make 2 copies of letter of Oct. 5 for forwarding.
mc.

Acting Executive Officer, Region III

Re: Docket No. DMEA-4285 (Maximum)
Thunderbird Claim
Lemhi County, Utah

Dear Mr. Hardman:

With respect to your inquiry of October 12 concerning the subject docket, two copies of a closing letter dated October 5, 1956, signed by the Administrator, were forwarded to your office. Two duplicate copies of the letter are enclosed.

O. J. Com
Oct. 16-'56

Mike: We have our own follow-up system and therefore should not have to be alerted by the F.T. It makes extra work for all. Undoubtedly our letter of Oct. 5, 1956, has been received by now making a reply to F.T. request of Oct. 12 unnecessary.

10/15/56

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

224 New Customhouse
Denver 2, Colorado

October 12, 1956

RECEIVED
OCT 15 1956

Memorandum

To: Secretary to the Operating Committee

From: DMEA Field Team, Region III

Subject: Docket DMEA 4285 (Uranium) El Rico Uranium Corporation Thunderbird Claims) Sevier County, Utah

The Administrator's letter to the subject Applicant, dated September 3, 1956, allowed the Applicant 30 days in which to submit the requested information. This office has not received any of the requested information from the Applicant.

Will you please advise the present status of this applicant.

DMEA Field Team, Region III

E. N. Harshman

E. N. Harshman
Acting Executive Officer

Surname copy

700

Ching file

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

OCT 5 1956

Mr. Frank Bullock, President
El Rico Uranium Corporation
34 South Grant Street
Midvale, Utah

Re: Docket No. DMEA-4285 (Uranium)
Thunderbird Claims
Sevier County, Utah

Dear Mr. Bullock:

This is with reference to our letters of June 7, July 24, and September 4, 1956, requesting additional information needed to process the subject application.

As we have not received any reply to our letters, we are considering your application as having been withdrawn and are placing it in our inactive files.

We regret the necessity of taking such action, however, it is taken without prejudice to your proposed project. If at some future time you desire to reopen this case, you may do so by filing a new application, referring to the subject application by the DMEA docket number, and furnishing the information previously requested, together with any other information that you think might be helpful.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

MChing/gla
10-5-56
cc to: Admr.'s Reading File
Docket
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700, Mr. Ching
DMEA Field Team, Region III (2)

R.C.S.

Surname copy

Ching (Ecl) 700
Ellis

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

SEP 4 1956

Mr. Frank Bullock, President
El Rico Uranium Corporation
34 South Grant Street
Midvale, Utah

Re: Docket No. DMEA-4285 (Uranium)
Thunderbird Claims
Sevier County, Utah

Dear Mr. Bullock:

Reference is made to our letters of June 7 and July 24, 1956, requesting additional information concerning the subject application for exploration assistance.

We wish to cooperate with you fully in allowing ample time to supply the requested information; however, we cannot indefinitely postpone action on an application. Therefore, if we do not receive the requested information within 30 days from the date of this letter, we will assume that you are no longer interested in proceeding with your application, and we will consider it as having been withdrawn.

Sincerely yours,

Frank E. Johnson

Acting Administrator

EWEllis/gla
8-31-56
cc to: Admr.'s Reading File
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210,GSA
Mr. Ching, Code 700
DMEA Field Team, Region III (2)

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

August 29, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4285 (Uranium) El Rico Uranium Corporation, (Thunderbird claims) Sevier County, Utah

A review of our file on the subject docket indicates there has been no reply to the Ernest William Ellis letter to the Applicant dated June 7, 1956 and the F. L. Knouse letter to the Applicant dated July 24, 1956.

Will you please advise the present status of this docket.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Surname copy

700

Ching

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

JUL 24 1956

Mr. Frank Bullock, President
El Rico Uranium Corporation
34 South Grant Street
Midvale, Utah

Re: Docket No. DMEA-4285 (Uranium)
Thunderbird Claims
Sevier County, Utah

Dear Mr. Bullock:

Reference is made to our letter, dated June 7, 1956, relating to the captioned docket.

Action on your application is pending receipt of the information requested in the above-mentioned letter. If you are no longer interested in the processing of this application, please advise us.

Sincerely yours,

F. L. Knowse, Acting Chief
Rare and Miscellaneous
Metals Division

MChing/gla
7-23-56
cc to: Admr.'s Reading File
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, OSA
Mr. Ching, Code 700
DMEA Field Team, Region III (2)

R.G.S

700

FILE COPY
Surname:
Chron of
Mitchell

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

Mr. Frank Bullock, President
El Rico Uranium Corporation
34 South Grant Street
Midvale, Utah

JUN - 7 1956

Re: Docket No. DMEA-4285 (Uranium)
Thunderbird Claims
Sevier County, Utah

Dear Mr. Bullock:

In reviewing your application for aid in an exploration project, we find the information submitted too incomplete for further processing. To enable us to make a preliminary appraisal of the merits of your proposed project the following additional information should be submitted:

1. Four copies of a map or sketch, drawn to scale, showing the 105 claims you propose to include in the project. The map submitted (Exhibit "C") includes only 16 claims.

2. The location of geological features such as the known vein or veins should be shown on the map, together with the locations of bulldozer pits and the four core drill holes. Areas of anomalous radioactivity as well as locations of any samples taken for chemical analyses should be shown, and the values noted.

3. Some indication of the topography or relative elevations involved should be presented such as rough contour lines on the map or a longitudinal section along the line of the proposed drift.

4. The positions of the proposed drift, shaft, and diamond drill holes should be shown on the map. Exhibit "C", submitted with your application, shows a drift and a shaft which, presumably, have already been driven 300 feet and 100 feet, respectively. No description of these two openings was given in the application, and the relationship of the proposed work to the completed work was not explained.

5. The total cost of the proposed project should be shown. Only the cost of the drifting and shaft sinking was estimated, although you also proposed 5,000 feet of core drilling.

Upon receipt of the above-listed information, we shall continue to process your application. All documents should be submitted in quadruplicate. Any additional information which you may have which would

R.C.B.

encourage us to believe that there is a geologic probability of making a significant discovery on your property should be submitted. Specific proof of the presence of ore-grade material on the property is especially helpful. Such proof usually would be in the form of certified assay certificates covering representative samples.

Sincerely yours,

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

MChing/izm 6-6-56
cc to: Docket
Code 700
Mr. Ching
Admr.'s Reading File
DMEA Field Team, Region III (2)
Messrs. JEOrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

6-4-56

IN REPLY REFER TO:

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

RECEIVED
JUN - 1 1956

May 31, 1956

Re: DMEA 4285
El Rico Uranium Corp.
Thunderbird Mine
Sevier Co., Utah
$58,786.00 - Uranium

Memorandum

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

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

Subject: Review of application.

The applicant requests assistance in prospecting a large block of claims, within which a limited yardage of bulldozing and a small footage of drilling have disclosed places showing generally low radioactivity. As viewed by the authors of the application the rock relationships are similar to those holding at certain productive mines to the south and, by analogy, the referenced property may respond to deeper work and be made productive.

Too little information is given to enable judgment of the reasoning. That the indications secured to date justify the proposed work appears doubtful, but some work, perhaps drilling, may be warranted.

Referral to the Field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

5-18-56

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

May 17, 1956

RECEIVED
MAY 18 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

Subject: Application for Assistance, DMEA Docket 4285, El Rico Uranium Corporation, Sevier County, Utah.

I have reviewed the application for assistance, DMEA Docket 4285, El Rico Uranium Corporation, Sevier County, Utah, dated May 1956, and received in this office May 11, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant requests Federal assistance to explore for uranium on 105 claims in Sevier County, Utah. The proposed project includes 1200 feet of drift, 200 feet of shaft and 5000 feet of core drilling. The total estimated cost of the project is $58,786.

The application lacks maps and information regarding chemical assays relative to the claims. It would be desirable to have a map showing the geology, and location of the veins, location of shallow pits and bulldozing along the main vein; the location of the proposed exploration work should also be indicated thereon in view of the fact that Exhibit "C" which is supposed to contain such information is missing from the copy of the application available for review.

We recommend the request of pertinent information because a field examination is not justified at this time.

John E. Crawford
John E. Crawford

Attachment

El Rico Uranium Corporation
Frank Bullock, President
34 South Grant Street
Midvale, Utah

Subject: DMEA 4285
Re: Thunderbird
(Exploration Assistance)

Dear Mr. Bullock:

The receipt of your application dated May 1956 **for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.**

Your application has been assigned Docket Number DMEA 4285 **and referred to the** Rare and Miscellaneous Metals Division.

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

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

P.S. Enclosed is extra copy of the application. Only need four copies.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
MAY 11 1956

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

Not to be filled in by applicant

Docket No. 4285
Metal or Mineral Uranium
Date Received May 1, '56
Estimated Cost $58,786.00
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: EL RICO URANIUM CORPORATION, a corporation of the State of Utah, incorporated October 13, 1954. Frank Bullock, 34 South Grant Street, Midvale, Utah, President; McRay Nielsen, 2493 East 29th South, Salt Lake City, Utah, and John M. Panek, 2051 Lambourne Avenue, Salt Lake City, Utah, Vice-Presidents; Wanda Nielsen, 2493 E. 29th So. St., Salt Lake City, Utah Secretary.

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Legal owner by mining deed from the locators of 105 mining claims in Sevier County, State of Utah, known and designated as Thunderbird No. 1 to Thunderbird No. 105, all as specifically described in deed recorded in the office of the County Recorder of Sevier County, Utah, November 29, 1954, as Entry No. 130852.

(*b*) State any mine name by which the property is known. Thunderbird Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owner under location by deed from original locators.

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. The complete list of the claims is attached hereto and by reference made a part hereof.

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

The information called for by paragraph 4, Physical development, is set forth in detail on Exhibit "B" attached hereto and by reference made a part hereof.

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. 1200 feet of drift, and 200 feet of shaft, and 5000 feet of core drilling, all as shown on attached sketch marked Exhibit "C".

(*c*) The work will start within ten (10) days and be completed within six (6) 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 Exhibit "D".

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: Exhibit "E"

(*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

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

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

Explain in detail on acompanying paper. See Exhibit "F" attached hereto.

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 May, 1956. EL RICO URANIUM CORPORATION

(Applicant)

By Frank Bullock

PRESIDENT

34 South Grant Street

Midvale, Utah

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

EXHIBIT "A"

RECEIVED
MAY 1 1 1956

LIST OF CLAIMS OWNED BY EL RICO URANIUM CORPORATION

Name of Claim	Date of Recording	Entry No.
Thunderbird #1	April 10, 1954	127374
Thunder Bird #2	June 14, 1954	128021
Thunder Bird #3	July 1, 1954	128396
Thunder Bird #4	June 14, 1954	128022
Thunder Bird #5	June 14, 1954	128023
Thunder Bird #6	June 14, 1954	128024
Thunder Bird #7	June 14, 1954	128025
Thunder Bird #8	June 14, 1954	128026
Thunder Bird #9	June 14, 1954	128027
Thunder Bird #10	June 14, 1954	128028
Thunder Bird #11	July 1, 1954	128301
Thunder Bird #12	July 1, 1954	128302
Thunder Bird #13	July 1, 1954	128303
Thunder Bird #14	July 1, 1954	128304
Thunder Bird #15	July 1, 1954	128305
Thunder Bird #16	July 1, 1954	128306
Thunder Bird #17	July 1, 1954	128307
Thunder Bird #18	July 1, 1954	128308
Thunder Bird #19	July 1, 1954	128309
Thunder Bird #20	July 1, 1954	128310
Thunder Bird #21	July 1, 1954	128311
Thunder Bird #22	July 1, 1954	128312
Thunder Bird #23	July 1, 1954	128313
Thunder Bird #24	July 1, 1954	128314
Thunder Bird #25	July 1, 1954	128315
Thunder Bird #26	July 1, 1954	128316
Thunder Bird #27	July 1, 1954	128317
Thunder Bird #28	July 1, 1954	128318
Thunder Bird #29	July 1, 1954	128319
Thunder Bird #30	July 1, 1954	128320
Thunder Bird #31	July 1, 1954	128321
Thunder Bird #32	July 1, 1954	128322
Thunder Bird #33	July 1, 1954	128323
Thunder Bird #34	July 1, 1954	128324
Thunder Bird #35	July 1, 1954	128325
Thunder Bird #36	July 1, 1954	128326
Thunder Bird #37	July 1, 1954	128327
Thunder Bird #38	July 1, 1954	128328
Thunder Bird #39	July 1, 1954	128329
Thunder Bird #40	July 1, 1954	128330
Thunder Bird #41	July 1, 1954	128331

Name of Claim	Date of Recording	Entry No.
Thunder Bird #42	July 1, 1954	128332
Thunder Bird #43	July 1, 1954	128333
Thunder Bird #44	July 1, 1954	128334
Thunder Bird #45	July 1, 1954	128335
Thunder Bird #46	July 1, 1954	128336
Thunder Bird #47	July 1, 1954	128337
Thunder Bird #49	July 1, 1954	128339
Thunder Bird #50	July 1, 1954	128340
Thunder Bird #51	July 1, 1954	128341
Thunder Bird #52	July 1, 1954	128342
Thunder Bird #53	July 1, 1954	128343
Thunder Bird #54	July 1, 1954	128344
Thunder Bird #55	July 1, 1954	128345
Thunder Bird #56	July 1, 1954	128346
Thunder Bird #57	July 1, 1954	128347
Thunder Bird #58	July 1, 1954	128348
Thunder Bird #59	July 1, 1954	128349
Thunder Bird #60	July 1, 1954	128350
Thunder Bird #61	July 1, 1954	128351
Thunder Bird #62	July 1, 1954	128352
Thunder Bird #63	July 1, 1954	128353
Thunder Bird #64	July 1, 1954	128354
Thunder Bird #65	July 1, 1954	128355
Thunder Bird #66	July 1, 1954	128356
Thunder Bird #67	July 1, 1954	128357
Thunder Bird #68	July 1, 1954	128358
Thunder Bird #69	July 1, 1954	128359
Thunder Bird #70	July 1, 1954	128360
Thunder Bird #71	July 1, 1954	128361
Thunder Bird #72	July 1, 1954	128362
Thunder Bird #73	July 1, 1954	128363
Thunder Bird #74	July 1, 1954	128364
Thunder Bird #48	July 1, 1954	128338
Thunder Bird #75	July 1, 1954	128365
Thunder Bird #76	July 1, 1954	128366
Thunder Bird #77	July 1, 1954	128367
Thunder Bird #78	July 1, 1954	128368
Thunder Bird #79	July 1, 1954	128369
Thunder Bird #80	July 1, 1954	128370
Thunder Bird #81	July 1, 1954	128371
Thunder Bird #82	July 1, 1954	128372
Thunder Bird #83	July 1, 1954	128373
Thunder Bird #84	July 1, 1954	128374
Thunder Bird #85	July 1, 1954	128375
Thunder Bird #86	July 1, 1954	128376

Name of Claim	Date of Recording	Entry No.
Thunder Bird #87	July 1, 1954	128377
Thunder Bird #88	July 1, 1954	128378
Thunder Bird #89	July 1, 1954	128379
Thunder Bird #90	July 1, 1954	128380
Thunder Bird #91	July 1, 1954	128381
Thunder Bird #92	July 1, 1954	128382
Thunder Bird #93	July 1, 1954	128383
Thunder Bird #94	July 1, 1954	128384
Thunder Bird #95	July 1, 1954	128385
Thunder Bird #96	July 1, 1954	128386
Thunder Bird #97	July 1, 1954	128387
Thunder Bird #98	July 1, 1954	128388
Thunder Bird #99	July 1, 1954	128389
Thunder Bird #100	July 1, 1954	128390
Thunder Bird #101	July 1, 1954	128391
Thunder Bird #102	July 1, 1954	128392
Thunder Bird #103	July 1, 1954	128393
Thunder Bird #104	July 1, 1954	128394
Thunder Bird #105	July 1, 1954	128395

EXHIBIT "B"

RECEIVED
MAY 1 1 1956

PHYSICAL DESCRIPTION

This group of claims is in the form of a rectangle 6,300 feet wide by 15,000 feet long. The 15,000 foot center line of the block runs southeasterly from approximately the center of the northeast quarter of Section 22, Township 25 South, Range 3 West, Salt Lake Meridian, and parallels Monroe Canyon through which flows Monroe Creek, a tributary of Sevier River.

It is approximately three miles to the nearest paved highway, but a good gravelled road runs through the entire length of the group of claims.

In the township immediately south of the claims are several uranium mines from which ore is being shipped in substantial amounts. The area being mined appears to be similar, geologically, to that containing the Thunderbird Claims. The active mines are in what is known as the Marysvale district. The ore is found in vertical veins which have intruded bodies of andesite and monzonite. Where monzonite is the country rock, it also carries commercial values in the vicinity of the intrusive rock which is softer and is porphyritic.

The property contains a series of southeasterly trending veins of porphyry, similar to those being mined near Marysvale, and it has been determined by Geiger counter the degree of radio activity at the surface. This varied from zero in the andesite to as much as .15 MR per hour in the vein material. The monzonite, which shows a very low surface count in the Marysvale district, showed up to .10 in places in the Thunderbird group. The monzonite that is being mined from a shaft on the Vanadium Corporation of America property, in the Marysvale district, shows a much lower Geiger count than similar surface beds on the subject claims. It is known that some of these mines have been opened where surface indications have been little more than the ordinary background count. This condition is caused by surface weathering or leaching, that in some cases extends 30 to 50 feet below the surface.

Further exploration consisted of blasting of shallow pits and bull-dozing along the main vein and the drilling of four small diameter holes. These four core holes were drilled to depths of 90 feet, 100 feet, 110 feet and 120 feet. The formation was so broken that drilling was very difficult and cores could not be recovered. Circulation returns went away in fissures and did not reach the surface. Only one of these holes could be probed at depth. There the probe would not go beyond a depth of 45 feet. This hole showed a Geiger count, by probe, from 30 to 45 feet that indicated ore with a U308 count in exeess of 0.35. The probe had been calibrated with a sample of known uranium content. One of the other holes had been drilled latterally into the main vein, some 9 feet below the surface. Due to caving, it could not be probed beyond 12 feet. It showed a count of 0.30. While trying to push the probe beyond this point, the probe was lost and could not be recovered.

 PHYSICAL DESCRIPTION

RECEIVED
MAY 1 1 1956

A Scintillator was used at the surface along the main vein where it had been exposed by bull-dozing for roads and test pits. In all cases where pits had reached greater depths, greater counts were obtained. The best count was on the face where the exposed vertical side of the vein had been dozed out to make a place to start the horizontal hole. This put the Scintillator to 15 on the third scale (.25), which according to the Scintillator Manual indicates commercial grade ore.

The exploration by drilling proved to be too expensive in light of the results, because of mechanical difficulties. The bull-dozing of pits along the vein was carried as far as could be done economically and each slight increase in depth showed substantially higher Geiger count. Upon the recommendation of the company geologist a drift was commenced. This work has been carried on as indicated on Exhibit "C" attached hereto.

RECEIVED
MAY 1 1 1956

EXHIBIT "D"

The operations will be under the personal direction and supervision of Frank Bullock, President of the applicant. Mr. Bullock has been engaged in mining for more than a quarter of a century. He was, for many years, an employee of the Bingham Mines Company, the Ohio Copper Company, the U. S. Smelting, Refining and Mining Company, and the American Smelting and Refining Company, and has engaged in all types of mine work from actual labor as a miner to mine superintendent. Since 1941 he has been successfully employed in operating, developing and leasing mines on his own account, and he is fully qualified to direct and manage the operation. The corporation itself is not of long standing, and has no background of experience other than the background of operating experience of the officers thereof.

EXHIBIT "E"

RECEIVED
MAY 1 1 1956

ESTIMATE OF COSTS

Items	Cost of Driving 1,200 foot Drift per foot.	Cost of 200 feet of Shaft per foot.
(a) Independent contracts:	NONE	
(b) Labor, supervision, consultants:		
Labor	$ 16.00	$ 28.00
Engineering, accounting, etc.	3.00	3.00
(c) Operating materials and supplies:		
Compressor's supplies	2.28	3.25
Timber, rods, blocks and wedges . .	1.45	12.00
Steel and bits	2.80	2.10
Powder, fuse and caps	4.30	4.30
Repairs	2.35	1.75
(d) Operating equipment:		
Rental of equipment	4.06	3.85
Shaft guide or skids		2.00
Hoisting		2.25
(e) Rehabilitation and repairs to existing equipment:	None contemplated	
(f) New buildings, improvements, installations:	None contemplated	
(g) Miscellaneous, Insurance and Social Security:	1.68	3.92
Total Cost Per Foot	$ 37.91	$ 66.42

EXHIBIT "F"

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MAY 1 1 1956

EQUIPMENT TO BE FURNISHED BY COMPANY

Two Compressors	reasonable rental value	$425.00 per mo.
Gasoline Hoist	reasonable value . . .	$1,500.00
Three Drilling Machines	reasonable value . . .	2,300.00
Two Shaft Buckets	reasonable value . . .	425.00
Air and Water Hoses	reasonable value . . .	225.00
Air and Water Lines	reasonable value . . .	325.00
Tools	reasonable value . . .	275.00

5/11/56

Crawford

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. 4285
Metal or Mineral Uranium
Date Received May 1, '56
Estimated Cost $58,786.00
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: **EL RICO URANIUM CORPORATION, a corporation of the State of Utah, incorporated October 13, 1954. Frank Bullock, 34 South Grant Street, Midvale, Utah, President; McRay Nielsen, 2493 East 29th South, Salt Lake City, Utah, and John M. Panek, 2051 Lambourne Avenue, Salt Lake City, Utah, Vice-Presidents; Wanda Nielsen, 2493 E. 29th So. St., Salt Lake City, Utah Secretary.**

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract **Legal owner by mining deed from the locators of 105 mining claims in Sevier County, State of Utah, known and designated as Thunderbird No. 1 to Thunderbird No. 105, all as specifically described in deed recorded in the office of the County Recorder of Sevier County, Utah, November 29, 1954, as Entry No. 130852.**

(*b*) State any mine name by which the property is known. **Thunderbird Mine**

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise **Owner under location by deed from original locators.**

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. **The complete list of the claims is attached hereto and by reference made a part hereof.**

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

The information called for by paragraph 4, Physical development, is set forth in detail on Exhibit "B" attached hereto and by reference made a part hereof.

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. 1200 feet of drift, and 200 feet of shaft, and 5000 feet of core drilling, all as shown on attached sketch marked Exhibit "C".

(*c*) The work will start within ten (10) days and be completed within six (6) 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 Exhibit "D".

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: Exhibit "E"

(*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

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

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

Explain in detail on acompanying paper. See Exhibit "F" attached hereto.

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 May, 195-6

EL RICO URANIUM CORPORATION

(Applicant)

By Frank Bullock

PRESIDENT

34 So. State St.

Midvale, Utah

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

EXHIBIT "A"

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LIST OF CLAIMS OWNED BY EL RICO URANIUM CORPORATION

Name of Claim	Date of Recording	Entry No.
Thunderbird #1	April 10, 1954	127374
Thunder Bird #2	June 14, 1954	128021
Thunder Bird #3	July 1, 1954	128396
Thunder Bird #4	June 14, 1954	128022
Thunder Bird #5	June 14, 1954	128023
Thunder Bird #6	June 14, 1954	128024
Thunder Bird #7	June 14, 1954	128025
Thunder Bird #8	June 14, 1954	128026
Thunder Bird #9	June 14, 1954	128027
Thunder Bird #10	June 14, 1954	128028
Thunder Bird #11	July 1, 1954	128301
Thunder Bird #12	July 1, 1954	128302
Thunder Bird #13	July 1, 1954	128303
Thunder Bird #14	July 1, 1954	128304
Thunder Bird #15	July 1, 1954	128305
Thunder Bird #16	July 1, 1954	128306
Thunder Bird #17	July 1, 1954	128307
Thunder Bird #18	July 1, 1954	128308
Thunder Bird #19	July 1, 1954	128309
Thunder Bird #20	July 1, 1954	128310
Thunder Bird #21	July 1, 1954	128311
Thunder Bird #22	July 1, 1954	128312
Thunder Bird #23	July 1, 1954	128313
Thunder Bird #24	July 1, 1954	128314
Thunder Bird #25	July 1, 1954	128315
Thunder Bird #26	July 1, 1954	128316
Thunder Bird #27	July 1, 1954	128317
Thunder Bird #28	July 1, 1954	128318
Thunder Bird #29	July 1, 1954	128319
Thunder Bird #30	July 1, 1954	128320
Thunder Bird #31	July 1, 1954	128321
Thunder Bird #32	July 1, 1954	128322
Thunder Bird #33	July 1, 1954	128323
Thunder Bird #34	July 1, 1954	128324
Thunder Bird #35	July 1, 1954	128325
Thunder Bird #36	July 1, 1954	128326
Thunder Bird #37	July 1, 1954	128327
Thunder Bird #38	July 1, 1954	128328
Thunder Bird #39	July 1, 1954	128329
Thunder Bird #40	July 1, 1954	128330
Thunder Bird #41	July 1, 1954	128331

Name of Claim	Date of Recording	Entry No.
Thunder Bird #42	July 1, 1954	128332
Thunder Bird #43	July 1, 1954	128333
Thunder Bird #44	July 1, 1954	128334
Thunder Bird #45	July 1, 1954	128335
Thunder Bird #46	July 1, 1954	128336
Thunder Bird #47	July 1, 1954	128337
Thunder Bird #49	July 1, 1954	128339
Thunder Bird #50	July 1, 1954	128340
Thunder Bird #51	July 1, 1954	128341
Thunder Bird #52	July 1, 1954	128342
Thunder Bird #53	July 1, 1954	128343
Thunder Bird #54	July 1, 1954	128344
Thunder Bird #55	July 1, 1954	128345
Thunder Bird #56	July 1, 1954	128346
Thunder Bird #57	July 1, 1954	128347
Thunder Bird #58	July 1, 1954	128348
Thunder Bird #59	July 1, 1954	128349
Thunder Bird #60	July 1, 1954	128350
Thunder Bird #61	July 1, 1954	128351
Thunder Bird #62	July 1, 1954	128352
Thunder Bird #63	July 1, 1954	128353
Thunder Bird #64	July 1, 1954	128354
Thunder Bird #65	July 1, 1954	128355
Thunder Bird #66	July 1, 1954	128356
Thunder Bird #67	July 1, 1954	128357
Thunder Bird #68	July 1, 1954	128358
Thunder Bird #69	July 1, 1954	128359
Thunder Bird #70	July 1, 1954	128360
Thunder Bird #71	July 1, 1954	128361
Thunder Bird #72	July 1, 1954	128362
Thunder Bird #73	July 1, 1954	128363
Thunder Bird #74	July 1, 1954	128364
Thunder Bird #48	July 1, 1954	128338
Thunder Bird #75	July 1, 1954	128365
Thunder Bird #76	July 1, 1954	128366
Thunder Bird #77	July 1, 1954	128367
Thunder Bird #78	July 1, 1954	128368
Thunder Bird #79	July 1, 1954	128369
Thunder Bird #80	July 1, 1954	128370
Thunder Bird #81	July 1, 1954	128371
Thunder Bird #82	July 1, 1954	128372
Thunder Bird #83	July 1, 1954	128373
Thunder Bird #84	July 1, 1954	128374
Thunder Bird #85	July 1, 1954	128375
Thunder Bird #86	July 1, 1954	128376

Name of Claim	Date of Recording	Entry No.
Thunder Bird #87	July 1, 1954	128377
Thunder Bird #88	July 1, 1954	128378
Thunder Bird #89	July 1, 1954	128379
Thunder Bird #90	July 1, 1954	128380
Thunder Bird #91	July 1, 1954	128381
Thunder Bird #92	July 1, 1954	128382
Thunder Bird #93	July 1, 1954	128383
Thunder Bird #94	July 1, 1954	128384
Thunder Bird #95	July 1, 1954	128385
Thunder Bird #96	July 1, 1954	128386
Thunder Bird #97	July 1, 1954	128387
Thunder Bird #98	July 1, 1954	128388
Thunder Bird #99	July 1, 1954	128389
Thunder Bird #100	July 1, 1954	128390
Thunder Bird #101	July 1, 1954	128391
Thunder Bird #102	July 1, 1954	128392
Thunder Bird #103	July 1, 1954	128393
Thunder Bird #104	July 1, 1954	128394
Thunder Bird #105	July 1, 1954	128395

EXHIBIT "B"

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PHYSICAL DESCRIPTION

This group of claims is in the form of a rectangle 6,300 feet wide by 15,000 feet long. The 15,000 foot center line of the block runs southeasterly from approximately the center of the northeast quarter of Section 22, Township 25 South, Range 3 West, Salt Lake Meridian, and parallels Monroe Canyon through which flows Monroe Creek, a tributary of Sevier River.

It is approximately three miles to the nearest paved highway, but a good gravelled road runs through the entire length of the group of claims.

In the township immediately south of the claims are several uranium mines from which ore is being shipped in substantial amounts. The area being mined appears to be similar, geologically, to that containing the Thunderbird Claims. The active mines are in what is known as the Marysvale district. The ore is found in vertical veins which have intruded bodies of andesite and monzonite. Where monzonite is the country rock, it also carries commercial values in the vicinity of the intrusive rock which is softer and is porphyritic.

The property contains a series of southeasterly trending veins of porphyry, similar to those being mined near Marysvale, and it has been determined by Geiger counter the degree of radio activity at the surface. This varied from zero in the andesite to as much as .15 MR per hour in the vein material. The monzonite, which shows a very low surface count in the Marysvale district, showed up to .10 in places in the Thunderbird group. The monzonite that is being mined from a shaft on the Vanadium Corporation of America property, in the Marysvale district, shows a much lower Geiger count than similar surface beds on the subject claims. It is known that some of these mines have been opened where surface indications have been little more than the ordinary background count. This condition is caused by surface weathering or leaching, that in some cases extends 30 to 50 feet below the surface.

Further exploration consisted of blasting of shallow pits and bull-dozing along the main vein and the drilling of four small diameter holes. These four core holes were drilled to depths of 90 feet, 100 feet, 110 feet and 120 feet. The formation was so broken that drilling was very difficult and cores could not be recovered. Circulation returns went away in fissures and did not reach the surface. Only one of these holes could be probed at depth. There the probe would not go beyond a depth of 45 feet. This hole showed a Geiger count, by probe, from 30 to 45 feet that indicated ore with a U_3O_8 count in excess of 0.35. The probe had been calibrated with a sample of known uranium content. One of the other holes had been drilled latterally into the main vein, some 9 feet below the surface. Due to caving, it could not be probed beyond 12 feet. It showed a count of 0.30. While trying to push the probe beyond this point, the probe was lost and could not be recovered.

PHYSICAL DESCRIPTION

A Scintillator was used at the surface along the main vein where it had been exposed by bull-dozing for roads and test pits. In all cases where pits had reached greater depths, greater counts were obtained. The best count was on the face where the exposed vertical side of the vein had been dozed out to make a place to start the horizontal hole. This put the Scintillator to 15 on the third scale (.25), which according to the Scintillator Manual indicates commercial grade ore.

The exploration by drilling proved to be too expensive in light of the results, because of mechanical difficulties. The bull-dozing of pits along the vein was carried as far as could be done economically and each slight increase in depth showed substantially higher Geiger count. Upon the recommendation of the company geologist a drift was commenced. This work has been carried on as indicated on Exhibit "C" attached hereto.

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MAY 1 1 1956

EXHIBIT "D"

The operations will be under the personal direction and supervision of Frank Bullock, President of the applicant. Mr. Bullock has been engaged in mining for more than a quarter of a century. He was, for many years, an employee of the Bingham Mines Company, the Ohio Copper Company, the U. S. Smelting, Refining and Mining Company, and the American Smelting and Refining Company, and has engaged in all types of mine work from actual labor as a miner to mine superintendent. Since 1941 he has been successfully employed in operating, developing and leasing mines on his own account, and he is fully qualified to direct and manage the operation. The corporation itself is not of long standing, and has no background of experience other than the background of operating experience of the officers thereof.

EXHIBIT "E"

ESTIMATE OF COSTS

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MAY 1 1 1956

Items	Cost of Driving 1,200 foot Drift per foot.	Cost of 200 feet of Shaft per foot.
(a) Independent contracts:	NONE	
(b) Labor, supervision, consultants:		
Labor	$16.00	$ 28.00
Engineering, accounting, etc.	3.00	3.00
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(f) New buildings, improvements, installations:	None contemplated	
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Total Cost Per Foot	$37.91	$66.42

EXHIBIT "F"

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EQUIPMENT TO BE FURNISHED BY COMPANY

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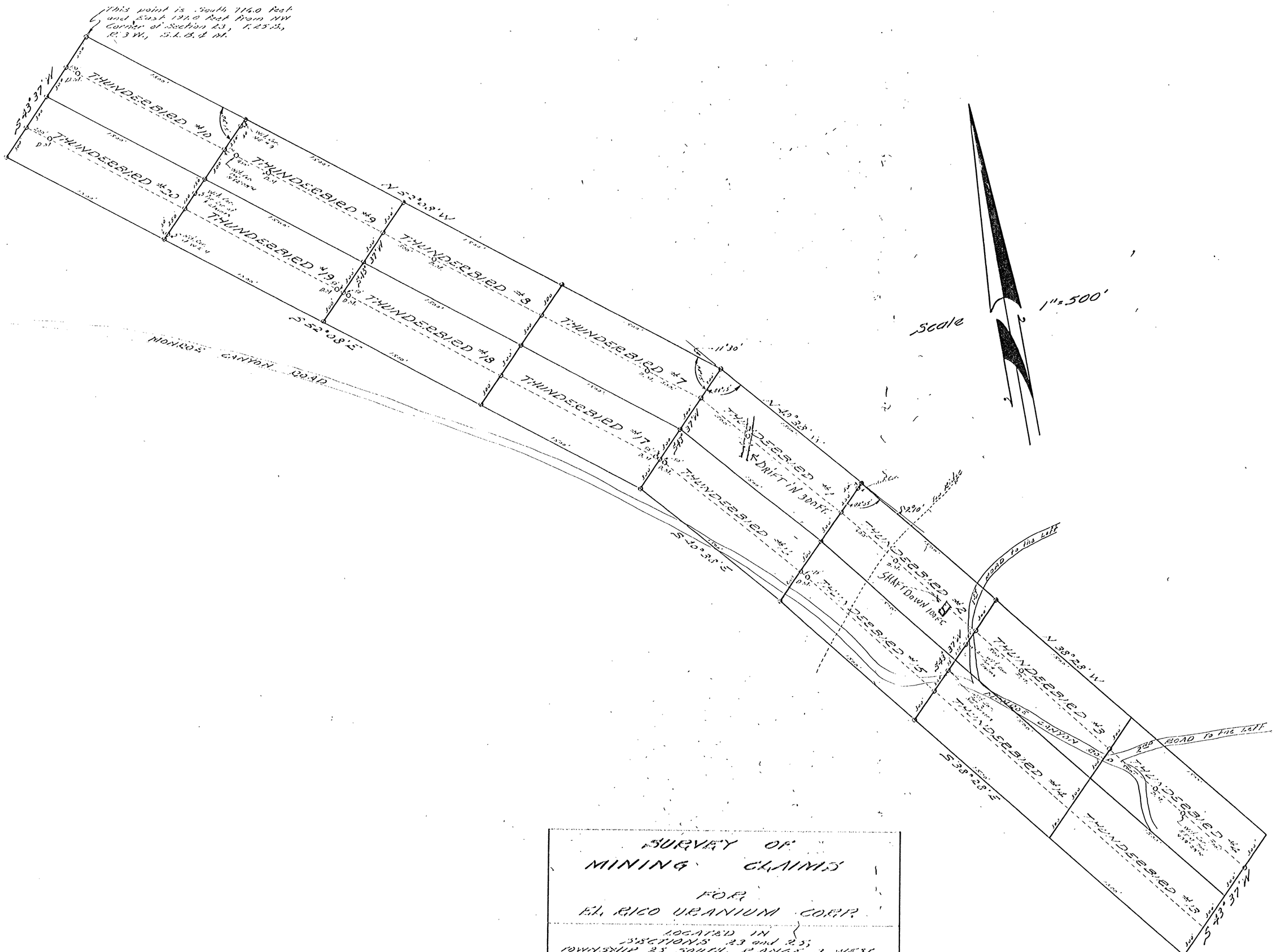
Three Drilling Machines	reasonable value	2,300.00
Two Shaft Buckets	reasonable value	425.00
Air and Water Hoses	reasonable value	225.00
Air and Water Lines	reasonable value	325.00
Tools	reasonable value	275.00

OFFICIAL BUSINESS

Mr. George C. Selfridge, Chairman
Operating Committee, D.M.E.A.
Dept. of the Interior
Washington 25, D.C.

EXHIBIT "C"



SURVEY OF
MINING CLAIMS
FOR
EL RICO URANIUM CORP.

LOCATED IN
SECTIONS 23 and 26
TOWNSHIP 25 SOUTH, RANGE 3 WEST,
SALT LAKE BASE & MERIDIAN

PREPARED BY
BUSH & GUDGELL ENGINEERS, INC.
210 SOUTH SECOND EAST STREET
SALT LAKE CITY, UTAH
EDWIN A. [illegible]

B&G 4118-C.B.D.

LANE WELLS

RADIOACTIVITY LOG COMPANY

Company Gamma Ray Petroleum
Well Lacina # 1H
Field Spraker Zone
County Ellis State KAN
Location SW-L-SE-SW
SE SE LS

SEC. 4	TWP. 14 S
RGE. 18 W	PERMANENT DATUM: GROUND LEVEL
ELEVATION: 2147	ELEVATION: 2147
ELEVATION: 2150	ELEVATION: 2153

DATE FIRST RUN	2-27-1979
DATE LAST RUN	2-27-1979
OFFICE FIELD LOG NO.	
DATE	
OFFICE FINAL LOG NO.	
DATE	

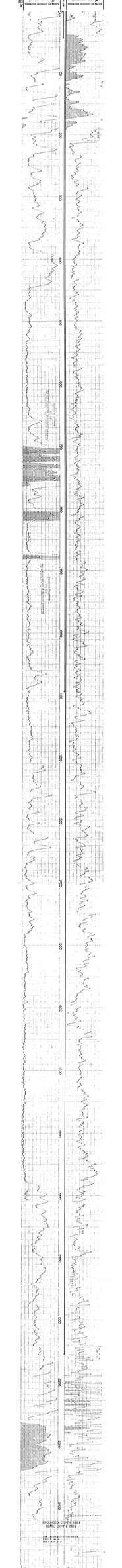
RUN NUMBER	ONE
DEPTH DRILLER	3600
DEPTH LOGGER	3600
BOTTOM LOGGED INTERVAL	3600
TOP LOG INTERVAL	2800
CASING DRILLER	8 5/8" @ 224'
CASING LOGGER	8 5/8" @ 224'
BIT SIZE	7 7/8"
TYPE FLUID IN HOLE	Mud
DENSITY	9.2
VISCOSITY	45
PH	10.5
FLUID LOSS	8.0
SOURCE OF SAMPLE	Pit
RM @ MEAS. TEMP.	.65 @ 70°
RMF @ MEAS. TEMP.	.55 @ 70°
RMC @ MEAS. TEMP.	.75 @ 70°
SOURCE RMF & RMC	Mud
RM @ BHT	.25 @ 120°
TIME SINCE CIRC.	8 hrs
TIME LOGGER ON BOTTOM	1:00 AM
UNIT NUMBER	2
WITNESS	Mr. Dreiling

CASING RECORD				LINER RECORD	
SIZE	WT.	GRADE	TOP	SIZE	TOP
8 5/8"	23	J-55	GL		
5 1/2"	14	J-55	2800		

LANE WELLS RADIOACTIVITY LOG COMPANY

GAMMA RAY — RADIATION INTENSITY INCREASES

NEUTRON — RADIATION INTENSITY INCREASES



RECORDED DEPTH ZERO
FORM. DEPTH ZERO

DIV. OF LANE WELLS, INC.
P.O. BOX 1369
HOUSTON 20, TEXAS

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
MINERAL LEASING DIVISION
OIL AND GAS OPERATIONS

STRUCTURAL & GEOLOGICAL MAP OF SPENCE DOME

BIG HORN COUNTY WYOMING

DRAWN BY J.D.C	DATE NOV. 13, 1930
APPROVED BY L.G.S	№ MIDWEST 8626
SCALE 4 IN. = 1 MI.	

MAP COPIED FROM ORIGINAL BY R. G. MARTIN 5-21-56

LEGEND

	Kc	COLORADO GROUP UNDIVIDED
CRETACEOUS	Kcv	CLOVERLY
	Kms	MORRISON
JURASSIC	Js	SUNDANCE
TRIASSIC	Rc	CHUGWATER

- - - - TOP OF LOWER MEMBER OF CHUGWATER FORMATION

Elevation on Dome

● Producing Well
◇ Dry Hole
◆ Show of Oil

— 4000 — CONTOURED ON TOP OF THE CHUGWATER

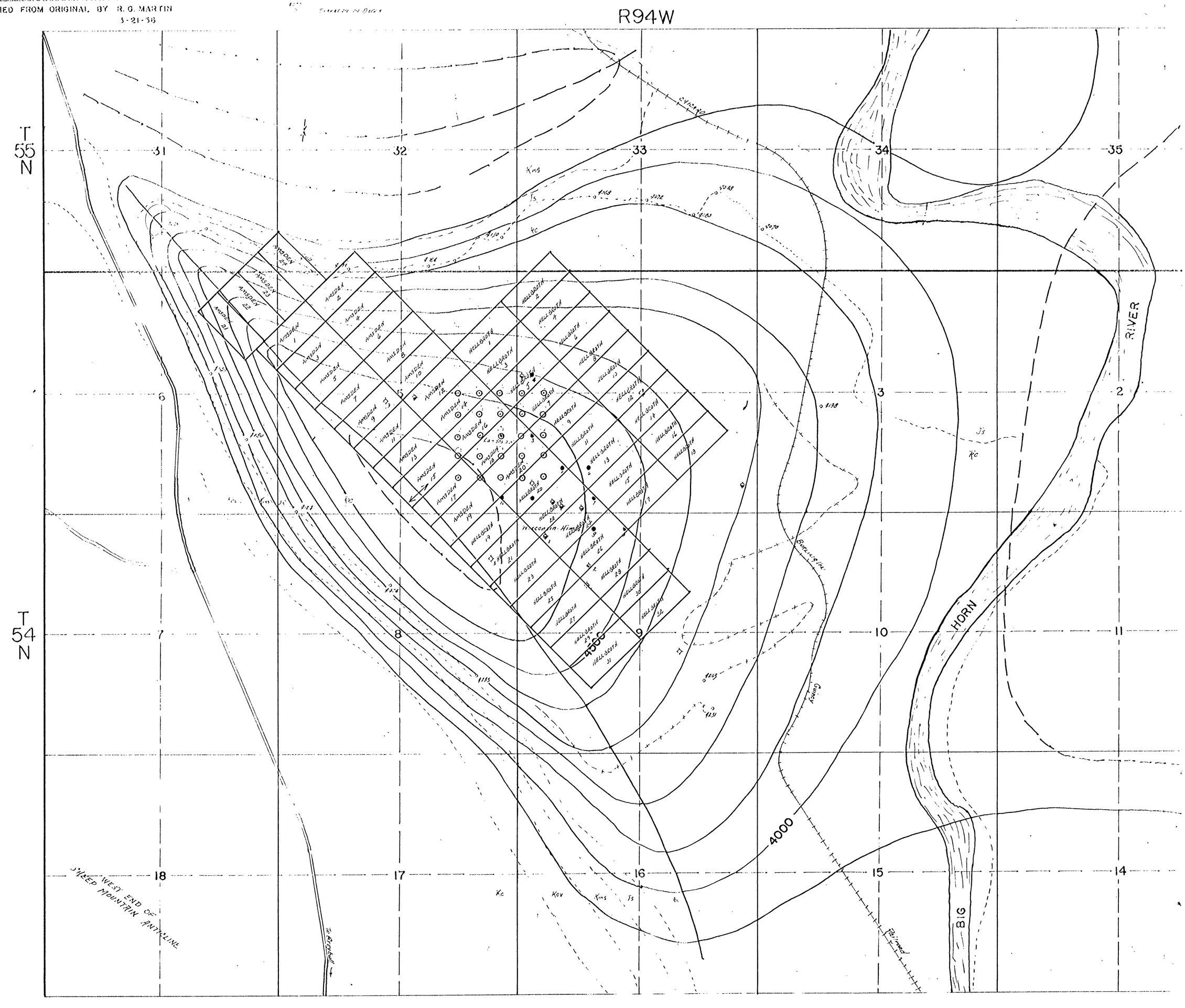
O Showing Location of Proposed Drill Holes

NOTE LANDES 4/10 HOLE LOG ENCLOSED

AMSDEN MINING & EXPLORATION CO. Box 193 Gillette, Wyo

AMSDEN & HELLBROTH

CLAIMS

BIG HORN COUNTY, WYOMING.

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING