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

RECEIVED
OCT 6 - 1955

October 3, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Assistance, (Uranium), Neptune Uranium Corporation, Piper-Shamrock-Kingpin groups, Montrose County, Colorado

Enclosed are two copies of the subject application in the amount of $99,730.

A copy of the application has been forwarded to the Grand Junction office for their review.

W. M. Traver

W. M. Traver

Enclosure

HMC:ab
cc: Hasler
Harshman
Shaw (2)
Subject
Chron.

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 10/12

REFERRED TO:

1. [redacted]
2. Mr. Crawford
3. Mr. Ellis
4.

FOR:

---------- Action	---------- Recommendation
---------- Approval	---------- Record of ----------
---------- Comment	---------- Referring to ----------
---------- Conference	---------- Reply for signature of ----------
---------- Consideration	---------- Rewriting
---------- Filing	---------- Signature
---------- Instructions	---------- Suggestions
---------- Investigation	---------- Your information
---------- Initials	
---------- Mailing	
---------- Previous correspondence	

REMARKS:

Hasler rpt. attached

[redacted]

4005

Check (X) before the items needing attention.

ROBERT E. ADAMS

Initials of sender.

GPO 16—63815-1

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

October 3, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. W. Hasler

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Assistance, (Uranium), Neptune Uranium Corporation, Piper-Shamrock-Kingpin groups, Montrose County, Colorado

Enclosed is the subject application in the amount of $99,730.00. The claims covered by this application are contiguous to those explored under Docket DMEA 3355, Contract Idm-#703.

Will you please review the application with the Bureau of Mines representative in the Grand Junction office and promptly submit to this office eight copies of your joint recommendations regarding the advisability of a field examination.

W. M. Traver

W. M. Traver

Enclosure

HMC:ab
cc: Sec. Opr. Comm. (2)
Shaw (2)
Subject
Chron.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd
SEP 30 1955

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

RECEIVED
OCT 6 - 1955
BUREAU OF MINES
Denver, Colorado

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. DMEA 4005
Metal or Mineral Uranium
Date Received 10-6-55
Estimated Cost $99,730
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: Neptune Uranium Corporation (a Colorado Corporation)
2625 Walnut,
Denver, Colo.

(*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. A Corporation under the laws of Colorado.

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

(*d*) If a partnership, add to the above statement the names and addresses of all partners. Not a partnership.

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 attached supplemental data.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee;
See attached supplemental data.

(*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. Complete data attached in accompanying bound report.

(*e*) If you own the land, describe any liens or encumbrances on it There are no liens nor encumbrances on the land beyond the Applicant's lease.

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Full data submitted with the accompanying report, & herewith.

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. } Information att'd.

(*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. Full engineering & geologic report attached.

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

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

16—66551-1

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

(*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. See attached data.

(*c*) The work will start within 60 days and be completed within 12 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project: Attached.

(*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.). See attached data

(*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. See attached data.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel. None

(*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. None

(*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. None

(*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. None

(*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. None

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)?

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated August 2, 1955, 195__

Neptune Uranium Corporation
(Applicant)

By Paul H. Keating
Paul H. Keating
(Engineer-Geologist Consultant)

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

PAUL H. KEATING
MINING ENGINEER

RECEIVED
OCT 6 - 1955

Supplemental Data to be attached to

Form MF-103, "Application for aid in an Exploration Project, pursuant to DMEA Order 1, under the Defense Production Act of 1958, as amended".

1. Name of Applicant:

(a) Neptune Uranium Corporation. (Incorporated

(b) under the laws of the State of Colorado, 1955). Address 2625 Walnut, Denver, Colorado.

(c) Names of Officers:

Col. W. D. Griffith, Pres.
2308 Bellaire, Denver, Colo.

W. B. Griffith, Vice Pres.
Uravan, Colo.

Ray Carson, Sec'y-Treas.
Denver, Colo.

3. Applicant's property rights:

(a) The land upon which the Applicant wishes to explore is a group of claims contiguous to an area already explored, under Docket No. 3355, Contract No. Idm-E703, (L. A. Griffith Associates, a partnership). ON THE ACCOMPANYING MAP in the Engineering and Geological Report (Exhibit I, folded and in the pocket of the report binder), there is shown "all 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". This map illustrates this requirement fully.

PAUL H. KEATING
MINING ENGINEER

PLEASE NOTE: The adjacent and contiguous area upon which a DMEA contract has been completed, has been certified as a "discovery". (Copy is included in the report herewith). Furthermore, about 10% of the Government aid has already been re-paid within the last 8 months, by royalties from production.

ALSO: The successors to the "L. A. Griffith Associates" whose management-personnel is the same as that of the Applicant, have done an additional $6500 worth of off-set drilling exploration from capital funds. Full data and logs of this off-set drilling program have been sent to the DMEA and U. S. Bureau of Mines offices in Denver.

(b) The group of claims is known as the "Piper-Shamrock-Kingpin Group".

(c) The Applicant's interest in the land is as a Lessee, from the original locators, one Keith M. Andrews, and Donald K. Andrews, of Nucla, Colorado. There is included in the accompanying report, the book and page number of the entire group of claims located by these two men (father and son), and, in addition, the two claims "Lollypop" and "Piperoo", located by the L. A. Griffith Associates. The title to all of these has been transferred by L. A. Griffith Associates, et al, contract, renewable at the option of the Lessee.

(d) Copies of the lease between L. A. Griffith Associates and the Andrews interests are attached herewith; copies of the transfer-of-title to the Applicant (Neptune Uranium Corporation) are also attached, immediately following.

(e) The Applicant does not own the land, but there are no liens nor encumbrances upon it, beyond the Applicant's lease.

(f) The land consists of unpatented claims. Attached is a complete list of the entire group, giving book and page numbers, as recorded in the Montrose Colorado County Court House, re the discovery of each of these claims. The contiguous claims which have already been explored are suitably marked on this tabulation.

LIST OF CLAIMS

3(a)

Claim Name	Date Filed	Book-Page	Claimant
*Piper #1	Mar. 30, 1953	349 - 567	K.M & D.K. Andrews
*Piper #2	"	349 - 567	"
*Piper #3	"	349 - 568	"
Shamrock #1	Apr. 13 1950	343 - 8	"
*Shamrock #2	"	343 - 9	"
*Shamrock #3	"	343 - 10	"
*Shamrock #4	"	343 - 11	"
Shamrock #5	Apr. 19 1950	343 - 21	"
Kingpin #1	Mar. 19, 1951	343 - 379	"
Kingpin #2	"	343 - 380	"
Kingpin #3	"	343 - 381	"
Kingpin #4	"	343 - 382	"
Kingpin #5	"	343 - 383	"
Kingpin #6	"	343 - 384	"
Kingpin #7	"	343 - 385	"
Kingpin #8	"	343 - 386	"
Lollypop	Apr. 15, 1954	379 - 111	* Griffith, et. seq.
Piperoo	"	379 - 112	* " "
*Outlet	"	381 - 236	" "

* Claims so marked have been explored under DMEA Contract Idm-E703.

PAUL H. KEATING
MINING ENGINEER

4. Physical description:

(a) At the date of this application (July-August '55), the Applicant is exploring, by off-set drill holes, the holes drilled on DMEA Contract Idm-703. There are no mine workings on the area. The "production facilities" for this area are on hand and in operating order, in terms of track, cars, pipe, hose, drills, compressor, and domestic facilities. The Applicant's interest is as a Lessee from the Andrews interests, described above. (3. (a), (c), (d) of this form).

(b) There is no past or current production from the area concerned, BUT it is adjacent to an area that has been "certified" and which has produced a return upon a previous DMEA Contract. This adjacent contract has returned, within 8 months, about 10% or more of the Government loan.

(c) The geologic features and "reasons for wishing to explore" are covered in the accompanying geologic and engineering report. Maps and sketches, (some of which are referred to in this supplemental-data portion), are in this report. It is not requested that this report be returned.

(d) The area is accessible 11½ months per year, at least for "getting ore out". The Atomic Energy Commission and other Federal Agencies, have built an "access" road into the area.

Distance to shipping points are: Uravan (U. S. Vanadium Corporation), 11 miles; Vanadium Corporation of America (near Naturita), about 20 miles; Climax Uranium, at Grand Junction, about 90 miles.

Supply points are Uravan, Naturita, and Grand Junction, Colorado, at the distances given above.

Residence points are on the property of the Applicant, where existing permanent housing has been established, or where trailer-houses might be set up for operations.

(e) Skilled labor is readily available in this area, for the competent care of "carnotite-type" ore. Materials, supplies, and equipment are available at Uravan, 11 miles away, or at most, in Grand Junction, 90 miles away.

Domestic and operational water supply is within 3 miles of the operation (the Dolores River). It must be hauled, but the Applicant has trucks and tanks on hand for the purpose.

Power: The power source is gasoline engines, which develop sufficient electric energy for lights, power tools, and other needs, at 110v, a.c., for residential and underground needs.

5. The Exploration Project:

(a) The minerals for which the Applicant wishes to explore are the Uranium-bearing minerals found in the region. These are, in part, Carnotite, Tuyuamunite, Calciovolborthite, Pitchblende, Gummite, Torbernite, and/or other associated natural chemical compounds containing Uranium.

(b) The proposed work is fully described in the accompanying Engineering and Geologic Report. It consists of:

i. Establishing drill-hole sites on the ground on a checkerboard pattern at 100 -ft. centers.

ii. Bulldozing drill sets at these pin-pointed co-ordinates, suitably marked by a stake showing the position of each such marker on the co-ordinate network covering the property.

iii. The actual drilling of the holes, on-sub-contract, at the specified points, and under the observation of a resident engineer-geologist.

iv. Extraction of cores, through mineralized strata, and the competent examination and assaying of these cores, and their subsequent

storage or delivery to an authorized Government Agency. (See Part I of the Engineering-Geological Report re "Sampling", herewith).

(c) The work will start within 30 days and be completed within 12 months from the date of an exploration project contract.

(d) Lowell A. Griffith has been directing mining operations in Colorado for more than 25 years. Col. W. E. Griffith has operated and managed mining properties for an equal period. Paul H. Keating has been associated with carnotite mining since 1918. These are the personnel who will supervise the exploration project.

6. Estimate of costs:

(a) It is the Applicant's intention to sub-contract the actual drilling and the drill-set bulldozing to operators now in the field.

i. The existing group of drillers now in the Colorado Plateau has, within the last 6 months, formed an organization to present a unified front re drilling costs, essentially $1.50 per ft. for rotary 4¼" hole. This price per foot has been used in the attached estimate of drilling costs in this application.

ii. The estimated cost of bulldozing drill sets has been based upon actual experience of the contiguous area, under a recently completed contract, on identical type of ground, and by identical management personnel.

iii. The core-drilling expense has been estimated at $4.00 per ft. of dry coring, in 15% of the holes (100 holes), for a core-length of 5 ft. This figure will include the cost of core boxes, which, with the cores, will be turned over to any Government Agency concerned in this project, upon demand.

(c)
(d)
(e)
(f)
(g)
(h)

These items, inclusive, do not apply in this application and are therefore marked "None" on the attached Form MF-103. Inferred answers have been completed in the foregoing, or in the attached report.

7. (a) The Neptune Uranium Corporation is prepared to furnish its share of the expense of this project in cash.

Neptune Ur. Corp.

PAUL H. KEATING
MINING ENGINEER

Summary of the Estimates of Cost of the Exploration Project, on the "Piper Shamrock-Kingpin Group" of mining claims, on Carpenter Flats, western Montrose County, Colorado.

Refer to Form MF-103:

6.

(a) Independent contracts:

i. Drilling: A total of 59,448 ft., in 701 holes, of average depth of 84.8 ft.

-Rotary drilling: 58,948 ft. @ $1.50/ft. $88,422.00
-Core drilling: 5 ft. on each of 100 holes; payment to be based upon core-recovered, rather than upon footage drilled, at $4.00 per ft. 2,000.00

ii. Bulldozing drill sets for the above operation: Estimated 3 drill sets prepared per hour, total 234 hours, at a rate of $12/hr. 2,808.00

(b) Technical help: (Please refer to the "Summary and Recommendations" at the end of the attached report, particularly re fees et al for geological and engineering consultants). Estimated cost by this Applicant, on this proposed project. 5,000.00

(h) Contingencies: It is estimated, from experience on an adjacent and contiguous area that 150 chemical-analyses will be required; A competent Uranium analysis costs $10 each 150 chemical assays, @ $10.00 each. 1,500.00

TOTAL ESTIMATED COST OF THIS EXPLORATION PROJECT, $99,730.00

NOTE: These estimates are based upon current cost-rates for the kinds of work listed.

Carl Brown

RECEIVED
OCT 6 - 1955

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

To: Lowell A. Griffith Associates, a partnership consisting of Lowell A. Griffith, P. O. Box 673, Central City, Colorado; Construction Specialties Co., 2625 Walnut Street, Denver 1, Colorado; and Paul H. Keating, Apt. 5, Mines Park, Golden, Colorado

Pursuant to the provisions of Exploration Project Contract No. Idm-E703, dated September 9, 1954, (Docket No. DMEA-3355), hereinafter called the "contract" between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Limited high-grade concentrations of uranium-vanadium mineralization were disclosed by drilling in the lowest rim or horizon of the Salt Wash member of the Jurassic Morrison formation.

Dated: May 19, 1955

THE UNITED STATES OF AMERICA

By /s/ C. O. Mittendorf
Administrator, Defense Minerals
Exploration Administration

PAUL H. KEATING
MINING ENGINEER

RECEIVED
OCT 6 - 1955

ENGINEERING and GEOLOGICAL REPORT

ON THE PIPER-SHAMROCK-KINGPIN GROUP OF CLAIMS ON

CARPENTER FLATS, MONTROSE COUNTY, COLORADO

I. PURPOSE OF THIS REPORT: This is part of an application to the Defense Minerals Exploration Administration for an Exploration contract on a portion of Sec. 15, Township 48 North, Range 18 West, N. M.P.M.

II. The applicant is the "Neptune Uranium Corporation", which has been formed under the laws of the State of Colorado. This corporation is the successor to the partnership known as "Lowell A. Griffith Associates", and/or the "Griffith Uranium Co."

III. The contents of this combined engineering and geological report are:

1. DMEA Form MF-103, (Revised April 1952. Data for each section and sub-letter (a), (b), (c), etc., are filled out in detail on a separate sheet, and attached to the form. These data have not been bound into this report, but have been attached to the form and inserted into the folder containing this report. Some of these data are repeated in this binding in order that the form itself might be processed independently of the bound report, herewith.

2. The bound portion of the report is in two sections:

   i. Engineering data and description of procedure.

   ii. Geological data on the area.

   Also:

   Bound topographic, geologic, and section maps, as the text of the report requires: Gatefold maps of the property concerned, the isochore or drilling-depth contour map, the drilling-pattern, and the local topographic map enlarged from the U.S.G.S Red Canyon Quadrangle.

   A complete tabulation on 13 pages, giving the co-ordinates of each proposed hole in terms of east and north with respect to an established triangulation point on the ground. These pages show the estimated depth of each hole. THIS TABULATION HAS BEEN MADE BY CAREFUL CHECKING AS TO WHICH CLAIM EACH PROPOSED DRILL HOLE WILL BE UPON. To wit: The claim upon which each proposed drill hole is located, is tabulated in terms of the Filing Sequence in the Montrose County Court House, Montrose, Colorado.

   In the back pages of the bound portion of this report are photographic copies of all of the legal documents, assignments, contracts, et al, and also notarial affidavits concerning title.

PAUL H. KEATING
MINING ENGINEER

3. In the pocket of the inside back cover of the binder are two maps showing :-

   i. The regional topography and the claims concerned as the over-all holdings of the Neptune Uranium Corporation on Carpenter Flats.

   ii. A detailed map of these claims showing the particular areas concerned in this application. The area that has already been explored under a previous Exploration Project, (Contract Idm-E703), and the "foreign" or other areas that are contiguous to this application, are designated by a suitable legend.

4. The last page of the bound report, herewith, is reproduced from a form suggested by the DMEA, re: the appointment of an "Attorney-in-fact". This form applied to the contract Idm-E703, which has been completed and upon which, partial repayment has been made. The managerial, technical, and operational personnel of that completed contract is identical to the applicant, herewith. The "Attorney-in-fact" is the undersigned, who prepared this application and report, and, also, the previous application and reports on the adjacent holdings.

   It is requested that the undersigned be continued as "Attorney-in-fact" on this application in order to continue the experienced smoothness of operations between the personnel of applicant and administration. (This request will be repeated in the "engineering" section of the attached bound report).

PAUL H. KEATING
MINING ENGINEER

PART I

Engineering Procedure for an Exploration Project on the PIPER-SHAMROCK-KINGPIN group of claims on Carpenter Flats, in Sections 14-15, Twp. 48 N, R 18 W, N.M.P.M., western Montrose County, Colorado.

THE CO-ORDINATE NETWORK

The U. S. Bureau of Land Management has established on the Red Canyon Quadrangle area the section and quarter-corners of the Public Domain. These are iron pipes, with labelled caps, set firmly into the ground, or set with concrete into holes drilled into the country rock.

About 200 yards north of the quarter-corner between Sec. 14, and Sec. 15, Twp. 48 N., R. 18 W., N. M. P. M., on a high topographic promontory, there is a "Triangulation Point" set into the sandstone bedrock. This is a circular brass plate marked as "Triangulation Point, U. S. Dept. of the Interior". From this plate a U.S.B.M. on the right hand bank of the Dolores River, bears N 36°0' E, 3000 feet more or less. (This U.S.B.M. is shown on the U. S. Geological Survey topographic map of the Red Canyon Quadrangle).

This Triangulation Point lies upon and within the holdings of the Neptune Uranium Corporation (the applicant). It has been arbitrarily assigned a position as 10,000 feet east and 10,000 feet north of an "origin".

The purpose of assigning this rather large number of feet in each direction is this: All present and all probable future holdings on Carpenter Flats of the applicant will lie in the northeast quadrant of the co-ordinate network. This will greatly simplify calculations for all present and future work.

A number of "control points" have been established all over the property by careful chaining and/or precision triangulation methods. These "control points" are iron pipes or steel rods driven or set in the bed rock of the area so that:-

The resident engineer for current and future operations can set up his transit over any one of these "control" points, sight on a mutually visible, similar control point, and know immediately where he is on the mapping procedure that must follow each field job, in terms of direction, distance, and elevation.

On all maps made or used by the Corporation, or submitted in reports, this permanent reference point is marked by a triangle, and labelled as 10,000 feet east and 10,000 feet north.

The foregoing defines the coordinate network of the property concerned.

THE DRILLING PATTERN

There is "experience", which may or may not reach the dignity of "evidence", that carnotite-type ore bodies in the Colorado Plateau are almost intelligent in successfully dodging discovery by a drilling program of whatever design, or no design.

This operator-writer has attempted random drilling, triangulation patterns, staggered patterns, and simple checkerboard square patterns. In every case, in which actual production was made subsequent to a drilling program, <u>good ore</u> was found in areas that showed only mediocre drilling results--<u>near</u> the drill hole, but not under it or penetrated by it.

However, the best results have come from a checkerboard pattern of dril-

ling, in terms of mineralized holes, (regardless of grade).

THEREFORE, this proposed drilling program is based upon a checkerboard pattern of holes, spaced on 100-ft. centers.

SAMPLING AND DISCOVERY CONTROL

This is the most technically difficult problem of an expensive exploration program. Following is a brief outline of the applicant's methods of taking adequate samples:

The cuttings from a "discovery drill hole" are recognized by some physical or chemical property that is different from the waste rock above or below an "ore" streak. This difference may be in color, hardness, luster, slow chemical analysis, or rate of radiation, as measured by some electronic device.

However, this "radiation" rate, is NOT sufficient, by itself, to establish a "discovery hole". IF the uranium-bearing mineral has been in place for a long time, and has not been subjected to migrating ground-water, THEN the radiation rate approaches "equilibrium" and the radiation-rate, or the eU (equivalent uranium) estimate will approximate the chemical analysis of uranium content.

The foregoing "IF" is highly important, in any given uranium-producing locality. For example, a luminous dial wrist watch will "knock a Geiger counter needle off the pin" which is a common expression among the current clan of uranium ore prospectors. This radiation force is actually radium, the third "daughter-product" of uranium itself. On the watch dial there is little or no actual uranium present. The reading on a Geiger counter of the watch dial is "eU"—equivalent-uranium.

The "equivalent uranium" is the amount of uranium that has been undisturbed for a very long time in order to generate its third daughter-product, radium.

The radium "kicks the needle", and the Geiger counter translates, electronically, on the dial of the instrument, how much uranium was required to give the needle such an equivalent "kick". The actual ratio of the activating radium to the patent element uranium is 1:2,800,000. Hence, a microscopic amount of radium, in a watch dial, may represent a huge tonnage of actual "ore" production of the parent element uranium.

It is NOT the purpose of the foregoing to "play school", but this writer believes that any investor in any "uranium" prospect, of whatever nature, (including the DMEA), should be advised of the singular problems that uranium production includes, and as to how this applicant proposes to meet those problems.

On the area concerned in this application, it has been established by experience, that the commercial grade ore bodies are "in equilbirium". In other words, the chemical analyses, upon which settlements have been made for shipments from a contiguous area, have approximated very closely the estimates made by "radiation-rates" of a calibrated Geiger counter or similar electronic instrument.

The higher-grade electronic devices used to measure radiation are equipped with "probes". These are an accessory attachment, equipped with a highly flexible cable, that can be lowered into a drill-hole, and thereby determine, foot-by-foot, the "eU",equivalent uranium, that the drill hole exposed. When an area's mineralization is in equilibrium, these probe data amount to an in-place approximation of the thickness and grade of ore that

the drill hole has penetrated. This condition applies specifically to the area concerned in this application.

However, it is entirely possible (and has actually happened), that a fast-moving drill bit will go through a thin streak of high-grade ore on the edge of a large body of high-grade ore; and that a "statistical dust-collecting sampler" will absorb this high-grade streak into a 5-ft. interval of cuttings, and thereby dilute an important discovery hole into a mere "trace" or "mineralized" hole.

Such an experience places an unfair and frustrating disadvantage upon all agencies and personnel concerned with an exploration project.

Following is the proposed procedure: - (The instruments described are on hand).

(a) A "probe", an electronic device at the end of a 50-100 ft. cable, will be placed in the dust-stream at the top of each drill hole; and the air-stream coming out of each drill hole will blow the instrument constantly clean.

(b) This "probe" is connected to a loud speaker, 50-100 feet away, out of the dust-stream. This "LOUD" speaker is of a magnitude that can be heard for several miles, and override the noise of the drilling equipment.

(c) The driller, upon such "warning signal", will immediately stop operations, blow the hole clean, and install a core-barrel on his drill stem.

(d) Core-drilling is also dry, and involves a certain amount of dust. The probe will continue to activate the loud-speaker until the coring bit is through the radioactive stratum.

(e) The cores, so obtained, will be available to any competent government agency requesting them or kept in the possession of the applicant in conventional core-boxes.

The drillers on this proposed program shall be fully responsible for all changes of lithology, color, hardness, and ore-occurrence as provided for on the

log forms. The resident engineer, or a competent assistant shall be at the scene of operations AT ALL TIMES during the actual drilling operations.

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SUMMARY AND RECOMMENDATIONS

SUMMARY The area upon which the foregoing report has been prepared is:

1. Geographically in the Colorado Plateau, and surrounded in all directions by uranium-ore production, for many miles.
2. Geologically and stratigraphically located upon the Salt Wash member of the Morrison (Jurassic) formation, which is a major ore-producing unit of the Colorado Plateau.

FURTHERMORE:-

1. The ore bodies discovered on the contiguous area (upon which a certified discovery was made on a recently completed DMEA contract), are of economically-reachable depth.
2. The area has an access road into it, and operations are possible 350 days per year. The applicant has a fully equipped camp on the ground, in terms of dwellings, facilities, electric and gasoline power, water-supply tanks and trucks, and mining machinery (compressors, track, pipe, hose, pneumatic drilling machines), and all necessary accessory equipment for a camp maintenance and mining operation. The applicant also includes experienced and competent personnel for the successful exploration, development, and production of a mining operation.

   Except for the "access road", (which serves many operators in the district), the above paragraph lists the physical and technical equipment and personnel now on the property, brought there and maintained there in the spirit and faith in free enterprise by the applicant, himself and as successor to "L.A. Griffith Associates and/or Griffith Uranium Company."

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No officer nor director of the applicant is on salary now or heretofore, for his service. The mutual motive was, and is: "That this is a good property, of high potential-production of uranium bearing ore".

It seems to me that the foregoing is competent background upon which to base the following:

RECOMMENDATIONS I recommend:

1. That the PIPER-SHAMROCK-KINGPIN Group of claims on Carpenter Flats, in western Montrose County, Colorado, be explored;

   i. By a checkerboard pattern of drill holes, on 100-ft. centers;

   ii. To a depth indicated by the isochore map and the abstracted tabulation of such depths taken from said map (enclosed in this bound report).

   iii. That the actual drilling, by rotary $4\frac{1}{4}$" holes be done on sub-contract; that bull-dozing drillsets for such drilling also be done on sub-contract.

   iv. That competent audio-warning electronic devices be made an integral part of each sub-contract for drilling, (per the engineering-report data given herewith);

   v. That 15% of the proposed 701 drill holes (100 holes, more or less), be allowed 5 feet of diamond-bit core-drilling, the recovered cores of which shall be kept on hand by the applicant or delivered to any government agency interested.

   vi. That allowance be made for chemical analysis for a minimum of 150 mineralized cores @ $10.00 each.

   vii. That provision be made for a competent engineer-geologist to be in contact with all drilling operations at all times, during the mechanical portions of this exploration program.

   viii. That rigorous demands be put upon the drillers in the matter of keeping logs of holes, on-the-ground, and at-the-time such drilling is going on.

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ix. That all data, in terms of logs, assays, maps of holes drilled, tunnel, incline, or shaft driven, mill returns from whatever area or deposit owned or controlled by the applicant, be promptly sent to the government agencies concerned.

Very truly yours,

Paul H. Keating

Paul H. Keating,
Golden, Colorado

LIST OF CLAIMS

Claim Name	Date Filed	Book-Page	Claimant
*Piper #1	Mar. 30, 1953	349 - 567	K.M & D.K. Andrews
*Piper #2	"	349 - 567	"
*Piper #3	"	349 - 568	"
Shamrock #1	Apr. 13 1950	343 - 8	"
*Shamrock #2	"	343 - 9	"
*Shamrock #3	"	343 - 10	"
*Shamrock #4	"	343 - 11	"
Shamrock #5	Apr. 19 1950	343 - 21	"
Kingpin #1	Mar. 19, 1951	343 - 379	"
Kingpin #2	"	343 - 380	"
Kingpin #3	"	343 - 381	"
Kingpin #4	"	343 - 382	"
Kingpin #5	"	343 - 383	"
Kingpin #6	"	343 - 384	"
Kingpin #7	"	343 - 385	"
Kingpin #8	"	343 - 386	"
Lollypop	Apr. 15, 1954	379 - 111	* Griffith et seq
Piperoo	"	379 - 112	" " " "
Outlet	"	881 - 236	" " "

* Claims so marked have been explored under DMEA Contract Idm-E703.

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PART II

GEOLOGICAL REPORT
on the
PIPER-SHAMROCK-KINGPIN Group of mining claims, on
Carpenter Flats, western Montrose County, Colorado.

The particular area discussed in this report is a group of 12 mining claims lying in Section 15, Twp. 48 N, Range 15 West, N.M.P.M. The claims are on the southwesterly side of the Dolores River, about 11 miles downstream from the town of Uravan, Colorado. An access road has been built to the claims, and operations are possible 350 days per year.

On the following page there is a reproduction of a portion of a "Preliminary Geological Reconnaisance" map, now in preparation by the U. S. Geological Survey, which shows by symbols the surface exposures. The pertinent area has been enclosed on this map by a rectangle, and the formations have been colored.

On the second page following, there is an idealized section of the area from the Entrada (Slick Rock) through the Morrison formations. These are all of Jurassic age.

Actually, on the ground, it is extremely difficult to establish sharp contacts between the Carmel and the Entrada formation below it and the Morrison-Salt Wash member above it.

For the purposes of this report, the series of thin interbedded sandstone lenses, shales, red and blue clays, which lie for about 75 feet immediately above the Entrada is arbitrarily grouped as the Salt Wash member of the Morrison formation.

The top of this 75-ft. interval is marked by a heavy sandstone ledge from 25 to 35 feet thick. This heavy ledge forms the first bench or "rim". It is the bottom member of a series of 5 to 7 such rims, overlying the Entrada, or "Slick Rock". This bottom rim has been designated as the "Salt Wash" member of the Morrison formation, and from this interval has been produced highly

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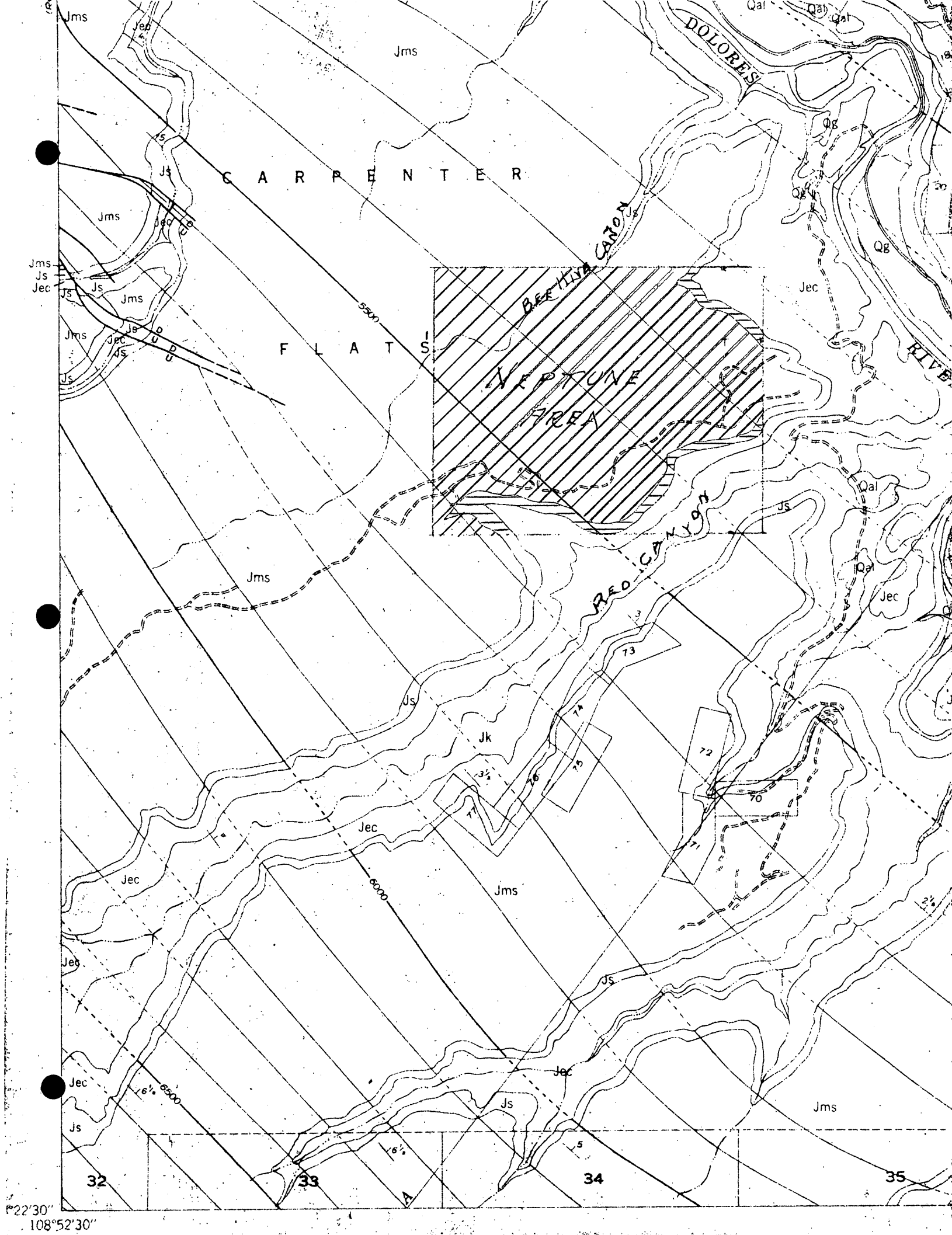
The map on the following page has been reproduced from a portion of the "Preliminary Geologic Map of the Red Canyon Quadrangle", in western Montrose County, Colorado, 1954.

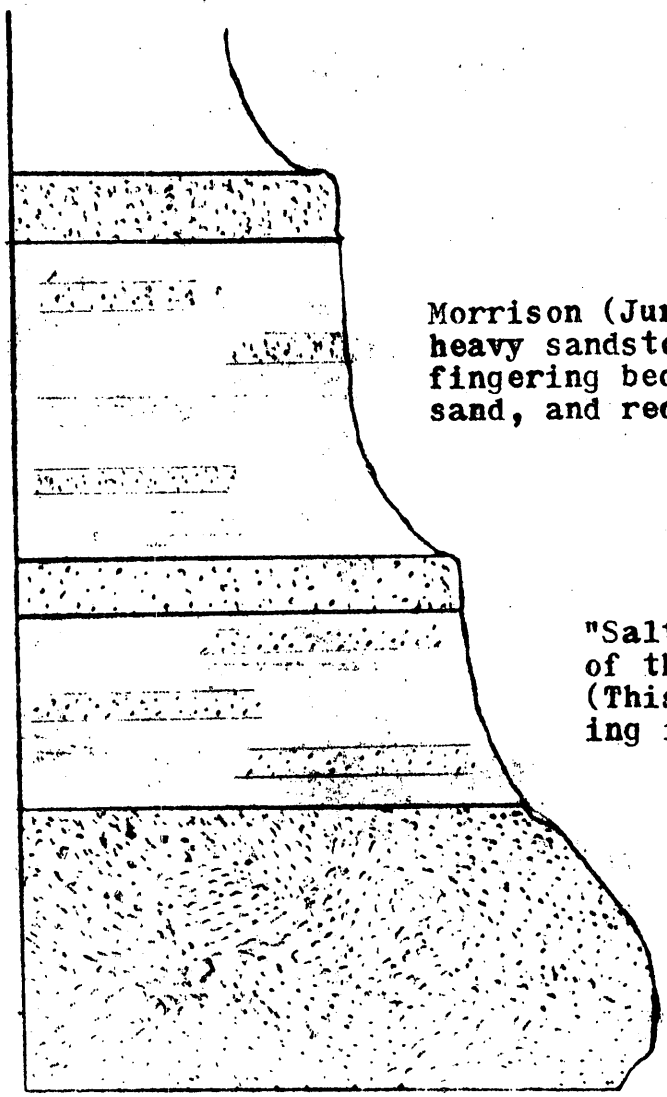
Scale: 1:24,000

LEGEND

	Jms	Jurassic, Morrison (Salt Wash member)
	Js Jec	Jurassic, Summerville, Entrada, & Carmel, undivided


CARPENTER
FLATS
DOLORES
RIVER
BEEHIVE CANYON
RED CANYON
Jms
Jec
Js
Jk
Qal
Qg
5500
6000
6500
32
33
34
35
108°52'30"

IDEALIZED SECTION OF A PORTION OF THE GEOLOGIC COLUMN, ON CARPENTER FLATS, (WESTERN MONTROSE COUNTY, COLORADO).



Morrison (Jurassic), showing heavy sandstone cap over interfingering beds and lenses of sand, and red and blue clay.

"Salt Wash", bottom member of the Morrison formation. (This is a major ore-producing interval in this region).

"Entrada" (Jurassic); cross-bedded sandstone locally called "The Slick Rock".

important tonnage of commercial uranium-bearing ore in the Colorado Plateau.

Immediately east of the area concerned by this report, but contiguous to it, there has recently been completed an organized exploration drilling program. The data obtained from this completed program indicates that there is a "zone of occurrence", of about 25 stratigraphic feet, in which trace-mineralization to high grade ore bodies are expectable.

These findings were carefully mapped, with elevations, and this stratigraphic "zone-of-occurrence" was established in terms of dip-and-strike. The top and bottom planes of this zone-of-occurrence followed the regional dip and strike of the major sandstone ledge of the first rim--the top of the Salt Wash member of the Morrison formation.

There are no major displacements or faults or acute folding over the area concerned; THEREFORE: This zone has been accepted by this writer as continuous over the 200 acres discussed in this report.

Since this zone-of-occurrence appears to be uniform over the area concerned, and since it has a measureable (and measured) slope in degress of angle and direction, horizontal lines ("strike" lines) were drawn upon the bottom of this zone-of-occurrence, and these strike lines were each given a known elevation.

Over this map of strike lines was superimposed a topographic map of the same area, blown up to the same scale and on the same set of established coordinates.

The <u>difference</u> in elevation between the surface, as shown on the topographic map, and the elevation of the bottom of this "zone-of-occurrence", gives the drilling depth to the bottom of that zone, at <u>any</u> given point.

Lines were then drawn connecting equal drilling depths, or differences of known elevations between the surface and the bottom of the zone-of-occurrence. This resulted in an "isochore" map, and "equal-core" or equal-depth map. This map is enclosed as a gatefold in this report.

Upon this isochore map there was superimposed the perimeter of the property concerned, and then, within the perimeter of that property, there was further superimposed a checkerboard drilling pattern on 100-ft. centers. Every proposed exploratory hole on this checkerboard pattern falls upon one or between two lines of this isochore map, and its depth can be pinpointed or interpolated between small limits.

It is upon these three gate-fold maps herewith that the estimated depth of each of the 70 proposed exploratory holes has been estimated. An arbitrary 5 feet has been added to the depth of each hole. The purpose of this additional footage is to insure that each hole will thoroughly penetrate the zone of occurrence, which zone has been projected from the adjacent and adjoining prospected area.

FURTHERMORE: In the preparation of this report, the filing date of each claim, in terms of Book and Page Number was studied in chronological sequence. Each proposed drill hole has been tabulated as being located upon the claim that has time-precedence in the filing of each claim. (In other words, the holes have been specified in terms of "seniority" for the claim upon which they are located).

It is the purpose of the foregoing to show, to any examining agent, HOW the following "estimated depths" of drilling were obtained for each proposed drill-hole on the attached dozen pages. These estimates are based upon adjacent

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measurements and experience, rather than upon opinion or guess-work.

This may be "engineering", but to the writer it is "applied" geology, and, therefore, belongs in this section of this report.

SUMMARY

1. This area is within the geographical limits of the major uranium-producing area of the country, the "Colorado Plateau".

2. It lies on the Salt Wash member of the Morrison formation, a geologic unit that has produced, and is producing, uranium-bearing minerals in all directions, and for many miles in every direction from the Piper-Shamrock-Kingpin group.

3. The mining depths to any discovery are economically "reachable" by tunnel, incline, or shaft.

4. A contiguous area, of identical physical, geologic, and operational facilities has been certified as a "discovery" by the DMEA. Production from this contiguous area has repaid, within 8 months, 10 percent of its DMEA contract, upon limited (3-man) crews, working an average of 4 days per week.

5. The applicant, is successor to the adjacent and recently completed drilling DMEA contract (Docket 3355, Contract Idm-[illegible]703). Applicant has done an additional 7000-plus feet of development drilling from capitol funds, and has sent copies of all data and logs to the DMEA and U. S. Bureau of Mines, etc.

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Drilling Depths of Exploration Drill Holes
Neptune Uranium Co., Carpenter Flats, Montrose County, Colo.

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
4700	8500	85			Kingpin #6
4700	8600	60			
4800	8300	118			
4800	8400	110			
4800	8500	75			
4800	8600	55			
4800	8700	40			
4900	8100	140			
4900	8200	135			
4900	8300	120			
4900	8400	105			
4900	8500	80			
4900	8600	60			
4900	8700	40			
4900	8800	35			
5000	7900	150			
5000	8000	145			
5000	8100	145			
5000	8200	135			
5000	8300	125			
5000	8400	110			
5000	8500	85			
5000	8600	65			
5000	8700	65			
5000	8800	55			
5000	8900	60			
5100	7700	120			
5100	7800	145			
5100	7900	145			
5100	8000	145			
5100	8100	145			
5100	8200	145			
5100	8300	130			
5100	8400	120			
5100	8500	110			
5100	8600	105			
5100	8700	80			
5100	8800	85			
5100	8900	65			
5100	9000	50			
5200	7600	85			Kingpin #5
5200	7700	105			Kingpin #6
5200	7800	145			
5200	7900	145			
5200	8000	145			
5200	8100	145			
5200	8200	145			
5200	8300	145			
5200	8400	135			
5200	8500	135			

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
5200	8600	125			Kingpin #6
5200	8700	120			
5200	8800	105			Kingpin #5
5200	8900	100			
5200	9000	85			
5200	9100	80			
5300	7600	85			Kingpin #6
5300	7700	100			
5300	7800	140			
5300	7900	145			
5300	8000	145			
5300	8100	145			
5300	8200	145			
5300	8300	145			
5300	8400	140			
5300	8500	145			
5300	8600	145			Kingpin #5
5300	8700	130			
5300	8800	130			
5300	8900	130			
5300	9000	115			
5300	9100	85			
5300	9200	65			
5400	7600	85			Kingpin #6
5400	7700	105			
5400	7800	125			
5400	7900	145			
5400	8000	145			
5400	8100	145			
5400	8200	145			
5400	8300	145			
5400	8400	145			Kingpin #5
5400	8500	135			
5400	8600	125			
5400	8700	125			
5400	8800	125			
5400	8900	120			
5400	9000	80			
5400	9100	60			
5400	9200	55			
5500	7600	90			Kingpin #6
5500	7700	110			
5500	7800	120			
5500	7900	145			
5500	8000	145			
5500	8100	145			Kingpin #5
5500	8200	145			
5500	8300	145			
5500	8400	145			
5500	8500	145			
5500	8600	140			
5500	8700	120			
5500	8800	100			
5500	8900	80			
5500	9000	60			

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
5500	9100	60			Kingpin #5
5500	9200	40			↓
5500	9300	30			Kingpin #6
5600	7700	115			↓
5600	7800	125			Kingpin #5
5600	7900	140			↓
5600	8000	140			↓
5600	8100	140			↓
5600	8200	140			↓
5600	8300	140			↓
5600	8400	140			↓
5600	8500	140			↓
5600	8600	140			↓
5600	8700	135			↓
5600	8800	125			↓
5600	8900	115			↓
5600	9000	65			↓
5600	9100	55			↓
5600	9200	35			Kingpin #6
5700	7800	125			Kingpin #5
5700	7900	140			↓
5700	8000	140			↓
5700	8100	140			↓
5700	8200	140			↓
5700	8300	140			↓
5700	8400	140			↓
5700	8500	140			↓
5700	8600	140			↓
5700	8700	140			↓
5700	8800	125			↓
5700	8900	115			↓
5700	9000	115			↓
5700	9100	70			Kingpin #4
5700	9200	45			↓
5700	9300	35			Kingpin #5
5800	7900	140			↓
5800	8000	140			↓
5800	8100	140			↓
5800	8200	140			↓
5800	8300	140			↓
5800	8400	140			↓
5800	8500	140			↓
5800	8600	120			↓
5800	8700	120			↓
5800	8800	105			Kingpin #4
5800	8900	105			↓
5800	9000	105			↓
5800	9100	105			↓
5800	9200	75			↓
5800	9300	55			↓
5800	9400	35			↓

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
5900	8000	140			Kingpin #5
5900	8100	140			
5900	8200	140			
5900	8300	135			
5900	8400	125			
5900	8500	105			
5900	8600	95			
5900	8700	75			
5900	8800	75			Kingpin #4
5900	8900	75			
5900	9000	75			
5900	9100	80			
5900	9200	100			
5900	9300	85			
5900	9400	55			
5900	9500	50			
6000	8100	140			Kingpin #5
6000	8200	140			
6000	8300	135			
6000	8400	130			
6000	8500	125			
6000	8600	105			Kingpin #4
6000	8700	75			
6000	8800	60			
6000	8900	60			
6000	9000	60			
6000	9100	70			
6000	9200	80			
6000	9300	85			
6000	9400	80			
6000	9500	35			
6000	9600	25			
6100	8200	145			Kingpin #5
6100	8300	145			Shamrock #5
6100	8400	145			
6100	8500	135			Kingpin #4
6100	8600	125			
6100	8700	90			
6100	8800	80			
6100	8900	75			
6100	9000	75			
6100	9100	75			
6100	9200	75			
6100	9300	85			
6100	9400	80			
6100	9500	45			
6100	9600	35			Kingpin #3
6100	9700	25			
6200	8200	145			Shamrock #5
6200	8300	145			
6200	8400	145			Kingpin #4
6200	8500	135			

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
6200	8600	120			Kingpin #4
6200	8700	105			
6200	8800	95			
6200	8900	85			
6200	9000	70			
6200	9100	70			
6200	9200	70			
6200	9300	70			
6200	9400	70			Kingpin #3
6200	9500	65			
6200	9600	45			
6200	9700	40			
6200	9800	45			
6200	9900	45			
6300	8000	95			Shamrock #5
6300	8100	90			
6300	8200	130			
6300	8300	145			
6300	8400	135			Kingpin #4
6300	8500	125			
6300	8600	115			
6300	8700	110			
6300	8800	95			
6300	8900	90			
6300	9000	95			
6300	9100	75			
6300	9200	75			Kingpin #3
6300	9300	75			
6300	9400	75			
6300	9500	75			
6300	9600	75			
6300	9700	75			
6300	9800	75			
6400	7700	75			Shamrock #5
6400	7800	75			
6400	7900	75			
6400	8000	80			
6400	8100	95			
6400	8200	115			
6400	8300	130			Kingpin #4
6400	8400	130			
6400	8500	130			
6400	8600	130			
6400	8700	120			
6400	8800	105			
6400	8900	95			
6400	9000	90			
6400	9100	80			Kingpin #3
6400	9200	80			
6400	9300	80			
6400	9400	80			
6400	9500	80			

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
6400	9600	80			Kingpin #3
6400	9700	80			
6400	9800	85			
6400	9900	85			Shamrock #5
6500	7400	70			
6500	7500	70			
6500	7600	70			
6500	7700	70			
6500	7800	70			
6500	7900	65			
6500	8000	65			
6500	8100	75			
6500	8200	85			
6500	8300	110			Kingpin #7
6500	8400	125			Kingpin #4
6500	8500	125			
6500	8600	125			
6500	8700	125			
6500	8800	115			
6500	8900	90			Kingpin #3
6500	9000	90			
6500	9100	75			
6500	9200	75			
6500	9300	75			
6500	9400	75			
6500	9500	75			
6500	9600	75			
6500	9700	75			
6500	9800	85			
6500	9900	85			
6500	10000	85			
6600	7400	60			Shamrock #5
6600	7500	60			
6600	7600	60			
6600	7700	60			
6600	7800	60			
6600	7900	60			
6600	8000	60			
6600	8100	55			
6600	8200	60			
6600	8300	80			Kingpin #7
6600	8400	90			
6600	8500	115			Kingpin #4
6600	8600	125			
6600	8700	115			Kingpin #3
6600	8800	110			
6600	8900	95			
6600	9000	85			
6600	9100	85			
6600	9200	85			
6600	9300	85			
6600	9400	85			
6600	9500	85			

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
6600	9600	85			Kingpin #3
6600	9700	85			
6600	9800	85			
6600	9900	85			Kingpin #2
6600	10000	85			
6600	10100	85			
6600	10200	85			
6700	7400	60			Shamrock #5
6700	7500	60			
6700	7600	60			
6700	7700	60			
6700	7800	60			
6700	7900	60			
6700	8000	60			
6700	8100	60			
6700	8200	60			Kingpin #7
6700	8300	60			
6700	8400	60			
6700	8500	85			
6700	8600	105			Kingpin #3
6700	8700	105			
6700	8800	95			
6700	8900	85			
6700	9000	85			
6700	9100	85			
6700	9200	85			
6700	9300	85			
6700	9400	85			
6700	9500	85			
6700	9600	85			
6700	9700	85			Kingpin #2
6700	9800	85			
6700	9900	85			
6700	10000	85			
6700	10100	85			
6700	10200	85			
6800	7400	60			Shamrock #5
6800	7500	60			
6800	7600	60			
6800	7700	60			
6800	7800	60			
6800	7900	60			
6800	8000	60			
6800	8100	60			Shamrock #1
6800	8200	60			Kingpin #7
6800	8300	60			
6800	8400	60			
6800	8500	60			
6800	8600	85			
6800	8700	80			Kingpin #3
6800	8800	80			
6800	8900	80			

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
6800	9000	80			Kingpin #3
6800	9100	80			
6800	9200	80			
6800	9300	80			
6800	9400	80			
6800	9500	80			
6800	9600	80			
6800	9700	80			Kingpin #2
6800	9800	80			
6800	9900	80			
6800	10000	80			
6800	10100	80			
6800	10200	80			
6800	10300	80			
6800	10400	75			
6900	7300	65			Shamrock #5
6900	7400	65			
6900	7500	65			
6900	7600	65			
6900	7700	65			
6900	7800	65			Shamrock #1
6900	7900	65			
6900	8000	65			
6900	8100	65			
6900	8200	65			Kingpin #7
6900	8300	65			
6900	8400	65			
6900	8500	65			
6900	8600	65			
6900	8700	85			Kingpin #3
6900	8800	85			
6900	8900	85			
6900	9000	85			
6900	9100	85			
6900	9200	85			
6900	9300	85			
6900	9400	85			Kingpin #2
6900	9500	85			
6900	9600	85			
6900	9700	85			
6900	9800	85			
6900	9900	85			
6900	10000	85			
6900	10100	85			
6900	10200	85			
6900	10300	75			
6900	10400	75			
7000	7300	65			Shamrock #5
7000	7400	65			
7000	7500	65			Kingpin #1
7000	7600	65			
7000	7700	65			
7000	7800	65			

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
7000	7900	65			Kingpin #1
7000	8000	65			↓
7000	8100	65			
7000	8200	65			Kingpin #7
7000	8300	65			
7000	8400	65			
7000	8500	65			
7000	8600	65			
7000	8700	75			↓
7000	8800	85			Kingpin #3
7000	8900	85			
7000	9000	85			
7000	9100	85			
7000	9200	85			
7000	9300	85			↓
7000	9400	75			Kingpin #2
7000	9500	75			
7000	9600	75			
7000	9700	70			
7000	9800	70			
7000	9900	65			
7000	10000	65			
7000	10100	65			
7000	10200	70			
7000	10300	70			
7000	10400	70			
7000	10500	65			↓
7100	7300	65			Shamrock #4
7100	7400	65			
7100	7500	65			
7100	7600	65			
7100	7700	65			
7100	7800	65			
7100	7900	65			
7100	8000	65			
7100	8100	65			↓
7100	8200	65			Kingpin #7
7100	8300	65			
7100	8400	65			
7100	8500	65			
7100	8600	65			
7100	8700	70			
7100	8800	75			↓
7100	8900	85			Kingpin #8
7100	9000	85			↓
7100	9100	85			Kingpin #2
7100	9200	85			
7100	9300	85			
7100	9400	75			
7100	9500	65			
7100	9600	65			
7100	9700	70			
7100	9800	80			↓

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
7100	9900	70			
7100	10000	50			Kingpin #2
7100	10100	40			↓
7100	10200	50			Kingpin #1
7100	10300	60			
7100	10400	65			
7100	10500	65			
7100	10600	65			
7100	10700	60			
7200	7200	45			Shamrock #1
7200	7300	65			
7200	7400	65			
7200	7500	65			
7200	7600	65			
7200	7700	65			
7200	7800	65			
7200	7900	65			
7200	8000	65			
7200	8100	75			
7200	8200	75			
7200	8300	75			Kingpin #7
7200	8400	75			
7200	8500	75			
7200	8600	75			
7200	8700	75			
7200	8800	75			
7200	8900	85			Kingpin #8
7200	9000	85			
7200	9100	85			
7200	9200	85			Kingpin #2
7200	9300	85			
7200	9400	65			
7200	9500	55			
7200	9600	55			
7200	9700	65			
7200	9800	85			
7200	9900	85			
7200	10000	65			Kingpin #1
7200	10100	45			
7200	10200	45			
7200	10300	45			
7200	10400	45			
7200	10500	45			
7200	10600	45			
7300	7200	45			Shamrock #1
7300	7300	50			
7300	7400	65			
7300	7500	65			
7300	7600	65			
7300	7700	65			
7300	7800	65			
7300	7900	65			

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
7300	8000	65			Shamrock #1
7300	8100	80			
7300	8200	80			
7300	8300	80			Kingpin #7
7300	8400	80			
7300	8500	80			
7300	8600	80			
7300	8700	80			
7300	8800	80			
7300	8900	80			Kingpin #8
7300	9000	80			
7300	9100	80			
7300	9200	75			
7300	9300	65			Kingpin #2
7300	9400	55			
7300	9500	45			
7300	9600	35			
7300	9700	65			
7300	9800	85			
7300	9900	85			Kingpin #1
7300	10000	85			
7300	10100	65			
7300	10200	35			
7300	10300	35			
7300	10400	30			
7300	10500	30			
7300	10600	30			
7400	7200	45			Shamrock #1
7400	7300	65			
7400	7400	65			
7400	7500	65			
7400	7600	65			
7400	7700	65			
7400	7800	65			
----------	----------	----------		(See break on drill pattern map)	
~~7400~~	~~8200~~	~~105~~		(Off limits)	Kingpin #7
7400	8300	105			
7400	8400	105			
7400	8500	95			
7400	8600	90			
7400	8700	85			
7400	8800	85			
7400	8900	75			Kingpin #8
7400	9000	65			
7400	9100	60			
7400	9200	60			
7400	9300	60			
7400	9400	60			Kingpin #2
7400	9500	45			
7400	9600	35			
7400	9700	45			Kingpin #1
7400	9800	65			

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
7400	9900	90			Kingpin #1
7400	10000	65			
7400	10100	65			
7400	10200	60			
7400	10300	45			
7400	10400	35			
7400	10500	35			
7400	10600	25			
7400	10700	20			
7500	7200	40			Shamrock #1
7500	7300	50			
7500	7400	50			
7500	7500	60			
----------	----------	----------	----------	(See break in drill pattern map)	
7500	8300	125			Kingpin #7
7500	8400	125			
7500	8500	105			
7500	8600	100			
7500	8700	95			
7500	8800	90			
7500	8900	85			Lollypop
7500	9000	75			Kingpin #8
7500	9100	60			
7500	9200	55			
7500	9300	50			
7500	9400	50			
7500	9500	50			Kingpin #1
7500	9600	45			
7500	9700	40			
7500	9800	45			
7500	9900	45			
7500	10000	45			
7500	10100	45			
7500	10200	60			
7500	10300	60			
7500	10400	50			
7500	10500	40			
7600	7200	40			Shamrock #1
----------	----------	----------	----------	(See break in drill pattern map)	
7600	8400	125			Kingpin #7
7600	8500	110			
7600	8600	100			
7600	8700	95			
7600	8800	90			
7600	8900	85			Lollypop
7600	9000	85			
7600	9100	70			
7600	9200	60			Kingpin #8
7600	9300	60			
7600	9400	60			
7600	9500	60			Kingpin #1
7600	9600	60			

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
7600	9700	50			Kingpin #1
7600	9800	45			↓
7600	9900	45			↓
7600	10000	45			↓
7600	10100	45			↓
7600	10200	45			↓
7600	10300	55			↓
7700	8600	100			Kingpin #7
7700	8700	90			↓
7700	8800	90			↓
7700	8900	90			Lollypop
7700	9000	90			↓
7700	9100	75			↓
7700	9200	65			↓
7700	9300	80			Kingpin #8
7700	9400	80			↓
7700	9500	95			↓
7700	9600	95			Kingpin #1
7700	9700	95			↓
7700	9800	95			↓
7700	9900	95			↓
7800	8700	95			Kingpin #7
7800	8800	95			↓
7800	8900	95			Lollypop
7800	9000	95			↓
7800	9100	85			↓
7800	9200	75			↓
7800	9300	85			↓
7800	9400	105			↓
7800	9500	105			Kingpin #8
7800	9600	105			↓
7800	9700	105			Kingpin #1
7800	9800	105			↓
7800	9900	90			↓
----------	----------	----------	(See break in drill pattern map)		↓
~~7800~~	~~10600~~	~~45~~		(Off limits)	↓
~~7800~~	~~10700~~	~~45~~		(Off limits)	↓
~~7800~~	~~10800~~	~~45~~		" "	Piperoo
7800	10900	45			↓
7800	11000	65			↓
7800	11100	65			↓
7900	8800	105			Kingpin #7
7900	8900	100			Lollypop
7900	9000	115			↓
7900	9100	115			↓
7900	9200	115			↓
7900	9300	115			↓
7900	9400	125			↓
7900	9500	120			↓
7900	9600	120			Kingpin #8
7900	9700	120			Kingpin #1

Co-ordinates East	Co-ordinates North	Depths Est.	Depths Actual	Remarks	Claim
7900	9800	115			Kingpin #1
				(See break in drill pattern map)	
~~7900~~	~~10700~~	~~40~~		(Off limits)	
~~7900~~	~~10800~~	~~40~~		(" ")	
7900	10900	40			Piperoo
7900	11000	45			
7900	11100	65			Lollypop
8000	9000	125			
8000	9100	125			
8000	9200	125			
8000	9300	125			
8000	9400	125			
8000	9500	125			
				(See break in drill pattern map)	
~~8000~~	~~10700~~	~~40~~		(Off limits)	
~~8000~~	~~10800~~	~~40~~		((" "))	
~~8000~~	~~10900~~	~~40~~		(" ")	
8000	11000	40			Piperoo
8000	11100	65			Lollypop
8100	9100	125			
8100	9200	125			
8100	9300	125			
8100	9400	125			
				(See break in drill pattern map)	Piperoo
8100	10800	25			
8100	10900	30			
8100	11000	35			
8200	10800	20			
8200	10900	25			
8200	11000	35			
8300	10900	25			
8300	11000	35			
8400	10900	25			
8500	10900	25			
8600	10600	25			
8700	10500	20			
8800	10600	20			
8800	10700	25			
8900	10700	25			

Neptune Ur. Corp.

PAUL H. KEATING
MINING ENGINEER

Summary of the Estimates of Cost of the Exploration Project, on the "Piper Shamrock-Kingpin Group" of mining claims, on Carpenter Flats, western Montrose County, Colorado.

Refer to Form MF-103:

6.

(a) Independent contracts:

i. Drilling: A total of 59,448 ft., in 701 holes, of average depth of 84.8 ft.

-Rotary drilling: 58,948 ft. @ $1.50/ft. $88,422.00
-Core drilling: 5 ft. on each of 100 holes; payment to be based upon core-recovered, rather than upon footage drilled, at $4.00 per ft. 2,000.00

ii. Bulldozing drill sets for the above operation: Estimated 3 drill sets prepared per hour, total 234 hours, at a rate of $12/hr. 2,808.00

(b) Technical help: (Please refer to the "Summary and Recommendations" at the end of the attached report, particularly re fees et al for geological and engineering consultants). Estimated cost by this Applicant, on this proposed project. 5,000.00

(h) Contingencies: It is estimated, from experience on an adjacent and contiguous area that 150 chemical-analyses will be required; A competent Uranium analysis costs $10 each 150 chemical assays, @ $10.00 each. 1,500.00

TOTAL ESTIMATED COST OF THIS EXPLORATION PROJECT, $99,730.00

NOTE: These estimates are based upon current cost-rates for the kinds of work listed.

RECEIVED
OCT 6 - 1955

Filed for Record March 1, 1955 at 10:50 A. M.
No. 310676 Ira C. Foster, Recorder

MINING CLAIM LEASE AGREEMENT

THIS AGREEMENT, made and entered into in duplicate this 1st day of February, 1954, by and between Keith M. Andrews and Donald K. Andrews of Nucla, Colorado, County of Montrose, (hereinafter referred to as "Lessors"), and Construction Specialties Company, 2625 Walnut Street, Denver, Colorado, and L. A. Griffith, Trustee, (hereinafter referred to as "Lessees");

WITNESSETH:

That Lessors, for and in consideration of the royalties, hereinafter reserved and the covenants and agreements hereinafter expressed and by Lessees to be kept and performed, do hereby lease and demise unto Lessees, equally, the following described mining claims located in Red Canyon (or Vixen) mining district in Township 49 North, Range 18 West of the New Mexico Principal Meridian, Montrose County, Colorado, all as more fully described in the Location Certificates which were recorded in the office of the Clerk and Recorder of Montrose County, Colorado, as follows:

Name of Claim	Book and Page in County Recorder's Book at which recorded	
	Book	Page
King Pin #1	343	379
King Pin #2	343	380
King Pin #3	343	381
King Pin #4	343	382
King Pin #5	343	383
King Pin #6	343	384

TO HAVE AND TO HOLD the same for a term of five years from the date hereof unless sooner abandoned by Lessees pursuant to the terms hereof.

1. To enter upon said mining property and work the same in a manner consistent with good and economical mining practices so as to take out the greatest amount of ore possible with due regard to the development and preservation of the same as mining property and keeping as high as practicable the grade of ore being so mined.

2. To work and mine said premises as aforesaid from the date of this lease, the Lessees, however, reserving the right to quit and abandon said claims and this lease at any time after six months from the date of the execution of this agreement if, in the opinion of the Lessees, said claims are not susceptible of profitable operation.

3. To allow said Lessors and their agent from time to time to enter upon and into all parts of mining operations upon said mining claims for purposes of inspection.

4. Not to assign this lease or any interest thereunder, nor sublet the said premises or any part thereof without the written consent of said Lessors nor to allow any person not in privity with the parties hereto to take hold or possession of said premises or any part thereof.

5. To pay said Lessors as royalty, fifteen per cent (15%) of the net mill returns of all ores mined from said claims by Lessees, such payment to be made by delivery of such ore with all convenient speed in lots as mined to some mill or regular ore buyer and leaving with such mill or ore buyer the percentage of mill returns aforesaid for delivery to Lessors. For the purpose of this contract, "net mill returns" shall mean such sums as shall be paid for the values in the ore after deducting all charges for carriage in any form, assays and mill charges. Should the uranium oxide content of ore mined and the volume thereof be sufficient to qualify for a bonus from the government, Lessors shall be entitled to receive twenty per cent (20%) as their share of such bonus. Development allowances and transportation allowances, as set forth by the government for the development and transportation of uranium, are to be retained by the Lessees as Lessees' sole property. When Lessees are awarded transportation allowances on uranium ore, as set forth by the government, such sums paid for the transportation of uranium ore by the government shall be deducted from the total carriage charges to arrive at an adjusted carriage charge to be used in calculating the net mill returns of uranium ore.

RECEIVED
OCT 6 - 1955

6. To do and perform the necessary assessment work on all claims in connection with this agreement during the life of the lease.

7. To indemnify and hold harmless Lessors from any and all loss or damage and from all claims for injury, death loss or damage of any kind or character and by whomsoever suffered or asserted occasioned by or in connection with any work performed by Lessees, their agents or employees.

8. To promptly pay all bills for labor and materials incurred in Lessees' operations hereunder and to indemnify and save harmless Lessors from all claims and liability of every kind and nature which may or might be incurred by them for reason of operations hereunder.

9. To at all times fully comply with the provisions of the Workmen's Compensation laws of the State of Colorado, and all other laws, federal and State, covering this type of operation.

10. It is agreed that Lessees can use Defense Mineral Exploration Administration loans to drill and explore.

IT IS MUTUALLY AGREED that if Lessees are in possession of said premises under this lease on the date five years from date and are conducting mining operations on said premises at that time, then Lessees shall have the option to remain on said premises and conduct operations thereon so long as mining operations, in the opinion of the Lessees, continue to be profitable on any of the claims, provided that Lessees fully and faithfully comply with each and all of the covenants by it to be kept and performed as herein stated.

The failure on the part of the Lessees to work the demised premises for a period of ninety days or more, without the permission of the Lessors may be considered by the Lessors as a violation of this Lease.

On any termination hereof, the Lessees shall have the right to remove from said claims at any time within the ninety day period from and after the date of termination, all machinery, equipment and buildings placed on the claim by Lessees.

Agreement

Donald X. Andrews
Keith M. Andrews
to
Construction Specialties Co.
L. A. Griffith, Trustee

In the event that Lessees shall conduct a core drilling program or wagon drilling program on said claim, a copy of all drill logs, analyses and other pertinent data shall be supplied to Lessors.

This agreement or lease can be terminated at any time upon the mutual agreement of the parties hereto, or upon failure of said Lessees to comply with the terms and covenants herein contained, at the option of the said Lessors who shall give the said Lessees ninety days notice of their intention to terminate said lease, setting forth the particular violations complained of, and the said Lessees shall then have forty-five days from date of said notice in which to make good said violation. In the event of their failure to do so, then this lease shall become null and void, otherwise to remain in full force and effect.

Each and every clause, and covenent of this agreement shall extend to the heirs, executors, administrators and lawful assigns of all parties hereto.

Dated at Nucla, Colorado, the day and year first above written.

LESSORS

Keith M. Andrews

Donald X. Andrews

LESSEES

CONSTRUCTION SPECIALTIES COMPANY

L. A. Griffith
President

R. S. Jones
Secretary

L. A. Griffith Trustee
Trustee

PHOTO
INDEXED

RECEIVED
OCT 6 - 1955

Filed for Record May 23, 1955 at 9:24 A. M.
No. 314496 Ira C. Foster, Recorder

AGREEMENT

Permission is hereby granted to Construction Specialties Co., 2625 Walnut Street, Denver, Colorado, and L. A. Griffith, Trustee, to transfer and assign to NEPTUNE URANIUM CORPORATION, or such other corporation as may be subsequently incorporated by the above Lessees. three (3) mining claim lease agreements, more particularly described as leases dated the 1st day of February, 1954, covering:

Name of Claim	Book and Page in County Recorder's Book at which recorded	
	Book	Page
Shamrock #2	343	9
Shamrock #3	343	10
Shamrock #4	343	11
Piper #1	349	467
Piper #2	349	567
Piper #3	349	568
King Pin #1	343	379
King Pin #2	343	380
King Pin #3	343	381
King Pin #4	343	382
King Pin #5	343	383
King Pin #6	343	384
King Pin #7	343	385
King Pin #8	343	386
Shamrock #1	343	8
Shamrock #5	343	21

all of which claims are located in Red Canyon (or Vixen) mining district in Township 48 North, Range 18 West of the New Mexico Principal Meridian, Montrose County, Colorado.

Signed this 14th day of January, 1955.

Witnesses:

Lowell A. Griffith

Keith M. Andrews

Donald K. Andrews

STATE OF COLORADO)
COUNTY OF _____) ss:

The within and foregoing instrument was acknowledged before me this 1st day of April, A. D. 1955, by W. E. GRIFFITH, President, and R. B. CARSON, Secretary, of CONSTRUCTION SPECIALTIES COMPANY, a corporation.

Witness my hand and official seal.

My commission expires: March 2, 1957

(Notarial)
(Seal)

Francella V. Smith
Notary Public

MINING CLAIM LEASE AGREEMENT

THIS AGREEMENT, made and entered into in duplicate this 1st day of February, 1954, by and between Keith M. Andrews and Donald K. Andrews of Nucla, Colorado, County of Montrose, (hereinafter referred to as "Lessors"), and Construction Specialties Company, 2625 Walnut Street, Denver, Colorado, and L. A. Griffith, Trustee, (hereinafter referred to as "Lessees");

WITNESSETH:

That Lessors, for and in consideration of the royalties, hereinafter reserved and the covenants and agreements hereinafter expressed and by Lessees to be kept and performed, do hereby lease and demise unto Lessees, equally, the following described mining claims located in Red Canyon (or Vixen) mining district in Township 48 North, Range 18 West of the New Mexico Principal Meridian, Montrose County, Colorado, all as more fully described in the Location Certificates which were recorded in the office of the Clerk and Recorder of Montrose County, Colorado, as follows:

Name of Claim	Book and Page in County Recorder's Book at which recorded	
	Book	Page
King Pin #7	343	385
King Pin #8	343	386
Shamrock #1	343	8
Shamrock #5	343	21

Lollypop (to be presently recorded)

TO HAVE AND TO HOLD the same for a term of five years from the date hereof unless sooner abandoned by Lessees pursuant to the terms hereof.

1. To enter upon said mining property and work the same in a manner consistent with good and economical mining practices so as to take out the greatest amount of ore possible with due regard to the development and preservation of the same as mining property and keeping as high as practicable the grade of ore being so mined.

2. To work and mine said premises as aforesaid from the date of this lease, the Lessees, however, reserving the right to quit and abandon said claims and this lease at any time after six months from the date of the execution of this agreement if, in the opinion of the Lessees, said claims are not susceptible of profitable operation.

3. To allow said Lessors and their agent from time to time to enter upon and into all parts of mining operations upon said mining claims for purposes of inspection.

4. Not to assign this lease or any interest thereunder, nor sublet the said premises or any part thereof without the written consent of said Lessors nor to allow any person not in privity with the parties hereto to take hold or possession of said premises or any part thereof.

5. To pay said Lessors as royalty, fifteen per cent (15%) of the net mill returns of all ores mined from said claims by Lessees, such payment to be made by delivery of such ore with all convenient speed in lots as mined to some mill or regular ore buyer and leaving with such mill or ore buyer the percentage of mill returns aforesaid for delivery to Lessors. For the purpose of this contract, "net mill returns" shall mean such sums as shall be paid for the values in the ore after deducting all charges for carriage in any form, assays and mill charges. Should the uranium oxide content of ore mined and the volume thereof be sufficient to qualify for a bonus from the government, Lessors shall be entitled to receive twenty percent (20%) as their share of such bonus. Development allowances and transportation allowances, as set forth by the government for the development and transportation of uranium, are to be retained by the Lessees as Lessees' sole property. When Lessees are awarded transportation allowances on uranium ore, as set forth by the government, such sums paid for the transportation of uranium ore by the government shall be deducted from the total carriage charges to arrive at an adjusted carriage charge to be used in calculating the net mill returns of uranium ore.

6. To do and perform the necessary assessment work on all claims in connection with this agreement during the life of the lease.

7. To indemnify and hold harmless Lessors from any and all loss or damage and from all claims for injury, death loss or damage of any kind or character and by whomsoever suffered or asserted occasioned by or in connection with any work performed by Lessees, their agents or employees.

8. To promptly pay all bills for labor and materials incurred in Lessees' operations hereunder and to indemnify and save harmless Lessors from all claims and liability of every kind and nature which may or might be incurred by them for reason of operations hereunder.

9. To at all times fully comply with the provisions of the Workmen's Compensation laws of the State of Colorado, and all other laws, federal and State, covering this type of operation.

10. It is agreed that Lessees can use Defense Mineral Exploration Administration loans to drill and explore.

IT IS MUTUALLY AGREED that if Lessees are in possession of said premises under this lease on the date five years from date and are conducting mining operations on said premises at that time, then Lessees shall have the option to remain on said premises and conduct operations thereon so long as mining operations, in the opinion of the Lessees, continue to be profitable on any of the claims, provided that Lessees fully and faithfully comply with each and all of the covenants by it to be kept and performed as herein stated.

The failure on the part of the Lessees to work the demised premises for a period of ninety days or more, without the permission of the Lessors may be considered by the Lessors as a violation of this Lease.

On any termination hereof, the Lessees shall have the right to remove from said claims at any time within the ninety day period from and after the date of termination, all machinery, equipment and buildings placed on the claim by Lessees.

In the event that Lessees shall conduct a core drilling program or wagon drilling program on said claim, a copy of all drill logs, analyses and other pertinent data shall be supplied to Lessors.

This agreement of lease can be terminated at any time upon the mutual agreement of the parties hereto, or upon failure of said Lessees to comply with the terms and covenants herein contained, at the option of the said Lessors who shall give the said Lessees ninety days notice of their intention to terminate said lease, setting forth the particular violations complained of, and the said Lessees shall then have forty-five days from date of said notice in which to make good said violation. In the event of their failure to do so, then this lease shall become null and void, otherwise to remain in full force and effect.

Each and every clause, and covenant of this agreement shall extend to the heirs, executors, administrators and lawful assigns of all parties hereto.

Dated at Nucla, Colorado, the day and year first above written.

LESSORS

Keith M. Andrews

Donald K. Andrews

LESSEES

CONSTRUCTION SPECIALTIES COMPANY

W. E. Griffith
President

R. B. Carson
Secretary

L. A. Griffith Trustee
Trustee

Filed for Record May 23, 1955 at 9:26 A. M.
No. 314497 Ira C. Foster, Recorder

A S S I G N M E N T

KNOW ALL MEN BY THESE PRESENTS, That the undersigned, for and in consideration of the sum of One Dollar ($1.00) and other valuable consideration, the receipt of which is hereby acknowledged, has, and by these presents does, sell, assign, transfer, and set over unto NEPTUNE URANIUM CORPORATION, a Colorado corporation, those certain leases, and all the right, title and interest of the undersigned Lessees in and pursuant to those certain leases described as follows:

That certain lease dated February 1, 1954 and recorded February 16, 1954 in Book 405 at page 266 of the records of Montrose County, Colorado, between Keith M. Andrews and Donald K. Andrews, as Lessors, and Construction Specialties Company, of Denver, Colorado, and L. A. Griffith, Trustee, covering those certain mining claims located in Red Canyon (or Vixen) mining district in Township Forty-eight (48) North, Range Eighteen (18) West of the New Mexico Principal Meridian, as shown by location certificates recorded in Montrose County, Colorado, as follows:

Name of Claim	Book & Page of Recording	
Shamrock #2	Bk. 343	Pg. 9
Shamrock #3	Bk. 343	Pg. 10
Shamrock #4	Bk. 343	Pg. 11
Piper #1	Bk. 349	Pg. 467
Piper #2	Bk. 349	Pg. 567
Piper #3	Bk. 349	Pg. 568

That certain lease dated February 1, 1954 and recorded March 1, 1955 in Book 405 at page 524 of the records of Montrose County, Colorado, between Keith M. Andrews and Donald K. Andrews, as Lessors, and Construction Specialties Company, of Denver, Colorado, and L. A. Griffith, Trustee, covering those certain mining claims located in Red Canyon (or Vixen) mining district in Township Forty-eight (48) North, Range Eighteen (18) West of the New Mexico Principal Meridian, as shown by location certificates recorded in Montrose County, Colorado, as follows:

Name of Claim	Book & Page of Recording	
King Pin #7	Bk. 343	Pg. 385
King Pin #8	Bk. 343	Pg. 386
Shamrock #1	Bk. 343	Pg. 8
Shamrock #5	Bk. 343	Pg. 21

That certain lease dated February 1, 1954 and recorded March 1, 1955 in Book 405 at page 520 of the records of Montrose County, Colorado, between Keith M. Andrews and Donald K. Andrews, as Lessors, and Construction Specialties Company, of Denver, Colorado, and L. A. Griffith, Trustee, covering those certain mining claims located in Red Canyon (or Vixen) mining district in Township Forty-eight (48) North, Range Eighteen (18) West of the New Mexico Principal Meridian, as shown by location certificates recorded in Montrose County, Colorado, as follows:

Name of Claim	Book & Page of Recording	
King Pin #1	Bk. 343	Pg. 379
King Pin #2	Bk. 343	Pg. 380
King Pin #3	Bk. 343	Pg. 381
King Pin #4	Bk. 343	Pg. 382
King Pin #5	Bk. 343	Pg. 383
King Pin #6	Bk. 343	Pg. 384

IN WITNESS WHEREOF, the undersigned have caused to be affixed hereto their hands and seals this 1st day of April, A. D. 1955.

CONSTRUCTION SPECIALTIES COMPANY

By W. E. Griffith
President

Attest:
R. B. Carson
Secretary

(SEAL)

L. A. Griffith Trustee
L. A. Griffith, Trustee

Filed for Record May 23, 1955 at 9:28 A. M.
No. 314498 Ira C. Foster, Recorder

MINING DEED

THIS INDENTURE, made this 1st day of April, in the year of our Lord one thousand nine hundred and fifty-five, between L. A. GRIFFITH, TRUSTEE, W. B. GRIFFITH, CONSTRUCTION SPECIALTIES COMPANY, a corporation, and GRIFFITH URANIUM COMPANY, a co-partnership, (formerly known as Lowell A. Griffith & Associates, Denver, Colorado) composed of Lowell A. Griffith, W. B. Griffith, Paul H. Keating, and Construction Specialties Company, a corporation,

all of the State of Colorado, parties of the first part, and

NEPTUNE URANIUM CORPORATION, a corporation organized and existing under and by virtue of the laws of the State of Colorado,

party of the second part;

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of TEN DOLLARS ($10.00), to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold, remised, released and forever quit-claimed, and by these presents does grant, bargain, sell, remise, release and forever quit-claim, unto the said party of the second part, its successors and assigns, the following described property, situate, lying and being in Red Canyon (Vixen) or Paradox Mining District, in the County of Montrose, and State of Colorado, to-wit:

Those certain mining claims located in Township Forty-eight (48) North, Range Eighteen (18) West of the New Mexico Principal Meridian, as more fully describedin location certificates recorded in the office of the Clerk and Recorder of Montrose County, Colorado, as follows:

Name of Claim	Book & Page where Recorded	
Lollypop Lode	Bk. 379	Pg. 111
Piperoo Lode	Bk.379	Pg. 112
Outlet Lode	Bk. 379	Pg. 113
Outlet Lode (relocated)	Bk. 381	Pg. 235

TOGETHER with all the dips, spurs, and angles, and all the metals, ores, gold and silver-bearing quartz, rock and earth therein, and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever, as well in law as in equity, of the said parties of the first part, of, in or to the said premises, and every part and parcel thereof, with the appurtenances.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances and privileges thereto incident, unto the said party of the second part, its successors and assigns forever.

IN WITNESS WHEREOF, The said parties of the first part have hereunto set their hands and seals the day and year first above written.

L. A. Griffith Trustee (SEAL)
L. A. Griffith, Trustee

W. B. Griffith (SEAL)
W. B. Griffith

CONSTRUCTION SPECIALTIES COMPANY, a corporation

By W. E. Griffith (SEAL)
President

(Corporate Seal)

Attest:

R. B. Carson (SEAL)
Secretary

GRIFFITH URANIUM COMPANY, a co-partnership (formerly known as Lowell A. Griffith & Associates, Denver, Colorado)

By Lowell A. Griffith (SEAL)
Lowell A. Griffith, Partner

By W. B. Griffith (SEAL)
W. B. Griffith, Partner

By Paul H. Keating (SEAL)
Paul H. Keating, Partner

By: CONSTRUCTION SPECIALTIES COMPANY, Partner

By W. E. Griffith (SEAL)
President

(Corporate Seal)

Attest:

R. B. Carson (SEAL)
Secretary

STATE OF COLORADO)
COUNTY OF _____) ss:

The foregoing instrument was acknowledged before me this 1st day of April, A. D. 1955, by LOWELL A. GRIFFITH (also known as L. A. Griffith), W. B. GRIFFITH, and PAUL H. KEATING.

My commission expires: March 2, 1957.

(Notarial)
(Seal)

Francella V. Smith
Notary Public

Filed for Record June 20, 1955 at 10:58 A. M.
No. 315637 Ira C. Foster, Recorder

QUIT CLAIM DEED

THIS INDENTURE, made this 20th day of April, in the year of our Lord one thousand nine hundred and fifty-five, between L. A. GRIFFITH, Trustee; W. B. GRIFFITH; PAUL H. KEATING; GRIFFITH URANIUM COMPANY, a co-partnership, (formerly known as Lowell A. Griffith & Associates, Denver, Colorado) by LOWELL A. GRIFFITH, co-partner; and CONSTRUCTION SPECIALTIES COMPANY, a corporation, all of the State of Colorado, parties of the first part; and NEPTUNE URANIUM CORPORATION, a corporation organized and existing under and by virtue of the laws of the State of Colorado, party of the second part,

W I T N E S S E T H:

That the said parties of the first part, for and in consideration of the sum of Ten Dollars ($10.00), to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold, remised, released and forever quit-claimed, and by these presents do grant, bargain, sell, remise, release and forever quit-claim, unto the said party of the second part, its successors and assigns, the following described property, situate, lying and being in Red Canyon (Vixen) or Paradox Mining District, in the County of Montrose, and State of Colorado, to-wit:

Those certain mining claims located in Township Forty--Eight (48) North, Range Eighteen (18) West of the New Mexico Principal Meridian, as more fully described in location certificates recorded in the office of the Clerk and Recorder of Montrose County, Colorado, as follows:

Name of Claim	Book and Page where recorded:
Lollypop Lode	Book 379 Page 111
Piperoo Lode	Book 379 Page 112
Outlet Lode	Book 379 Page 113
Outlet Lode (relocated)	Book 381 Page 235

TOGETHER with all the dips, spurs, and angles, and all the metals, ores, gold and silver-bearing quartz, rock and earth therein, and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever, as well in law as in equity, of the said parties of the first part, of, in or to the said premises, and every part and parcel thereof, with the appurtenances.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances and privileges thereto incident, unto the said party of the second part, its successors and assigns forever.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year first above written.

L. A. Griffith Trustee (SEAL)
L. A. Griffith, Trustee

W. B. Griffith (SEAL)
W. B. Griffith

Paul H. Keating (SEAL)
Paul H. Keating

GRIFFITH URANIUM COMPANY,
a co-partnership (formerly known as
Lowell A. Griffith & Associates, Denver,
Colorado)

By: Lowell A. Griffith (SEAL)
Lowell A. Griffith, co-partner

CONSTRUCTION SPECIALTIES COMPANY,
a corporation

By: W. E. Griffith (SEAL)
President

(Corporate Seal)

ATTEST:

R. B. Carson
Secretary

STATE OF COLORADO)
: ss
City and COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 30th day of April, A. D. 1955, by L. A. GRIFFITH, Trustee; W. B. GRIFFITH; and PAUL H. KEATING.

My commission expires: March 2, 1957

Francella V. Smith
Notary Public.

(SEAL)

STATE OF COLORADO)
: ss
CITY and COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 30th day of April, A. D. 1955, by Lowell A. Griffith, co-partner, of GRIFFITH URANIUM COMPANY, a co-partnership (formerly known as Lowell A. Griffith & Associates, Denver, Colorado).

My commission expires: March 2, 1957

Francella V. Smith
Notary Public.

(SEAL)

STATE OF COLORADO)
: ss
City and COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 30th day of April, A. D. 1955, by W. E. Griffith, President, and R. B. Carson, Secretary, of CONSTRUCTION SPECIALTIES COMPANY, a corporation.

My commission expires: March 2, 1957

Francella V. Smith
Notary Public.

(SEAL)

RECEIVED
OCT 6 - 1955

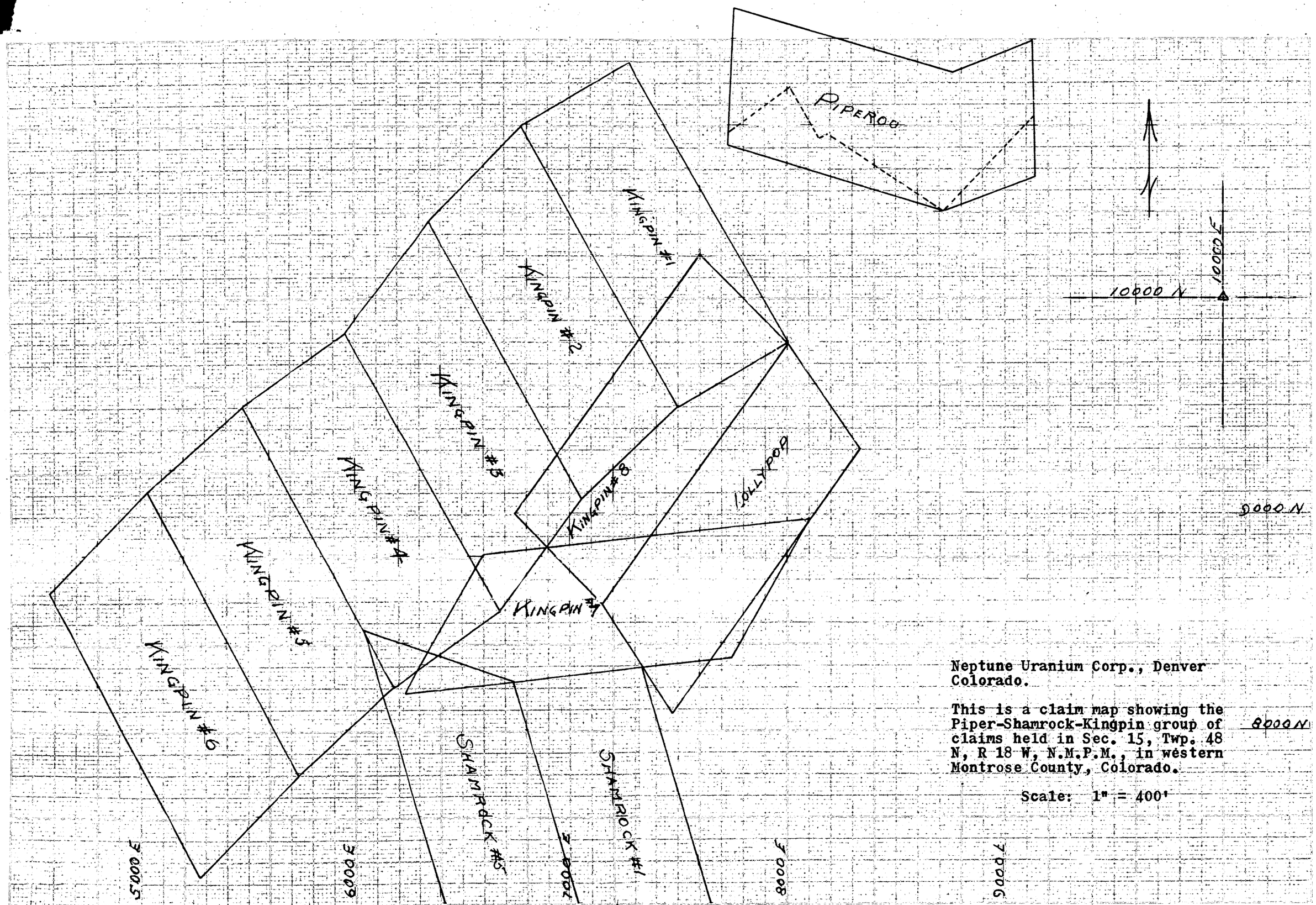
(SAMPLE)

POWER OF ATTORNEY

We, the undersigned, members of a partnership designated as Lowell A. Griffith Associates, composed of Lowell A. Griffith, Box 673, Central City, Colorado; Construction Specialties Company, 2625 Walnut Street, Denver 1, Colorado: and Paul H. Keating, Apt. 5, Mines Park, Golden, Colorado, do hereby appoint PAUL H. KEATING, GOLDEN, COLO. to act as the agent of said partnership in all matters connected with the United States Department of the Interior, Defense Minerals Exploration Administration, DMEA Docket 3355, Contract Idm-E703, and in behalf of said partnership to submit to the Government all necessary reports and information required under said contract, and said agent is authorized to receive individually, and to receipt for, any monies that are now or may hereafter become due to said partnership by reason of said Contract Idm-E703.

Date Sept. 19, 1954. Signed Lowell A. Griffith

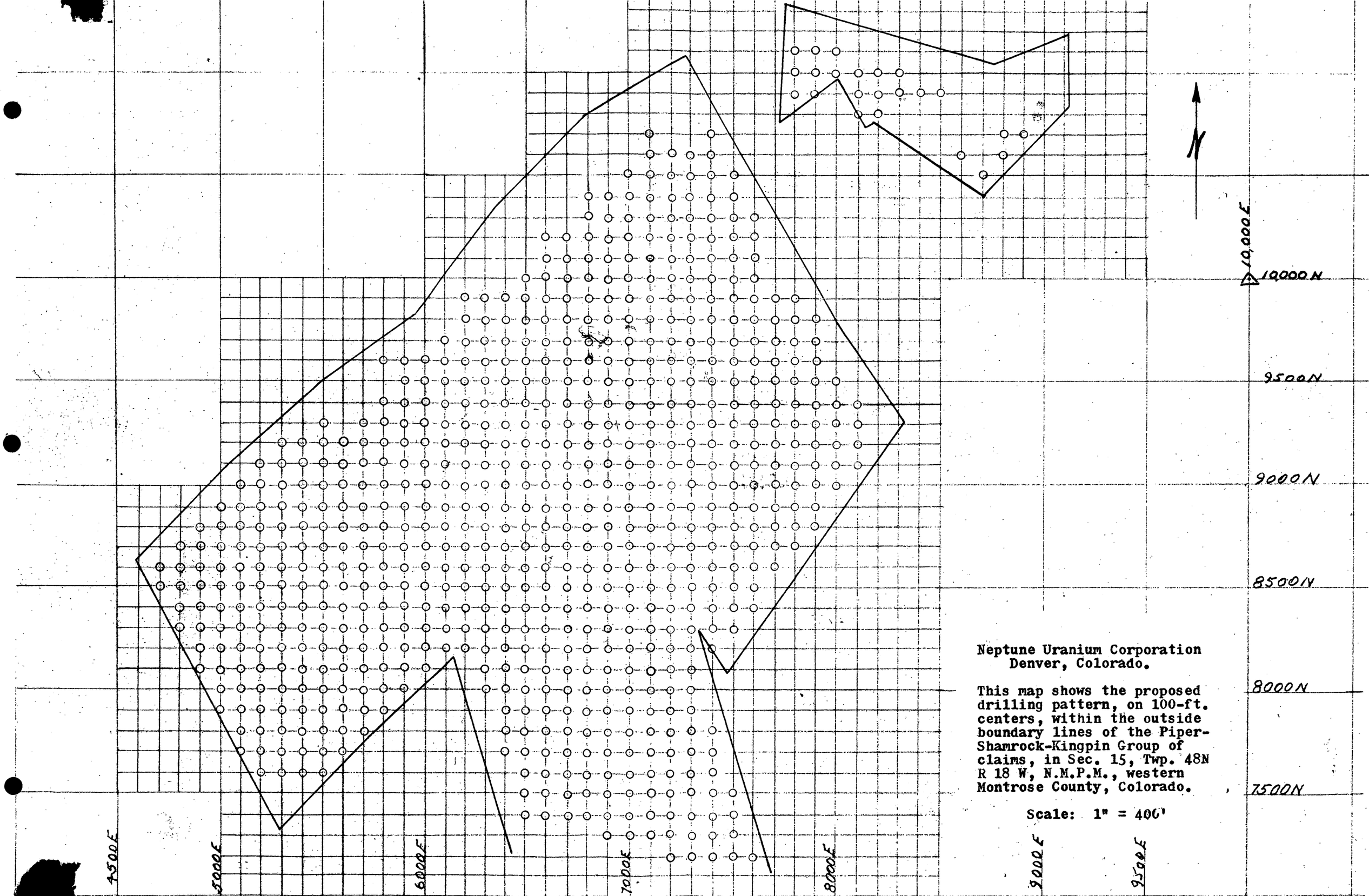
CONSTRUCTION SPECIALTIES CO.
by W. E. Griffith, Pres.



Neptune Uranium Corp., Denver Colorado.

This is a claim map showing the Piper-Shamrock-Kingpin group of claims held in Sec. 15, Twp. 48 N, R 18 W, N.M.P.M., in western Montrose County, Colorado.

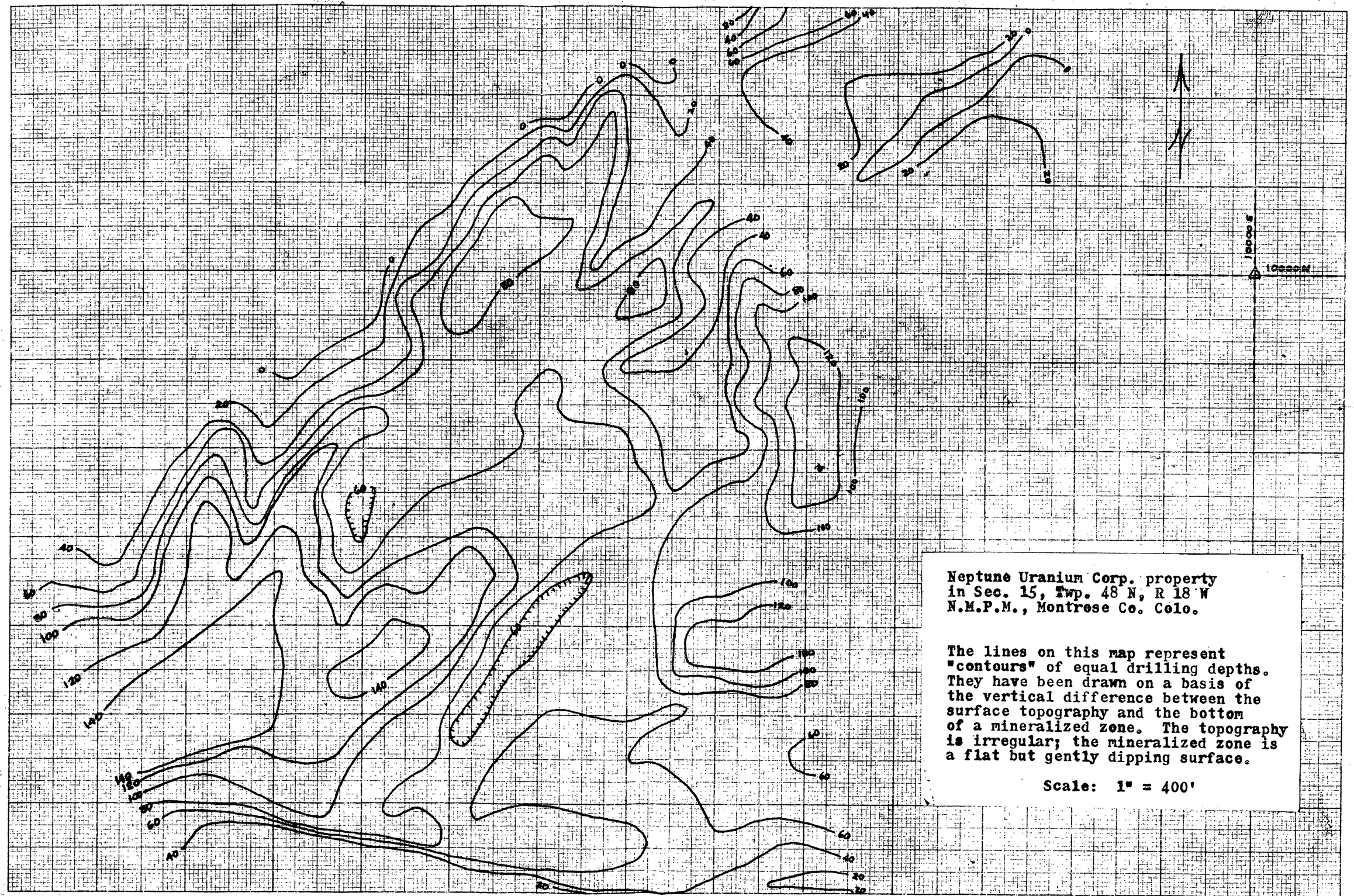
Scale: 1" = 400'



Neptune Uranium Corporation
Denver, Colorado.

This map shows the proposed drilling pattern, on 100-ft. centers, within the outside boundary lines of the Piper-Shamrock-Kingpin Group of claims, in Sec. 15, Twp. 48N R 18 W, N.M.P.M., western Montrose County, Colorado.

Scale: 1" = 400'



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Surname:
Ching
Ellis

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

January 25, 1956

Memorandum

To: Robert E. Adams
Operations Control & Statistics Division

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

Subject: New application
Neptune Uranium Corporation
Piper-Shamrock-Kingpin Group
Montrose County, Colorado

The Neptune Uranium Corporation application for aid in an exploration project, under Docket No. DMEA-4005, was denied by the Acting Administrator's letter dated November 2, 1955.

Through additional work on adjacent claims, the Applicant has demonstrated that significant ore bodies may exist in this area; consequently, he has submitted the attached four sets of supplemental material to this Office.

It is requested that you consider this supplemental material as a new application to which a new docket number should be assigned. Inasmuch as most of the supporting material attached to Docket No. DMEA-4005 also represents the supporting material to the new application, it is suggested that all such material pertinent to the new application be made a part of the new docket.

Ernest Wm. Ellis

Ernest Wm. Ellis

Attachments

MChing/izm 1-25-56
cc to: Docket
Code 700
Mr. Ching
Admr.'s Reading File

APPLICATION AND MAPS TRANSFERRED
TO DMEA 4114 ADDITIONAL DATA RECEIVED
ON 4005 AND WRITTEN UP AS NEW APPLICATION

Surname copy

700

Ching
Ellis
Williams
Stephen
Selfridge

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

NOV - 2 1955

Mr. Paul H. Keating
Engineer-Geologist Consultant
Neptune Uranium Corporation
2625 Walnut
Denver, Colorado

Re: Docket No. DMEA-4005 (Uranium)
Piper-Shamrock-Kingpin Group
Montrose County, Colorado

Dear Mr. Keating:

Reference is made to your application for aid in an exploration project on the above-named property.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of your application and other information relating to the area surrounding your property indicates that, although the possibility exists of finding small bodies of uranium ore, as in the case of your DMEA project, Contract No. Idm-E703 (Docket No. DMEA-3355), the probability of disclosing significant ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you that, under these circumstances, your application for exploration assistance is denied.

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

Sincerely yours,

Frank E. Johnson (for)

ACTING Administrator

MChing/FEJohnson/gla
(10/28/55)
11/2/55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Ching
DMEA Field Team, Region III (2)

P.L.S.

Surname copy

Ching
Ellis
Geehan
Williams

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

Mr. Paul N. Keating
Engineer-Geologist Consultant
Neptune Uranium Corporation
2625 Walnut
Denver, Colorado

Re: Docket No. DMEA-4005 (Uranium)
Piper-Shamrock-Kingpin Group
Montrose County, Colorado

Dear Mr. Keating:

Your application for aid in an exploration project and other information available to us in Washington concerning your above-named property have been reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of all our information, although noting some uranium mineralization on adjacent claims, indicates to us that the probability of disclosing significant ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

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

Sincerely yours,

Acting Administrator

M. Ching/gla
10/28/55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Ching
DMEA Field Team, Region III (2)

DOCKET COPY

700

Chrono
Ellis

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

October 28, 1955

Summary of Proposed Project

Object: Denial of application for an exploration project.

Docket No.: DMEA-4005

Commodity: Uranium

Applicant: Neptune Uranium Corporation
2625 Walnut
Denver, Colorado

Property: Piper-Shamrock-Kingpin Group, consisting of 12 unpatented mining claims situated in section 15, T. 48 N., R. 18 W., N.M.P.M., Montrose County, Colorado. Applicant is the Lessee of 10 claims and owner of 2 claims.

Date of Application: August 2, 1955

Amount of Application: $99,730.00

Work Proposed: Explore the Salt Wash member of the Morrison formation by a checkerboard pattern of drill holes on 100-ft. centers. Total of 701 holes with average depth of 84.8 feet.

Estimated Costs:

58,948 ft. rotary drilling @ $1.50/ft.	$88,422.00	
500 ft. core drilling @ $4.00/ft.	2,000.00	
234 hrs. bulldozing @ $12.00/hr.	2,808.00	
Supervision & Consultants	5,000.00	
Analyses & Contingencies	1,500.00	
Total		$99,730.00
Government participation @ 75%		$74,797.50

Field Team Report: Dated October 6, 1955
J. William Hasler, USGS
M. H. Salsbury, USBM

The subject property is contiguous to that explored under DMEA-3355. The work under latter project failed to

indicate the presence of ore bodies of ore grade and thickness (.10% U_3O_8 or more, 1.09% V_2O_5, 1 foot or more thick). Of 164 wagon drill holes, 2 were in ore, 9 in ore-grade material less than 1 foot thick, 9 were weakley mineralized, and 144 were barren. An inferred tonnage of 428 tonsof material 0.63 feet thick and averaging 0.44% U_3O_8 was estimated in reserves. A certification of discovery was issued to protect the interests of the Government. No ore bodies were actually delineated by the drilling. The property may contain several ore bodies of marginal or sub-marginal grade but these would not appreciably increase the domestic uranium supply. It was recommended that no additional exploration aid be given on the property covered by Docket DMEA-3355.

The ore deposits in the Carpenter Flats area occur in the basal Salt Wash member of the Morrison formation. The upper 65 to 80% of the Salt Wash has been eroded away, leaving only the lower member. The deposits are found mostly in small rolls localized around logs and asroughly tabular masses. They may be high grade, but thin and discontinuous.

It is concluded that the subject property lies in an area where the chances of finding ore bodies of substantial size and grade are not good. It is recommended that the application be denied without further field examination.

Commodity Group comments:

Geological Survey - W. P. Williams - October 20, 1955.

The ore deposits on Carpenter Flats are probably small. The Government has a great deal of information on this general vicinity in addition to that on Docket 3355, so that an evaluation of the property would be feasible without a field examination. The Applicant has a strong argument in favor of a contract in that the previous project was certified as a discovery. He has proposed new sampling techniques which promise to make the new work an improvement over the previous contract. It would be advisable for the Field Team to explain to Applicant the reasons for the Government's denial of a new contract.

Bureau of Mines - John E.Crawford - October 26, 1955

Discussed the application and Field Team report with the AEC representative. Notes that Operator on

adjacent claims covered by Docket 3355 has repaid less than 10% of the Government's participation. The inferred tonnage of 428 tons of 0.44% U_3O_8 would enable him to repay not more than 10 to 15% of the Government's expenditures. Suggests that the subject application be held in abeyance a reasonable time until it is determined what royalties will be paid under Docket 3355. It is probable that the amount requested under the present application would exceed by many times the value of the ore that would be found.

Rare and Miscellaneous Metals Division - Michael Ching - October 26, 1955.

Experience under Docket 3355 indicates that the property covered by the subject application may contain a number of small, relatively thin ore bodies of good grade, at depths of about 80 feet. It has not been demonstrated that such ore bodies can be worked economically, although they have been worked.

Royalty payments under Docket 3355 through September amounted to $855, indicating production worth about $17,100. Production from the Dad's claim, adjoining the area covered by Docket 3355 on the south, was reported as 202 tons of 0.42% U_3O_8 prior to May, 1954. Production from the Eclipse claim, lying between the Piper and the Shamrock claims was reported as possibly several hundred tons. The ore bodies exposed by drifting on the Outlet claim proved to be quite small.

In the light of the foregoing record of discovery and production, the chances of making a worthwhile discovery by the proposed project are limited.

Conclusions and Recommendations:

Further participation in exploratory work by the Government in this particular area is not warranted because of its limited potential. It is recommended that the subject application be denied.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

10/27/55 gla

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

RECEIVED
OCT 27 1955

October 26, 1955

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4443

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

Subject: Application for assistance, DMEA Docket 4005, Neptune Uranium Corporation, Piper, Shamrock, and Kingpin claims, Carpenter Flats, Montrose County, Colo.

I have reviewed the attached application, DMEA Docket 4005, which was dated October 6, 1955, and was received in this office on October 24, 1955, and I have discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant has requested DMEA aid to explore for uranium on a group of claims contiguous to an area already explored, under Docket No. 3355, in the Carpenter Flats area, Montrose County, Colo. The proposed exploration program consists of a total of 59,948 feet of drilling in 701 holes, of average depth of 84.8 feet. Of the total footage, 58,948 feet will be rotary drilling at $1.50 per foot and 500 feet will be core drilling at $4.00 per foot. Total drilling costs will be $90,422. Costs for bulldozing drill sites, technical help, and contingencies added to the amount allotted for drilling result in a total estimated cost of $99,730.

The applicant has implied that the previous DMEA exploration was a success on the adjacent claims and that within 8 months about 10 percent or more of the Government loan has been returned from ore produced on the claims explored under DMEA Docket 3355. The amount loaned by DMEA to the applicant under Contract Idm-E703 was approximately $12,000; of this amount, the applicant has paid DMEA about $800 to date according to DMEA records. This is not a 10 percent or more return on the loan as stated in the application.

The total inferred tonnage listed in the certificate of discovery was 428 tons averaging 0.44 percent U_3O_8. From this small tonnage it appears improbable that the Government would receive more than 10 to 15 percent of the amount loaned to the applicant in contract Idm-E703.

Until a greater amount is paid to DMEA on the previous project, No. 3355, we suggest that the application be held in abeyance.

Should the applicant fail to make a larger return on the previous project within a reasonable time, we recommend that the application be denied. Based on the information contained in DMEA 3355, Contract Idm-E703, it is probable that the amount requested in DMEA 4005 would exceed by many times the value of the ore that would be found.

John E Crawford

John E. Crawford

Attachment

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

RECEIVED
OCT 27 1955

October 26, 1955

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4443

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

Subject: Application for assistance, DMEA Docket 4005, Neptune Uranium Corporation, Piper, Shamrock, and Kingpin claims, Carpenter Flats, Montrose County, Colo.

I have reviewed the attached application, DMEA Docket 4005, which was dated October 6, 1955, and was received in this office on October 24, 1955, and I have discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant has requested DMEA aid to explore for uranium on a group of claims contiguous to an area already explored, under Docket No. 3355, in the Carpenter Flats area, Montrose County, Colo. The proposed exploration program consists of a total of 59,948 feet of drilling in 701 holes, of average depth of 84.8 feet. Of the total footage, 58,948 feet will be rotary drilling at $1.50 per foot and 500 feet will be core drilling at $4.00 per foot. Total drilling costs will be $90,422. Costs for bulldozing drill sites, technical help, and contingencies added to the amount allotted for drilling result in a total estimated cost of $99,730.

The applicant has implied that the previous DMEA exploration was a success on the adjacent claims and that within 8 months about 10 percent or more of the Government loan has been returned from ore produced on the claims explored under DMEA Docket 3355. The amount loaned by DMEA to the applicant under Contract Idm-5703 was approximately $12,000; of this amount, the applicant has paid DMEA about $800 to date according to DMEA records. This is not a 10 percent or more return on the loan as stated in the application.

The total inferred tonnage listed in the certificate of discovery was 428 tons averaging 0.44 percent U_3O_8. From this small tonnage it appears improbable that the Government would receive more than 10 to 15 percent of the amount loaned to the applicant in contract Idm-5703.

Until a greater amount is paid to DMEA on the previous project, No. 3355, we suggest that the application be held in abeyance.

Should the applicant fail to make a larger return on the previous project within a reasonable time, we recommend that the application be denied. Based on the information contained in DMEA 3355, Contract Idm-E703, it is probable that the amount requested in DMEA 4005 would exceed by many times the value of the ore that would be found.

John E. Crawford

Attachment

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

RECEIVED
OCT 27 1955

October 26, 1955

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4443

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

Subject: Application for assistance, DMEA Docket 4005, Neptune Uranium Corporation, Piper, Shamrock, and Kingpin claims, Carpenter Flats, Montrose County, Colo.

I have reviewed the attached application, DMEA Docket 4005, which was dated October 6, 1955, and was received in this office on October 24, 1955, and I have discussed it with Joseph S. Hosted, Washington representative of the Atomic Energy Commission.

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The total inferred tonnage listed in the certificate of discovery was 428 tons averaging 0.44 percent U_3O_8. From this small tonnage it appears improbable that the Government would receive more than 10 to 15 percent of the amount loaned to the applicant in contract Idm-E703.

Until a greater amount is paid to DMEA on the previous project, No. 3355, we suggest that the application be held in abeyance.

Should the applicant fail to make a larger return on the previous project within a reasonable time, we recommend that the application be denied. Based on the information contained in DMEA 3355, Contract Idm-E703, it is probable that the amount requested in DMEA 4005 would exceed by many times the value of the ore that would be found.

John E. Crawford

Attachment

10/21/55 gla

IN REPLY REFER TO:

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

RECEIVED
OCT 21 1955

October 20, 1955

Memorandum

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

From: W. P. Williams, U. S. Geological Survey

Subject: Review of Application, DMEA 4005, Neptune Uranium Corporation, Piper, Shamrock, and Kingpin claims, Carpenter Flats, Montrose County, Colorado.

The applicant proposes an exploration project on lands that are adjacent to the area covered under DMEA 3355, Idm-E703. Work under Contract Idm-E703 was certified as a discovery by the Government on May 19, 1955. Certification of the previous project was recommended by the field geologist and engineer on the grounds that ore production was economically feasible from ore discovered by the DMEA project. In the present application the applicant states that about 10 percent of the Government's share of the exploration costs in Idm-E703 have been repaid from royalties from production from lands covered by the contract. The operator under Contract Idm-E703 and the present applicant are the same.

The application has been reviewed by the Grand Junction office, and they recommend that the application be denied without field examination. The Field Team concurs with the recommendation.

The ore deposits on Carpenter Flats in the Uravan District are probably small. The Government has a great deal of information on the general vicinity in addition to the results of DMEA 3355, so that an evaluation of the property would be feasible without field examination.

The applicant has a strong lever in arguing for approval of his present application. His previous DMEA project on adjacent property was an apparent success which has been attested to by the Government through Certification of Discovery and receipt of royalties. The applicant proposes new sampling techniques which promises to make any new work an improvement over the previous contract.

Since Government representatives have been on the property and the applicant is undoubtedly aware of it, I see no necessity for a field examination in the literal sense. I think it is advisable, however, that the Field Team in Denver discuss the application with the applicant and explain to him the reasons for the reluctance of the Government in entering into a new contract on the subject property. An interview could be easily arranged, as the applicant's geologist and representative, Mr. Paul H. Keating, resides near Denver.

W. P. Williams

W. P. Williams

IN REPLY REFER TO:

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

RECEIVED
OCT 21 1955

October 20, 1955

Memorandum

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

From: W. P. Williams, U. S. Geological Survey

Subject: Review of Application, DMEA 4005, Neptune Uranium Corporation, Piper, Shamrock, and Kingpin claims, Carpenter Flats, Montrose County, Colorado.

The applicant proposes an exploration project on lands that are adjacent to the area covered under DMEA 3355, Idm-2703. Work under Contract Idm-2703 was certified as a discovery by the Government on May 19, 1955. Certification of the previous project was recommended by the field geologist and engineer on the grounds that ore production was economically feasible from ore discovered by the DMEA project. In the present application the applicant states that about 10 percent of the Government's share of the exploration costs in Idm-2703 have been repaid from royalties from production from lands covered by the contract. The operator under Contract Idm-2703 and the present applicant are the same.

The application has been reviewed by the Grand Junction office, and they recommend that the application be denied without field examination. The Field Team concurs with the recommendation.

The ore deposits on Carpenter Flats in the Uravan District are probably small. The Government has a great deal of information on the general vicinity in addition to the results of DMEA 3355, so that an evaluation of the property would be feasible without field examination.

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W. P. Williams

WPWilliams:iml
G-10/20/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641
J. O. Hosted, 3210

10/17/55 gla

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

RECEIVED
OCT 17 1955

October 12, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4005, (Uranium), Neptune Uranium Corporation; Piper, Shamrock, and Kingpin groups, Montrose County, Colorado

Enclosed are four copies of a memorandum from the Grand Junction office recommending that the subject application be denied without a field examination.

We concur with this recommendation.

W. M. Traver

By J. W. Townsend
J. W. Townsend

E. N. Harshman
E. N. Harshman

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
OCT 17 1955

October 6, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: J. William Hasler, and M. H. Salsbury

Subject: DMEA ____, Neptune Uranium Corporation (Uranium), Piper, Shamrock, Kingpin groups of claims, Montrose County, Colo. Joint recommendation regarding the advisability of a field examination.

Enclosed is the subject application in the amount of $99,730. Claims covered by this application are contiguous to those explored under DMEA 3355, contract Idm-E 703.

The application for Government assistance submitted by the applicant has been carefully reviewed by the Grand Junction DMEA office and the Bureau of Mines representative. As mentioned above, the subject claims are contiguous to those explored under DMEA contract Idm-E 703, which has been completed. The exploratory work under this contract failed to indicate the presence of ore bodies of ore grade and thickness (0.10 percent U_3O_8 or more, of 1.0 percent V_2O_5, one foot or more thick).

A total of 164 wagon-drill holes were completed, of which only two were in ore, 9 were in ore-grade material but less than 1-foot thick, 9 were weakly mineralized, and 144 holes were barren.

The Bureau of Mines representative certified a discovery, with a total inferred tonnage of 420 tons, 0.53 feet thick and averaging 0.44 percent U_3O_8, to protect the interests of the Government.

Production for the Carpenter Ridge area to November 1954 was about 285 tons that averaged 0.44 percent U_3O_8 and 2.10 percent V_2O_5.

Seventy-two additional holes have been drilled to supplement work done under the contract. Several of the ore and mineralized holes drilled under Idm-E 703 were drilled as close as 50 feet from previously drilled holes and failed to delineate any ore bodies. Although the property explored under this contract may contain several ore bodies of marginal or submarginal ore grade, these ore bodies would not appreciably increase the domestic uranium supply. A final geologic report on DMEA docket 3355, contract Idm-E 703, recommended that no additional exploration be done with Government assistance.

The ore deposits in the Carpenter Flat area occur in the basal Salt Wash member of the Morrison formation of Jurassic age. The upper 65 to 80 percent of the Salt Wash has been eroded away and has left only the lower member. The deposits are found mostly in small rolls localized around logs and as roughly tabular masses.

It is concluded that the Piper, Shamrock, Kingpin group of claims lie in an area in which the chances of finding ore bodies of substantial size and grade are not good. The ore bodies that may be discovered are high grade, but are thin and discontinuous and are not likely to add materially to the over-all domestic uranium supply.

It is recommended that the application for Government assistance be denied without a field examination.

Enclosed is the applicant's brochure.

J. William Hasler
J. William Hasler,
Geologist, USGS

M. H. Salsbury
M. H. Salsbury
Engineer, USBM

JWH/mlr
Enclosure
cc: E. H. Harshman
J. F. Shaw

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

RECEIVED
OCT 13 1955

October 12, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4005, (Uranium), Neptune Uranium Corporation; Piper, Shamrock, and Kingpin groups, Montrose County, Colorado

Enclosed are four copies of a memorandum from the Grand Junction office recommending that the subject application be denied without a field examination.

We concur with this recommendation.

W. M. Traver

By J. W. Townsend

E. N. Harshman

E. N. Harshman

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
OCT 17 1955

October 6, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: J. William Hasler, and M. H. Salsbury

Subject: DMEA ____, Neptune Uranium Corporation (Uranium), Piper, Shamrock, Kingpin groups of claims, Montrose County, Colo. Joint recommendation regarding the advisability of a field examination.

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A total of 104 wagon-drill holes were completed, of which only two were in ore, 9 were in ore-grade material but less than 1-foot thick, 9 were weakly mineralized, and 144 holes were barren.

The Bureau of Mines representative certified a discovery, with a total inferred tonnage of 423 tons, 0.63 feet thick and averaging 0.44 percent U_3O_8, to protect the interests of the Government.

Production for the Carpenter Ridge area to November 1954 was about 285 tons that averaged 0.44 percent U_3O_8 and 2.10 percent V_2O_5.

Seventy-two additional holes have been drilled to supplement work done under the contract. Several of the ore and mineralized holes drilled under Idm-E 703 were drilled as close as 50 feet from previously drilled holes and failed to delineate any ore bodies. Although the property explored under this contract may contain several ore bodies of marginal or submarginal ore grade, these ore bodies would not appreciably increase the domestic uranium supply. A final geologic report on DMEA docket 3355, contract Idm-E 703, recommended that no additional exploration be done with Government assistance.

The ore deposits in the Carpenter Flat area occur in the basal Salt Wash member of the Morrison formation of Jurassic age. The upper 65 to 80 percent of the Salt Wash has been eroded away and has left only the lower member. The deposits are found mostly in small rolls localized around logs and as roughly tabular masses.

It is concluded that the Piper, Shamrock, Kingpin group of claims lie in an area in which the chances of finding ore bodies of substantial size and grade are not good. The ore bodies that may be discovered are high grade, but are thin and discontinuous and are not likely to add materially to the over-all domestic uranium supply.

It is recommended that the application for Government assistance be denied without a field examinaton.

Enclosed is the applicant's brochure.

J. William Hasler
J. William Hasler,
Geologist, USGS

W. H. Salsbury
W. H. Salsbury
Engineer, USBM

JWH/mlr
Enclosure
cc: E. H. Harshman
J. F. Shaw

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

RECEIVED
OCT 1 5 1955

October 12, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4005, (Uranium), Neptune Uranium Corporation; Piper, Shamrock, and Kingpin groups, Montrose County, Colorado

Enclosed are four copies of a memorandum from the Grand Junction office recommending that the subject application be denied without a field examination.

We concur with this recommendation.

W. M. Traver

By J. W. Townsend
J. W. Townsend

E. N. Harshman
E. N. Harshman

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
OCT 17 1955

October 6, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: J. William Hasler, and M. H. Salsbury

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Enclosed is the applicant's brochure.

J. William Hasler
J. William Hasler,
Geologist, USGS

M. K. Salsbury
M. K. Salsbury
Engineer, USBM

JWH/mlr
Enclosure
cc: E. N. Harshman
J. F. Shaw

October 6, 1955

Neptune Uranium Corporation
2625 Walnut
Denver, Colorado

Subject: DMEA-4005
Re: Exploration Assistance
Piper-Shamrock-Kingpin-Groups

Gentlemen:

The receipt of your application dated August 2, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA 4005 and referred to the Rare & 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

October 6, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III.

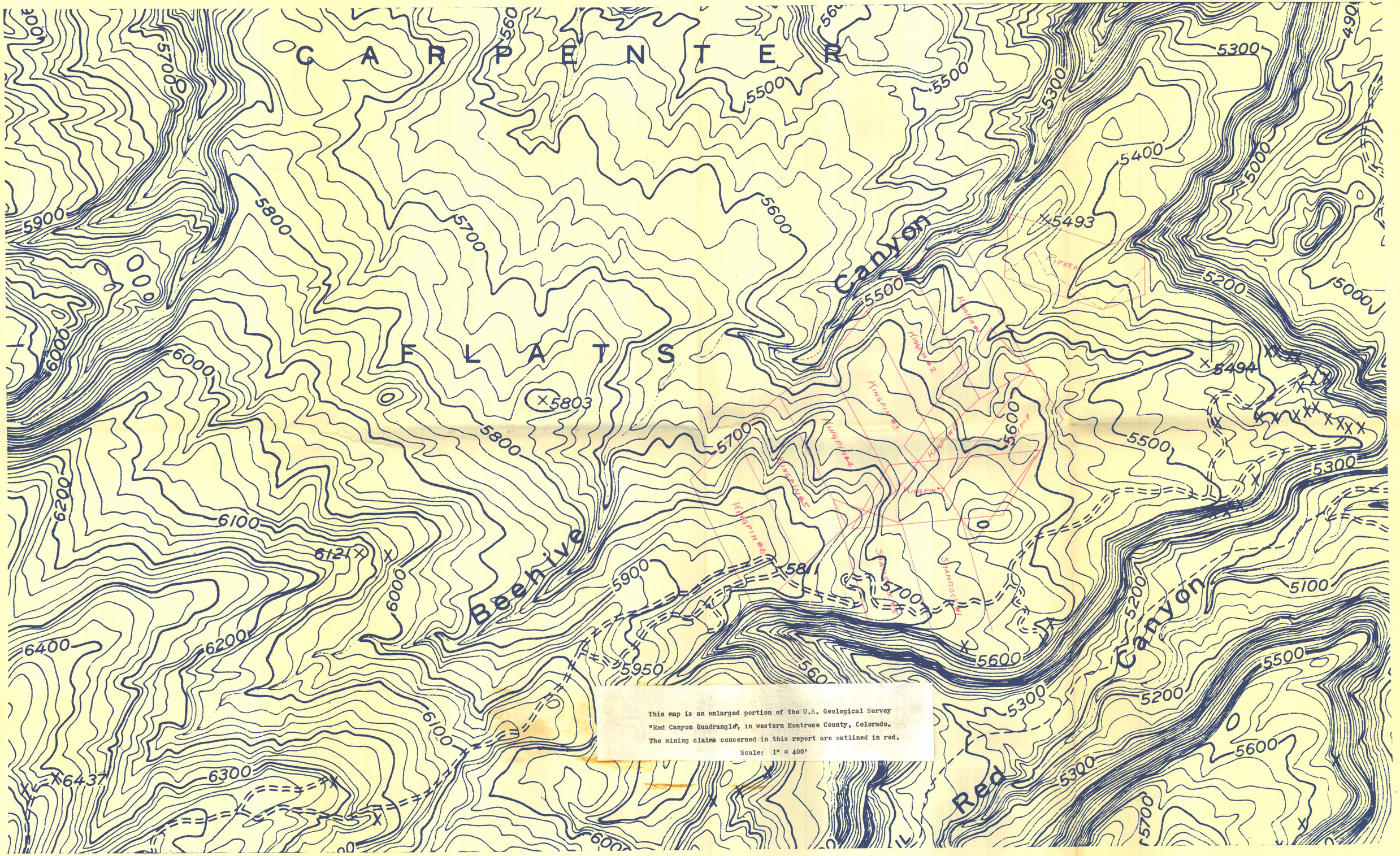
From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

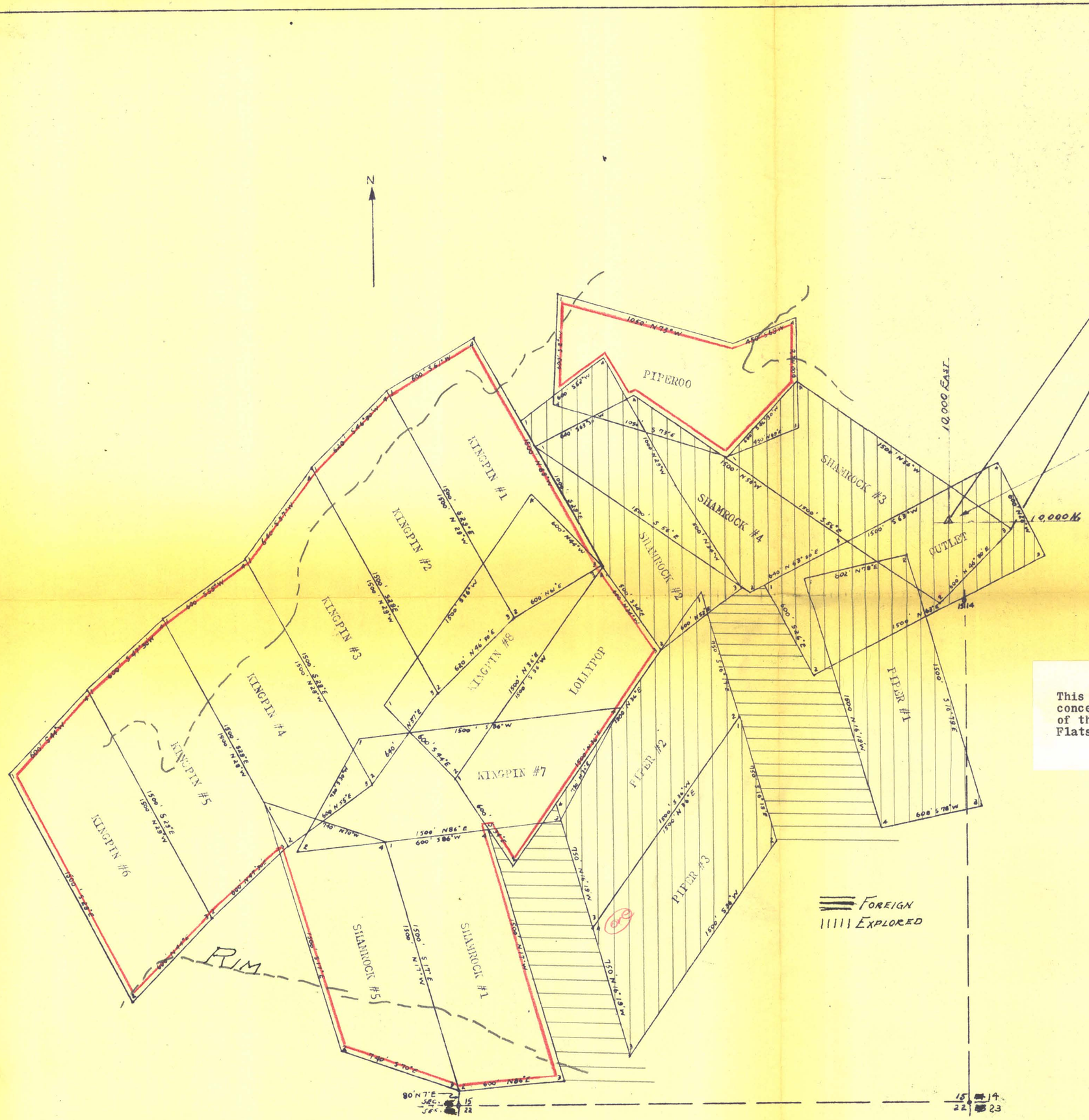
DMEA - 4005 Neptune Uranium Corporation

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



This map is an enlarged portion of the U.S. Geological Survey "Red Canyon Quadrangle", in western Montrose County, Colorado. The mining claims concerned in this report are outlined in red.

Scale: 1" = 400'



THIS POINT IS AN IRON PIPE SET FIRMLY INTO THE BEDROCK OF THIS AREA BY THE U.S. GEOLOGICAL SURVEY, AS A "TRIANGULATION POINT". THIS PIPE HAS BEEN ARBITRARILY ASSIGNED A COORDINATE VALUE OF 10,000 FT. EAST and 10,000 FT. NORTH. ALL CLAIM-CORNERS, DRILL HOLES, AND UNDERGROUND WORKINGS ARE REFERRED TO THIS POINT AS MORE OR LESS THAN THIS ASSIGNED VALUE, IN NET TERMS OF EAST-WEST OR NORTH-SOUTH.

This map shows the relationship of the claims concerned in this report to all of the holdings of the Neptune Uranium Corporation on Carpenter Flats, western Montrose County, Colorado.

THIS IS A CLAIM MAP OF THE "PIPER-SHAMROCK-KINGPIN" GROUP OF CLAIMS, LOCATED ON CARPENTER FLATS, IN WESTERN MONTROSE COUNTY, COLORADO. (Twp. 48 N, R.18 W, 6th P.M.)

Scale: 1" = 400'.

Paul N. Keating