pilot Nos. 11, 12, 13, 14 and 15 in Sections 22, 23, 26 and 27 T. 33 S. R. 19 E, location certificates recorded Book 109, pp. 29-31 and re-recorded Book 195, pp. 414-416; and Sheen Nos. 1 to 10, inclusive, in Sections 28, 29, 32 and 33, T. 33 S. R. 20 E, location certificates recorded Book 111, pp. 351-356.

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

2/ Apex Uranium, Inc., a Colorado corporation, as lessee under lease dated November 2, 1954, wherein the undersigned are lessors,

hereinafter called the "Operator"; and

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

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

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

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof, there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom, until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

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

4. Changes and added provisions None

Dated this 28TH day of DECEMBER, 1954.

Lyle F. Campbell [Seal]

Julian E. Simpson [Seal]

[Seal]

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

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

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

Exhibit # 3

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

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

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

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

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

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

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

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

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

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

MF-203
(Revised July 1, 1953)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Utah, County of San Juan, described as follows:1/

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 10 1955

Lode mining claims in Elk Ridge (unorganized) mining district identified as Pilot Nos. 11, 12, 13, 14 and 15 in Sections 22, 23, 26 and 27 T. 33 S. R. 19 E, location certificates recorded Book 109, pp. 29-31 and re-recorded Book 195, pp. 414-416; and Sheen Nos. 1 to 10, inclusive, in Sections 28, 29, 32 and 33, T. 33 S. R. 20 E, location certificates recorded Book 111, pp. 351-356.

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

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

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof, there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom, until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

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

4. Changes and added provisions None

Dated this 28th day of December, 1954.

Lyle B. Campbell [Seal]

Julian E. Simpson [Seal]

[Seal]

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

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

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

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

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

MF-203
(Revised July 1, 1953)

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Uranium Minerals Administration
RECEIVED
JAN 10 1955

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2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof, there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom, until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

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

4. Changes and added provisions None

Dated this 28th day of December, 1954.

Lyle B. Campbell [Seal]

Julian E. Simpson [Seal]

[Seal]

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

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

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

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

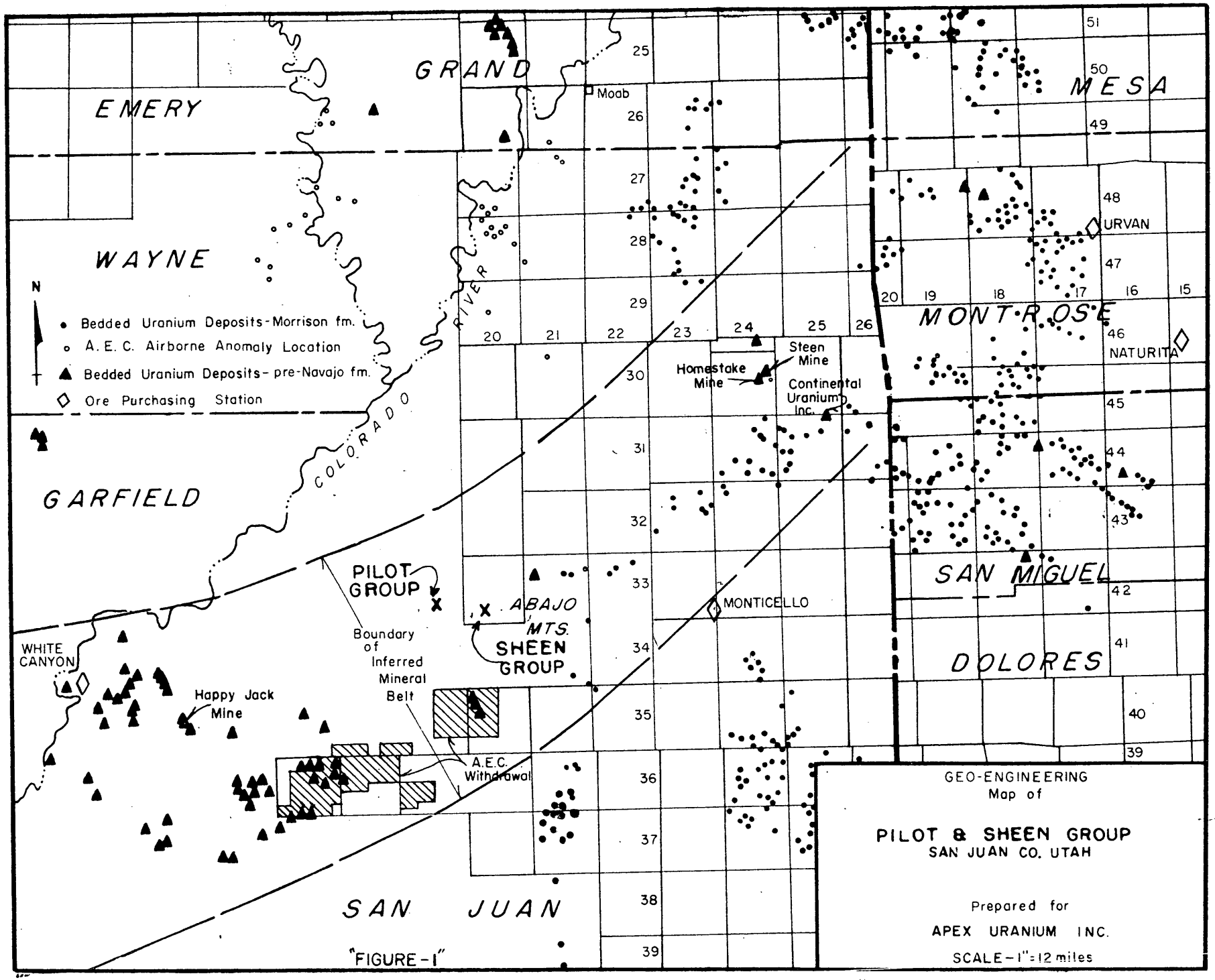
c. Definitions.--As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held.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

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

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

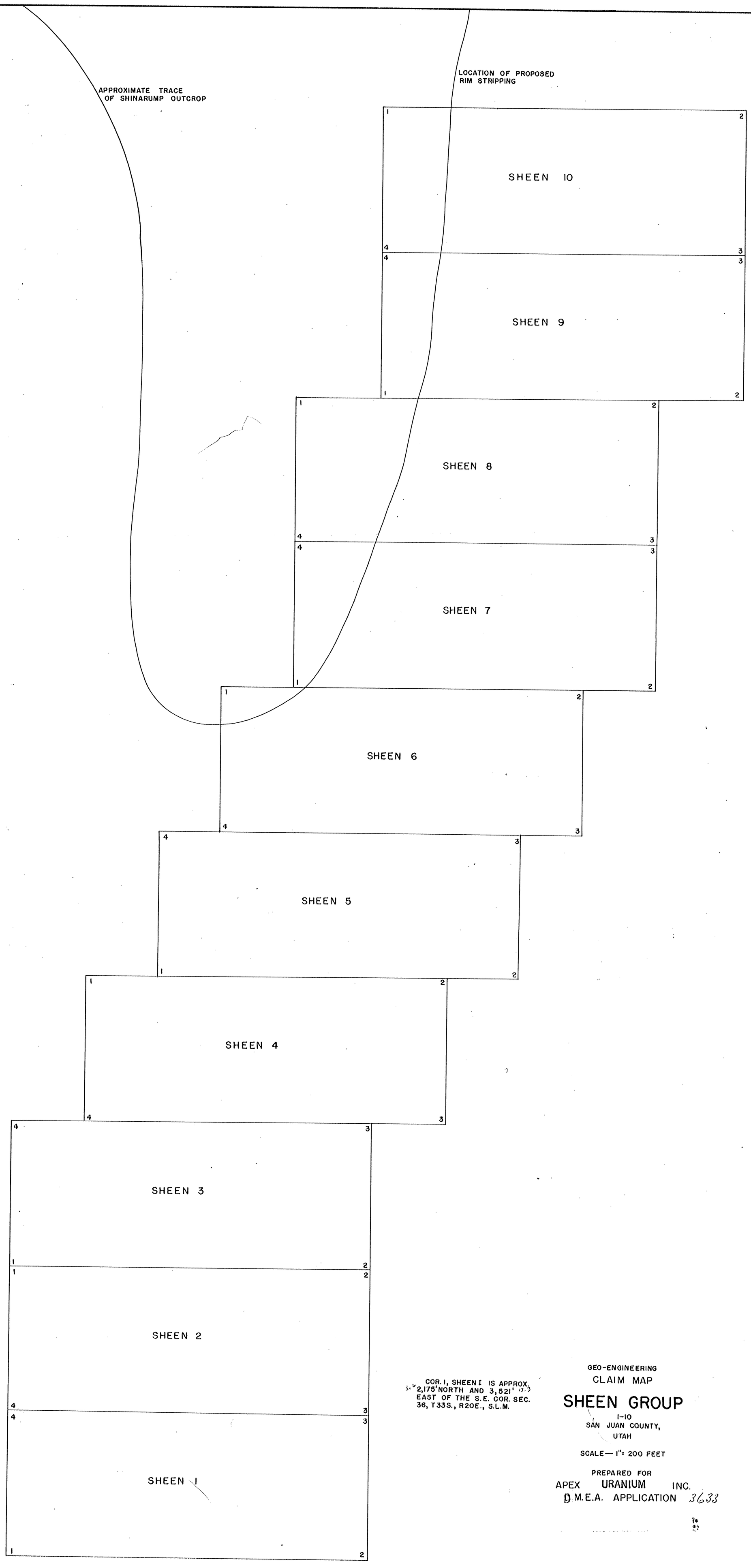
f. No Obligation to Produce.--This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

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



"FIGURE-1"

Doc Ref 3633



COR. 1, SHEEN 1 IS APPROX. 2,175' NORTH AND 3,521' EAST OF THE S.E. COR. SEC. 36, T33S., R20E., S.L.M.

GEO-ENGINEERING

CLAIM MAP

SHEEN GROUP

1-10

SAN JUAN COUNTY,

UTAH

SCALE— 1" = 200 FEET

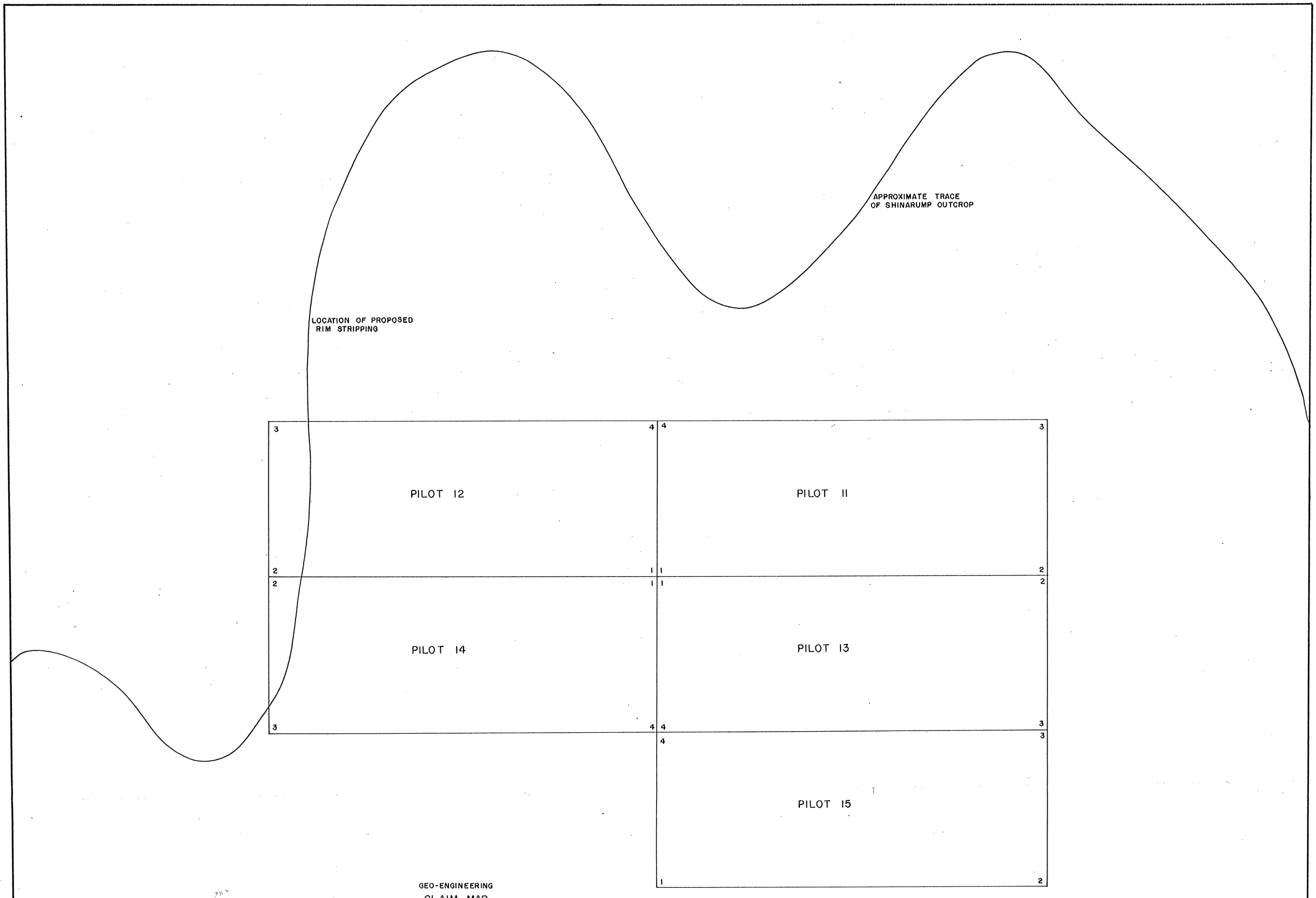
PREPARED FOR

APEX URANIUM INC.

D.M.E.A. APPLICATION 3633

PLATE 2

N



COR. 2, PILOT 15 IS APPROX.
3,872' NORTH AND 9,030' WEST
OF THE N.W. COR. SEC. 31, T33S.,
R20E., S.L.M.

GEO-ENGINEERING
CLAIM MAP

PILOT GROUP

11-15
SAN JUAN COUNTY,
UTAH

SCALE — 1" = 200 FEET

PREPARED FOR
APEX URANIUM INC.
DM.E.A. APPLICATION
3633

PLATE 1

N