DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 3932

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Routing Slip

To:	Rare & Misc. Mtls.	Date	8/2/55
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

RECEIVED
DEC - 1 1955

November 30, 1955

Memorandum

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

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

Subject: Memorandum Report of Examination, DMEA Docket 3932, Russell C. Trauger, Jack Lode claims, Montrose County, Colorado

I have reviewed the memorandum report of examination of Russell C. Trauger, DMEA Docket 3932, dated November 16 and received in this office November 28. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The subject property was examined on September 28, 1955, by a DMEA examining team. The examining team brought out discrepancies which the applicant had made regarding location of claims on his maps; a claim dispute might result in denial of the application.

In view of the complication arising from the conflict of claims, the applicant on October 15, 1955, requested that the application be withdrawn.

Inasmuch as the application has been withdrawn, any related comments would be extraneous.

The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

John E Crawford
John E. Crawford

12-1-55 zm

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

RECEIVED
DEC - 1 1955

November 30, 1955

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In view of the complication arising from the conflict of claims, the applicant on October 15, 1955, requested that the application be withdrawn.

Inasmuch as the application has been withdrawn, any related comments would be extraneous.

The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

John E. Crawford

11-28-55 ign

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

November 16, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Memorandum Report of Examination, DMEA Docket 3932 (Uranium), Russell C. Trauger, Jack Lode claims, Montrose County, Colorado

Enclosed are four copies of a memorandum report on the subject docket. The application was withdrawn in accordance with the written request of the applicant dated October 15, 1955.

In the event that the applicant, at some later date, proves valid title, denial would be recommended in the absence of new favorable evidence.

W. M. Traver

By J. W. Townsend
J. W. Townsend

RECEIVED
NOV 25 1955

E. N. Harshman
E. N. Harshman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
11/28/55
(date)

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BUREAU OF MINES
Denver, Colorado

November 7, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: J. W. Basler,
J. F. Shaw,
E. N. Harshman

From: M. H. Salsbury, USBM
F. M. Byers, Jr., USGS

Subject: DMEA 3932 (Uranium) Russell C. Trauger, Jack Lode claims, Montrose County, Colo. Result of field examination of DMEA application later withdrawn.

The subject property was examined on September 28, 1955, by a DMEA examining team, accompanied by the applicant. An application for Government assistance in exploration of two and one-half claims had been made at an estimated cost of $33,050.00, in which Government participation at 75 percent would be $24,787.50, rather than the $21,787.50 computed by the applicant. In a letter to the DMEA Field Team, Region III, dated October 15, 1955, from the applicant's attorney, Frank L. Seymour, the application was withdrawn.

The property is located in secs. 15 and 16, T. 48 N., R. 18 W., N.M.P.M., Carpenter Flats area, 11 miles north of Uravan, Colorado, and west of the Dolores river.

The claims adjoin the Mal Pais mine, which lies east of the Jack Lode claims, and are near a property where a DMEA project was completed in 1954 (DMEA 3355, contract Idm-E 703). During the examination it was brought out that the location of the claims, as shown on the applicant's map, does not check with the actual position of the common south corner of secs. 15 and 16 to which they are tied. There appears to be an error on the map in the position of the section corner in relation to topographic features. In addition, L. A. Griffith, who holds adjoining claims to the north, stated to the examining team that the Jack Lode claims of the applicant conflict, in part, with his Pork Chop claims. The applicant apparently was not aware of this conflict and, in view of this complication, decided to withdraw the application under DMEA 3932, perhaps reapplying when and if he could show a clear title. He was advised by the examining team that an application for exploration assistance on ground to which the title was not clear would be denied.

Reviewed by
DMEA OPERATING COMMITTEE
11/28/55

RECEIVED
NOV 25 1955

The field examination was completed and, if a new DMEA application is submitted, a joint report can be prepared without another visit. The appearance of a rim outcrop of the potential ore-bearing Salt Wash sandstone on the Jack Lode claims was unfavorable as contrasted with the very favorable character of the same sandstone unit at the Mal Pais mine. Wagon-hole drilling immediately behind this outcrop did not find any mineralized material.

From an engineering standpoint the cost of the proposed work is much too high for the small acreage involved. Experience at the nearby project under DMEA 3355, where a certification of discovery on small, isolated ore discoveries was made to protect the Government's interest, has shown that drilling on 100-foot centers to find deposits of the small size and frequency that probably occur in the immediate vicinity, will not insure complete exploration of the ground, and the cost of adequate closer-spaced drilling is prohibitive in view of the probable small production.

If a new application should be made for this project at a later date, denial would be recommended by the examiners in the absence of new favorable evidence.

M. H. Salsbury,
Engineer, USBM

F. M. Byers,
Geologist, USGS

MHS/mlr

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

DOCKET COPY
Murphy
Ellis

October 31, 1955

Memorandum

To: Mails & Files

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

Subject: Docket No. DMEA-3932 (Uranium)
Russell C. Trauger
Jack Lode claims
Montrose County, Colorado

In accordance with Mr. Traver's letter of October 18, 1955, and the Applicant's letter, dated October 15, 1955, to Mr. Traver, copies of which we received today, we are closing this docket by withdrawal. The docket file is returned herewith.

Ernest Wm. Ellis

Ernest Wm. Ellis

cc to: J. E. Crawford, Rm. 3641
T. H. Kiilsgaard, Rm. 5224

10/31/55 gla

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

RECEIVED
OCT 21 1955

October 18, 1955

224 New Customhouse
Denver 2, Colorado

Mr. Frank L. Seymour
317 Main Street
Grand Junction, Colorado

Re: Docket DMEA 3932 (Uranium),
Russel C. Tranger, Jack Lode
claims, Montrose County,
Colorado

Dear Mr. Seymour:

In accordance with your request of October 15, 1955, we have withdrawn your application for DMEA aid on Jack Lode claims, Montrose County, Colorado.

If, at a later date you perfect your title, consideration would be given to a new application for exploration aid on this property.

Very truly yours,

W. M. Traver

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

HMC:ab
cc: Sec. Op. Comm. (2)
Harshman
Hasler
Shaw (2)
Docket 3932
Chron.

RECEIVED
OCT 21 1955

DMEA
Date Rec'd
OCT 17 1955

BUREAU OF MINES
Denver, Colorado

October 15, 1955

Mr. W. M. Traver
Executive Officer
224 New Customhouse Building
Denver 2, Colorado

Re: Docket #DMEA-3932 (Uranium)
Jack Lode Claims
Montrose County, Colorado

Dear Mr. Traver:

On behalf of Mr. Russell C. Trauger regarding the above subject application, I would like to request that we be permitted to withdraw the application in its entirety. A heretofore unknown adverse claimant has asserted some title to a portion of the premises involved and it is for this reason that we respectfully request that our application be withdrawn at this time.

When this matter is resolved, there is a possibility that we may re-apply but we would like for the matter to be abandoned at this time for the above mentioned reason.

Sincerely,

Frank L. Seymour

Frank L. Seymour

dh

COPY

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

RECEIVED
OCT 21 1955

October 18, 1955

224 Near Customhouse
Denver 2, Colorado

Mr. Frank L. Seymour
317 Main Street
Grand Junction, Colorado

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Russel C. Tranger, Jack Lode
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Colorado

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Very truly yours,

W. M. Traver

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

HMC:ab
cc: Sec. Op. Comm. (2)
Harshman
Hasler
Shaw (2)
Docket 3932
Chron.

RECEIVED
OCT 21 1955

DMEA
Date Rec'd.
OCT 17 1955

BUREAU OF MINES
Denver, Colorado

October 15, 1955

Mr. W. M. Traver
Executive Officer
224 New Customhouse Building
Denver 2, Colorado

Re: Docket #DMEA-3932 (Uranium)
Jack Lode Claims
Montrose County, Colorado

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When this matter is resolved, there is a possibility that we may re-apply but we would like for the matter to be abandoned at this time for the above mentioned reason.

Sincerely,

Frank L. Seymour

Frank L. Seymour

dh

COPY

Surname 700
Murphy

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

AUG 31 1955

Mr. Russell C. Trauger
317 Main Street
Grand Junction, Colorado
c/o Frank L. Seymour, Attorney

Re: Docket No. DMEA-3932 (Uranium)
Jack Lode claims
Montrose County, Colorado

Dear Mr. Trauger:

The application for assistance in exploring the subject property under the captioned docket number has been reviewed by the Rare and Miscellaneous Metals Division.

The DMEA Field Team, Region III, Mr. W. M. Traver, Executive Officer, 224 New Customhouse Building, Denver 2, Colorado, will make a field examination of your property if it has not already done so.

Any assistance you may give the members of the Field Team during the examination will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

FMMurphy:am
8-30-55
cc to: Admr. Reading File
Docket
Code 700
DMEA Field Team, Region III(2)
Mr. Murphy

R.C.T.

Docket 700

Murphy
Ellis
Selfridge
Mittendorf

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

AUG 29 1955

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

Re: Docket No. DMEA-3932 (Uranium)
Russell C. Traugar
Jack Lode claims
Montrose County, Colorado

Dear Mr. Traver:

Enclosed are copies of memoranda pertinent to the subject application, from J. E. Crawford, dated August 8, and W. P. Williams, dated August 17, 1955, members of the Uranium Commodity Committee.

In the event the Field Team recommends a project on the Jack Lode claims, it should advise the Applicant that we will require the following:

1. A copy of the purchase agreement made in June 1955, between the Northwest Mining Company, purchaser and A. W. Bolt, R. L. Hunter, Pete Silicic, and Dan Shiekick, the owners of Jack Lode claims Nos. 1 through 7. Also, six executed copies of the Owners' Consent to Lien forms, signed by the above sellers.

2. Clarification of the contracts between the Northwest Mining Company and:

(a) Lapper Research and Development Company - June 4, 1955

(b) Linn Research and Development Company - June 3, 1955

(c) Jack Eatch - May 31, 1955

3. Six executed copies of a subordination agreement signed by V. Lee Potter, George Maxwell, and W. J. MacCabe, who comprise the Northwest Mining Company.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (2/6)

Enclosures

APPROVED:

P. F. Yopes (2/6)
Member, Bureau of Mines

Thor H. Kiilsgaard (2/6)
Member, Geological Survey

Code 700
Mr. Murphy

Messrs. J. E. Crawford, Rm. 3641
T. H. Kiilsgaard, Rm. 5222
J. O. Hosted, Rm. 3210, GSA

Admr. Reading File
Operating Committee
Docket

FMMurphy:am
8-26-55
cc to:

R.L.H.

8/30/55 gla

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

August 25, 1955

RECEIVED
AUG 29 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Appraisal relative to necessity for a field examination. Docket DMEA 3932, (Uranium), Russell C. Trauger, Jack Lode, Montrose County, Colorado

Enclosed are four copies of a memorandum report on the subject docket from the Grand Junction office.

A Field examination is recommended and the examination date will be scheduled as soon as possible.

The Bureau of Mines copy of the brochure has been sent to the engineer.

W. M. Traver

W. M. Traver

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Colorado Plateau District
P. O. Box 360
Grand Junction, Colorado

August 22, 1955

Memorandum

To: Executive Officer, Region III

RECEIVED
AUG 2 0 1955

Through: E. N. Harshbarger

From: J. William Hasler, USGS
M. H. Salsbury, USBM

Subject: Appraisal relative to necessity for a field examination. DMEA-3932 (Uranium) RUSSELL C. TRAUGER, JACK LODE, Montrose County, Colorado.

The applicant has applied for DMEA assistance to explore for uranium in the Morrison formation, northwest of Uravan, Colorado. L. A. Griffith Associates, DMEA 3355, contract Idm-E 703, adjoins the subject property and results of this contract were not encouraging although a discovery was certified upon a very small showing of ore-grade material found as a result of DMEA work. The applicant's claims are adjacent to an area in which the Mal Pais Mining Company is producing a small amount of tonnage. The claims are situated in an area which contains small, scattered ore deposits. In spite of the apparent draw-backs mentioned above, it is recommended that a field examination be made. The examination date will be set as soon as possible.

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

August 25, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Appraisal relative to necessity for a field examination. Docket DMEA 3932, (Uranium), Russell C. Trauger, Jack Lode, Montrose County, Colorado

Enclosed are four copies of a memorandum report on the subject docket from the Grand Junction office.

A Field examination is recommended and the examination date will be scheduled as soon as possible.

The Bureau of Mines copy of the brochure has been sent to the engineer.

W. M. Traver

W. M. Traver

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Colorado Plateau District
P. O. Box 360
Grand Junction, Colorado

August 22, 1955

Memorandum

To: Executive Officer, Region III

RECEIVED
AUG 29 1955

Through: E. N. Harrison

From: J. William Hadler, USGS
M. E. Salisbury, USBM

Subject: Appraisal relative to necessity for a field examination. DMEA-1932 (Uranium) RUSSELL C. TRAUGER, JACK LOHR, Montrose County, Colorado.

The applicant has applied for DMEA assistance to explore for uranium in the Morrison formation, northwest of Uravan, Colorado. L. A. Griffith Associates, DMEA 3355, contract Idm-X 703, adjoins the subject property and results of this contract were not encouraging although a discovery was certified upon a very small showing of ore-grade material found as a result of DMEA work. The applicant's claims are adjacent to an area in which the Mal Pain Mining Company is producing a small amount of tonnage. The claims are situated in an area which contains small, scattered ore deposits. In spite of the apparent drag-backs mentioned above, it is recommended that a field examination be made. The examination date will be set as soon as possible.

Sec. of Opr. Com. (2)

RECEIVED
AUG 29 1955

August 25, 1955

Memorandum

To: John F. Shaw

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA-3932 (Uranium), Russell C. Treuger, Jack Lode, Montrose County, Colorado

The subject application in the amount of $33,050.00 is enclosed herewith. The bruchure consists of the following:

1. Form MF-103 and accompanying answer sheets
2. Photocopy of an agreement regarding operation
3. Five maps
4. Copy of Executive Officer's memo of August 22 to Secretary Operating Committee
5. Copy of Executive Officer's memo of transmittal to this office

Your attention is directed to the fact that Question 5 lists the minerals Uranium and Vanadium. Vanadium is not on the list of minerals for which exploration aid is available. It is therefore assumed that the application must be judged on its merits as a uranium property.

A field investigation and suitable report are required. The completed report should be forwarded direct to the Executive Officer with a copy of the memo of transmittal to this office.

W. H. KING

W. H. King

Copy to: E. N. Harshman
W. M. Traver (3)

8/29/55 gla

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

224 New Customhouse
Denver 2, Colorado

August 22, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3932 (Uranium), Russell C. Trauger, Jack Lode, Montrose County, Colorado.

A field examination is recommended by the Grand Junction Survey office in their weekly report of August 15-19, 1955, on the subject application. A copy of the application has been forwarded to the Bureau of Mines.

Joint memoranda from the Bureau of Mines and the Survey offices at Grand Junction have been requested in future uranium applications in the Plateau area.

W. M. Traver

W. M. Traver

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

224 New Customhouse
Denver 2, Colorado

August 22, 1955

Memorandum

To: W. H. King

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3932 (Uranium), Russell C. Trauger, Jack Lode, Montrose County, Colorado

Enclosed is the subject application in the amount of $33,050.00.

A field investigation and suitable report are requested.

W. M. TRAVER,

W. M. Traver

Enclosure

HMC:pw

cc: Subject DMEA-3932
Chron
Sec.Op.Comm. (2)
Harshman
Hasler

Sec. of Opr. Comm. (2)

RECEIVED
AUG 29 1955

August 25, 1955

Memorandum

To: John F. Shaw

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket IMEA-3932 (Uranium), Russell C. Trauger, Jack Lode, Montrose County, Colorado

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A field investigation and suitable report are required. The completed report should be forwarded direct to the Executive Officer with a copy of the memo of transmittal to this office.

W. H. KING

W. H. King

Copy to: E. N. Harshman
W. M. Traver (3)

IN REPLY REFER TO:

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

August 17, 1955

Memorandum

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

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

Subject: Review of DMEA application, Docket No. 3932, Russell C. Trauger, Jack Lode claims, Montrose County, Colorado.

The applicant proposes to explore for uranium by means of 15,400 feet of plug-bit drilling and 2,100 feet of coring at a total project cost of $33,050. The property described consists of 2-1/2 mining claims located in the productive Uravan District.

Although significant production has been made from deposits in the vicinity of the subject property, proper evaluation of the property must depend upon field determination of the geologic character of the Salt Wash sandstone member of the Morrison formation.

I recommend that the Field Team, Region III, be requested to make a field examination and report.

WPWilliams

W. P. Williams

RECEIVED
AUG 18 1955

IN REPLY REFER TO:

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

August 17, 1955

Memorandum

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

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

Subject: Review of DMEA application, Docket No. 3932, Russell C. Traugar, Jack Lode claims, Montrose County, Colorado.

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I recommend that the Field Team, Region III, be requested to make a field examination and report.

WPW

W. P. Williams

WPWilliams:iml
G-8/17/55
cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641
J. O. Hosted, 3210

RECEIVED
AUG 18 1955

8/9/55 gla

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

RECEIVED
AUG - 9 1955

August 8, 1955

Memorandum

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

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

Subject: Application for assistance, DMEA Docket 3932, Jack Lode claims, Montrose County, Colorado

I have reviewed the attached application, DMEA Docket 3932, Jack Lode Claims; and I have discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant drilled seven wagon holes on the property, but owing to the nature of the equipment, was not able to reach the Salt Wash member of the Morrison formation. The holes were all less than 70 feet deep.

There was no descriptive evidence of uranium mineralization on the property. Radiometric anomalies were determined at several locations, but it was not stated whether the anomalies were on the subject property or adjacent to it.

Justification for exploration was based on the geological and geographic proximity of known and hopeful producers, as well as the anomalies mentioned above.

The applicant's exploration costs as shown are not believed to be excessive. Drilling costs were about average for the Plateau region.

The proposed initial exploration drilling on 100-foot centers might be practicable should assistance be warranted, but I would hesitate to approve 50-foot second stage drilling, and would object to drilling on 25-foot centers as described for the third stage.

I suggest that the Field Team review the application, but I doubt that a field examination is warranted. The fact that the claims are in an area geologically favorable for the deposition of uranium does not seem sufficient reason to warrant assistance.

Mr. Hosted, having completed a review of the application, recommends that the application be referred to the Field Team for an examination, and that the Field Team consult with Mr. Ernest Gordon, Atomic Energy Commission, Grand Junction, Colorado.

John E. Crawford

John E. Crawford

Attachment

Lack.
Copy of agreement - June 1955
NW. Mng Co. agreement to purchase
claims from A.W. Bolt
R.L. Hunter
Pete Shiek
Dan Shiekick

August 2, 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-3932 Russell C. Trauger

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

August 2, 1955
Subject: DMEA-3932
Re: Exploration Assistance
The Jack Lode Claims

Mr. Russell C. Trauger
c/o Frank L. Seymour, Attorney
317 Main Street
Grand Junction, Colorado

Dear Mr. Trauger:

The receipt of your application dated July 23, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3932 and referred to the Rare & Miscellaneous Metals Division.

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

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

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

224 New Customhouse
Denver, Colorado

July 28, 1955

Memorandum

To: Secretary, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), Russell C. Trauger, Jack Lode, Montrose County, Colorado

Enclosed are two copies of the subject application in the amount of $33,050.

One copy of the application is being forwarded to J. W. Hasler at the Grand Junction Field Office. One copy of the application is being retained in our file.

W. M. Traver

W. M. Traver

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd
JUL 27 1955
BUREAU OF MINES
Denver, Colorado

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

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

Not to be filled in by applicant.

Docket No. 3932
Metal or Mineral Uranium
Date Received 8-1-55
Estimated Cost $33,050
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: Russell C. Trauger
317 Main Street
Grand Junction, Colorado
% Frank L. Seymour, Attorney

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Jack Lode unpatented claims #4, #6, and the north 1/2 of #1. (See accompanying maps.) Said claims are located in Sections 15, 16, and 26, Township 48 North, Range 18 West, NMPM, Montrose County, Colorado.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Held under purchase contract. (See agreement attached.)

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

(*e*) If you own the land, describe any liens or encumbrances on it Not encumbered.

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

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

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

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

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

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

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

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within 30 days and be completed within 3 months from the date of an exploration project contract.

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

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

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

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

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

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

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

[X] Money [X] 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 July 23, 1955

R. C. Trauger
(Applicant)

By

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

To: United States Department of the Interior
Defense Minerals Exploration Administration

For: Application for aid in an exploration project, pursuant to DMEA Order 1, under the Defense Production Act of 1950, as amended.

1. Applicant: Russell C. Trauger
317 Main Street
Grand Junction, Colorado
% Frank L. Seymour, Attorney

3. Property:

A. Jack Lode unpatented claims #4, #6, and the north half of #1. (See accompanying maps.) Said claims are located in Sections 15, 16, and 26, Township 48 North, Range 18 West, NMPM, Montrose County, Colorado.

B. Property is known as "The Jack Lode Claims".

C. Held under purchase contract. (See agreement attached.)

E. Not encumbered.

F. Lease application was made under Circular 7 and was recorded in the office of the County Recorder of Montrose County, Colorado, as follows:

Jack Lode #1	Book 383	Page 110	On July 29, 1954
Jack Lode #4	Book 383	Page 113	On July 29, 1954
Jack Lode #6	Book 383	Page 296	On July 29, 1954

Lease application was withdrawn after passage of Act #585 and recorded and amended location notices were filed as follows;

Jack Lode #1 as Document #304750 on November 13, 1954.
Jack Lode #4 as Document #304753 on November 13, 1954.
Jack Lode #6 as Document #304755 on November 13, 1954.

To comply with the act passed by the State of Colorado in 1955, a map of the claims was filed on May 28, 1955, as Document #314832 in the office of said County Recorder in Book 413, Page 45.

4. Mining and Exploration:

A. No mining has been done on claims.

B. Applicant has, during the past sixty days, drilled seven holes by wagon drill, however due to the type of equipment used, depths did not exceed 67 feet, and it is now realized this depth was not sufficient to penetrate

through the Salt Wash member of the Morrison to the Summerville contact, an important zone of mineralization in the area, therefore results of this drilling were negative.

C. Geologic features:

1. Claims are on Carpenter Mesa, in the Uravan mineral belt of Western Colorado, to the north of a small spur canyon which projects to the northwest from Red Canyon approximately 1 1/2 miles west of the Dolores River. (See maps attached as Exhibits 1 and 2.)

2. Surface is mostly the first rim of the Salt Wash, with portions to the north and west being second rim, and the first rim is exposed in the spur canyon to the south.

The potential zone of enrichment of the area is the Salt Wash of the Morrison formation of Jurassic age, with enrichment possible in any one of the three rims generally present in the area.

The area has been a consistant producer of high grade Uranium and Vanadium from the early part of the century; in fact, it was at Roc Creek, some four miles to the northwest, that radioactive minerals were first discovered on the Colorado Plateau in 1898. Here is located the famous Rajah Mine, which furnished the rich ores from which the Curies extracted their radium.

The importance of the area was recognized by the government-owned Union Mines Development Corporation, who made an extensive study of the area during the past war. (See Exhibits 1 and 2.) Today additional properties are operating in the area which are shown on Exhibit 2. One such, the Mal Pais (formerly the Dad Claims) to the east, is said to have produced some $250,000.00 worth of "High Grade" during the past year and have recently blocked out considerable tonnage immediately to the east of Jack Lode Claim #4. Uranium enriched logs were said to have been mined from the Canyon Group to the south. The Radium King and Queen, to the northwest about two miles, are old producers, and the Pioneer and Griffin Mines are at present producing on the Mesa some two miles to the northeast. Across Red Canyon to the southeast, both the Andrews and Barton properties are reported to have drilled in large bodies of high grade ore during the past year.

Referring to Exhibit #4, which is an enlargement of a portion of the U.S.G.S. Red Canyon Quadrangle Photogeologic: in heavy lines are shown faulting extending down from the northwest. These fault lines have been extended through these claims ~~and~~ as they appear to have been the cause of the Spur Canyon, which these claims border. Extending these fault lines to the northwest, they become the Rajah and Roc Creek faults, along which the highly mineralized Rajah Mine and Sinbad Valley area are situated. Fractures having the same bearing

as these faults, plus traverse fractures at right angles thereto, are prominent both at surface in the area and in the mine workings of the Mal Pais, where they appear to influence both channelling and enrichment. The Mal Pais is producing from the upper 1/3 of the first rim, while the Barton and others produce from the lower 1/3 of the first rim. Other mines of the area are working in the second rim.

Anomalies of from 2 to 4 times background have been obtained from at least six points on the surface and in the lower 1/3 of the first rim, where it is exposed in the canyon.

D. The property is reached via a good access road from State Highway #141, which runs along the Dolores River; it is about nine miles via this access road and highway to the mill at Uravan. Supplies can be obtained at Uravan, or at Naturita, fourteen miles further south, or from Grand Junction, Colorado, a distance of 83 miles to the north, from this property, over Highway 141. There is a landing strip for light planes on the Mesa about one mile north of the claims and an excellent one on Atkinson Mesa east of Uravan.

A camp has been constructed on the claims and completely furnished. It consists of a cook house and a bunk house for seven employees. Help can be quartered at the mine or at Uravan, a distance of nine miles. Elevation is approximately 6,000 feet, and operations are possible all year round, with possibly one or two weeks of bad hauling weather during the thawing season.

E. Both drilling rigs and mining equipment are readily available for purchase or by contract in the area. Power is at present by gasoline and diesel engines. Water for domestic use is presently being hauled from Uravan, however there is a spring in the canyon about 100 feet below the camp level which could possibly be used for this purpose. Drilling water is hauled from the Dolores River, a distance of three miles. Mine timber is available at both Naturita and Grand Junction; there is none on the property.

Equipment presently owned by the applicant and available for the project is as follows:

1 6x6 truck
1 Pickup
1 Jeep
1 218-cubic foot compressor
1 Small wagon drill (not to be used for this project)
2 Jack hammers
200' Hose
Miscellaneous couplings, fittings, etc.
300' Drill Rod
1 Water tank
1 Water pump

1 Light plant
1 Cook house and equipment
1 Bunk house for 7 men

The applicant has purchased a rotary drill rig to be used for this drilling program.

5.

A. Uranium and Vanadium are the minerals to be explored for.

B. It is proposed to drill 140 holes into and through the Salt Wash, commencing as near the rim as possible on Claims #1 and #4, using a 100' grid (approximate) for the initial stage and to reduce this grid dimension to a 50' pattern as a second stage, with possible 25' spacing where warranted by enrichment encountered. Drilling to be by rotary with coring in the zones indicated to be potential. It is proposed to core the total of the first hole for strata identification and possibly the total of others, should there appear evidence of pronounced strata change. All holes to be probed in addition to any coring. Holes will mostly be drilled from the top of the first rim with a few from the top of the second rim. Depth should not exceed 200' and most holes will be less than 100' in depth.

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

D. Management of the project will be by:
Russ C. Trauger, age 47, who has had 25 years executive and supervision work, 12 years in heavy duty equipment operations, including 10 years of construction experience.

Dan Shickick, age 61, with 40 years of mining experience, at present Superintendent of the Mal Pais operations, will act as Supervisor.

Also on the actual drilling operations will be Cliff Brown, with 20 years of heavy duty mechanical and drilling experience, and A. W. Bolt, with many years of drilling experience, the past five of which have been drilling for Uranium on the Colorado Plateau.

Consulting Geologist will be Laurence Henn, Supervision of Uranium Operations for the U. S. Geophysical Corporation, who has supplied the foregoing geological data.

6. Cost estimate. All work to be done by applicant on Unit Basis.

A. 140 holes, average depth 125'----------17,500' of hole total
140 holes, average 15' of coring--------2,100' of coring
15,400' of drilling

15,400' of drilling hole @ $1.50 per foot----------	$23,100.00
2,100' of coring @ $3.00 per foot----------	$ 6,300.00
100 hours of cat work (roads) @ $14.00 per hour----------	$ 1,400.00
3 months supervision and geological consultation services @ $750.00 per month----------	$ 2,250.00
	$33,050.00
Applicant's portion 25% requested loan----------	$ 8,262.50
DMEA Loan----------	$24,787.50

$2,250.00 divided by 17,500' of hole equals 13¢ per foot, for geological supervision.

B. Supervision and geological included in 6A.

C. No material or supplies (all by unit of work)

D. Equipment furnished in Unit basis figures.

E. Equipment rehabilitation and repair furnished in Unit basis figures.

F. All required buildings now on premises.

G. All expenses included in Unit basis figures.

H. None.

7.

A. Applicant will furnish his share of project cost.

B. In money and equipment.

STATE OF COLORADO)
) ss. AFFIDAVIT
COUNTY OF MESA)

The undersigned, A . W. BOLDT of Grand Junction, Colorado, being first duly sworn upon oath, deposes and says:

That he is the original locator of certain mining claims on Carpenter Flats, Roc Creek Mining District, Montrose County, Colorado, known as the Jack Lode Group Nos. 1 through 7, inclusive, all as more fully described in a certain agreement entered into in June of 1955 between Northwest Mining Company, and A. W. Boldt, R. L. Hunter, Pete Sikick and Dan Shickick, and recorded in the County Records of said County.

That to the best of his knowledge, he believes the above mentioned mining claims to be free and clear of all liens and encumbrances.

A. W. Boldt (SEAL)

Subscribed and sworn to before me this 26th day of July, 1955 by A. W. Boldt.

My commission expires February 17, 1959.

Maurice A. Hall

AGREEMENT

THIS AGREEMENT, made and entered into this 28th day of June, 1955, by and between V. LEE POTTER, GEORGE MAXWELL and W. J. MacCABE, first parties, and RUSS TRAUGER, second party, WITNESSETH:

WHEREAS, all of the parties hereto entered into a certain operating agreement in Portland, Oregon on the 30th day of May of 1955 and thereafter referred to themselves as the NORTHWEST MINING COMPANY, and,

WHEREAS, all of the parties hereto now desire to rescind and declare null and void said operating agreement in accordance with the terms and conditions hereinafter set forth,

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants hereinafter contained to be kept and performed by the parties hereto, the parties agree as follows:

1. IT IS UNDERSTOOD AND AGREED that the Northwest Mining Company entered into a certain agreement in June of 1955 with A. W. Boldt, R. L. Hunter, Pete Sikick and Dan Shickick, whereby the Northwest Mining Company agreed to purchase certain mining claims known as the Jack Lode Nos. 1 through 7, inclusive in the Paradox Mining District of Montrose County, Colorado, for the total purchase price of Ten Thousand Dollars ($10,000.00), payable as follows: Five Thousand Dollars ($5,000.00) cash upon the execution of the agreement and ten percent (10%) royalty until another Five Thousand Dollars ($5,000.00) is paid with the option in Northwest Mining Company to pay the latter Five Thousand Dollars ($5,000.00) or the balance due thereon at any time, and obtain thereby a mining deed to said claims.

2. The parties agree that the above mentioned agreement to purchase the Jack Lode claims calls for a payment of Five Thousand Dollars ($5,000.00) upon execution of the agreement, but that an extension of time has been obtained from the sellers under the agreement whereby said Five Thousand Dollars ($5,000.00) may be paid on or before July 31, 1955 and thereby maintain said agreement in full force and effect. First parties agree that subject to the terms hereinafter

recited that first parties will pay said Five Thousand Dollar ($5,000.00) payment under the purchase contract on or before July 31, 1955 or, in the alternative, notify second party on or before the 26th day of July, 1955 in writing in care of Mal Pais, Uravan, Colorado, that first parties do not intend to make said payment. In the later event, second party may elect to make said Five Thousand Dollar ($5,000.00) payment and thereby become entitled to all of the right, title and interest of Northwest Mining Company and first parties hereto in and to said contract of sale and first parties agree that they will execute any and all instruments necessary to release all of their interest in and to said contract of sale provided they fail or refuse to make the Five Thousand Dollar ($5,000.00) payment above mentioned. PROVIDED, HOWEVER, it is understood and agreed between the parties that if first parties are able to maintain the contract of sale on the Jack Lode claims in full force and effect by obtaining valid written extensions from the sellers by partial payment or otherwise, so long as the agreement is not materially changed, then, in that event, first parties may maintain their interest in said contract for a period of time not to exceed five (5) days prior to the time when said extension expires, and first parties agree that they will again provide second party with five (5) days notice if they intend to not keep said contract of sale in full force and effect. And as above provided, should second party elect to undertake said contract of sale, first parties agree to execute a like release to all of their interests in the said contract if they fail to keep the purchase contract in force.

3. Second party agrees that in the event first parties meet the above mentioned Five Thousand Dollar ($5,000.00) payment timely, that second party will pay, up to the maximum sum of Eight Hundred Dollars ($800.00), all bills submitted to Northwest Mining Company which have accrued to the date hereof from the following creditors:

Junction Bit and Tool	Flannery Electric
Homer Woods	Shell Oil Company
Dan Shickick	Miller Petroleum

In the event the bills submitted by the above mentioned creditors do not total as much as Eight Hundred Dollars ($800.00), then second party agrees that he will pay the total amount of the bills and the balance of said Eight Hundred

Dollars ($800.00) to first parties. In the event first parties fail or refuse to make the above mentioned Five Thousand Dollar ($5,000.00) payment on the contract of sale, then first parties agree that they will pay all of the outstanding current bills of Northwest Mining Company and that second party will be released from all or any portion of any outstanding indebtedness of Northwest Mining Company, as of this date. This provision, it is agreed, is to have no effect on that portion of the agreement wherein second party obtains the right to acquire all of the interest in the contract of sale for the Jack Lode claims under conditions set forth hereinabove.

4. In the event first parties make the Five Thousand Dollar ($5,000.00) payment toward the purchase price of the Jack Lode claims, it is agreed that second party will become entitled to all of the rights obtained under said contract in regard to the claims known as the Jack Lode No. 4, the Jack Lode No. 6 and that portion of the Jack Lode No. 1 which lies north of an imaginary line drawn on a certain map of the Jack Lode group filed for record May 28, 1955 and numbered 314832. The imaginary line above referred to would be drawn from the northwest corner of the Jack Lode No. 1 through said claim easterly to the southeast corner of said claim and that portion of said claim north of said line is the land above referred to along with the Jack Lode Nos. 4 and 6. And in the event first parties pay said Five Thousand Dollars ($5,000.00), second party will execute any and all instruments necessary to show that he claims no interest in the remaining claims of the Jack Lode group, including the Jack Lode Nos. 8 and 9. PROVIDED, HOWEVER, all of the parties hereto agree that should first parties maintain an interest in the contract of sale and this agreement be carried out in accordance with the terms hereof, that each of the parties hereto will grant general easements to each of the other parties whereby any of the parties may use any of the claims in the Jack Lode group, including the Jack Lode Nos. 8 and 9, for the purposes of access either on the surface or underground.

5. In the event first parties maintain an interest in the Jack Lode claims as hereinbefore provided, it is agreed that if either first or second parties mine ore from said claims that the ten percent (10%) royalty

provided in the contract of sale of said claims will be paid to the sellers until the balance due under that contract is paid. However, the parties agree that the Five Thousand Dollar ($5,000.00) balance due under said contract of sale out of royalty is to be paid ultimately on a pro-rata basis whereby first parties are to pay nine fourteenths (9/14) and second party to pay five fourteenths (5/14) of said obligation. This pro-rata payment is contingent upon either both parties mining ore and paying their ten percent (10%) royalty as provided in the contract of sale, or both parties selling their interest at a profit enabling them to pay their pro-rata share either out of production or profit from a sale of their interest in said premises. Should one party alone have ore and the other fail to realize any profit from a sale or production, then it is agreed that only the party in production is to pay the royalty set forth in the contract of purchase. It is intended by this provision for a pro-rata payment of the balance due that if either or both of the parties mine ore, the royalty is to be paid under the contract and, further, that if either or both of the parties fail to mine ore or realize any profit from a sale of their interest in said premises, then, and in that event, the parties failing to realize a profit from a sale or from the mining of ore are not to be obligated to pay the balance due under the contract. HOWEVER, if at any time hereafter either or both of the parties realize a profit from mining or a sale of their interest, then this pro-rata payment basis is to be carried out between the parties.

6. In the event one party pays sufficient royalty to obtain a deed from the sellers the property will be divided as hereinabove set forth and the other party will be expected to reimburse the party which has paid said royalty payments provided they become able as a result of production or sale of the premises as above outlined.

7. Second party agrees to obtain releases from the following named persons that have entered into contracts with the Northwest Mining Company heretofore, and second party agrees that he will assume all obligations under said contracts:

(a) Loper Research and Development Company -- contract entered into June 4, 1955 with Northwest Mining Company.

(b) Linn Research and Development Company -- contract entered into June 3, 1955 with Northwest Mining Company.

(c) Jack Eatch -- Contract entered into May 31, 1955 with Northwest Mining Company.

8. Second party also agrees to hold harmless first parties from any and all contractual claims that may be asserted by the following employees that have previously contracted with either Northwest Mining Company or second party:

Lewis Beachan	Clifford Brown
Ted Irwin	Marion Kizer

9. The first parties hereto agree to hold second party harmless from any and all undisclosed contracts or liabilities heretofore contracted or obtained and second party likewise hereby agrees to hold first parties harmless from any heretofore undisclosed contracts or liabilities which he may have incurred. The parties agree that the creditors above mentioned are the sole creditors recognized by these parties jointly and that any and all other obligations which have been incurred will be paid by the party which contracted for or caused the obligations.

10. Both parties hereto agree that they will execute any and all necessary instruments to carry out the intent and purposes of this agreement, including releases of interest in the primary contract of sale on the Jack Lode claims and all deeds which may be necessary to accomplish the purpose of this agreement.

11. Both first and second parties agree to give the other party to this agreement the right of first refusal should either party desire to sell their interest in these claims. The parties agree to give the opposite party a five (5) day period in which to meet any bona fide offer for the sale of either parties interest herein.

12. It is intended that this agreement does hereby cancel and render null and void that original operating agreement between the parties under date of May 30, 1955 and that the provisions herein supersede and nullify that certain agreement. IT IS UNDERSTOOD that George Maxwell has executed a Power of Attorney to V. Lee Potter whereby Potter may enter into any agreements whatsoever concerning the Jack Lode claims and the Northwest Mining Company and, therefore, this agreement is being executed on behalf of the said Maxwell by V. Lee Potter and a copy hereof will be forwarded to Maxwell for his personal signature as ratification of this agreement.

13. Second party does hereby expressly release any and all other interest not mentioned herein that he may have in and to the Northwest Mining Company, or other mining claims owned or claimed by first party.

14. This agreement shall be binding upon the parties hereto and extend to the heirs, assigns and personal representatives of all of the parties.

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

(SEAL)

(SEAL)

(SEAL)

FIRST PARTIES

R. C. Trauger (SEAL)

SEOOND PARTY

APPROVED:

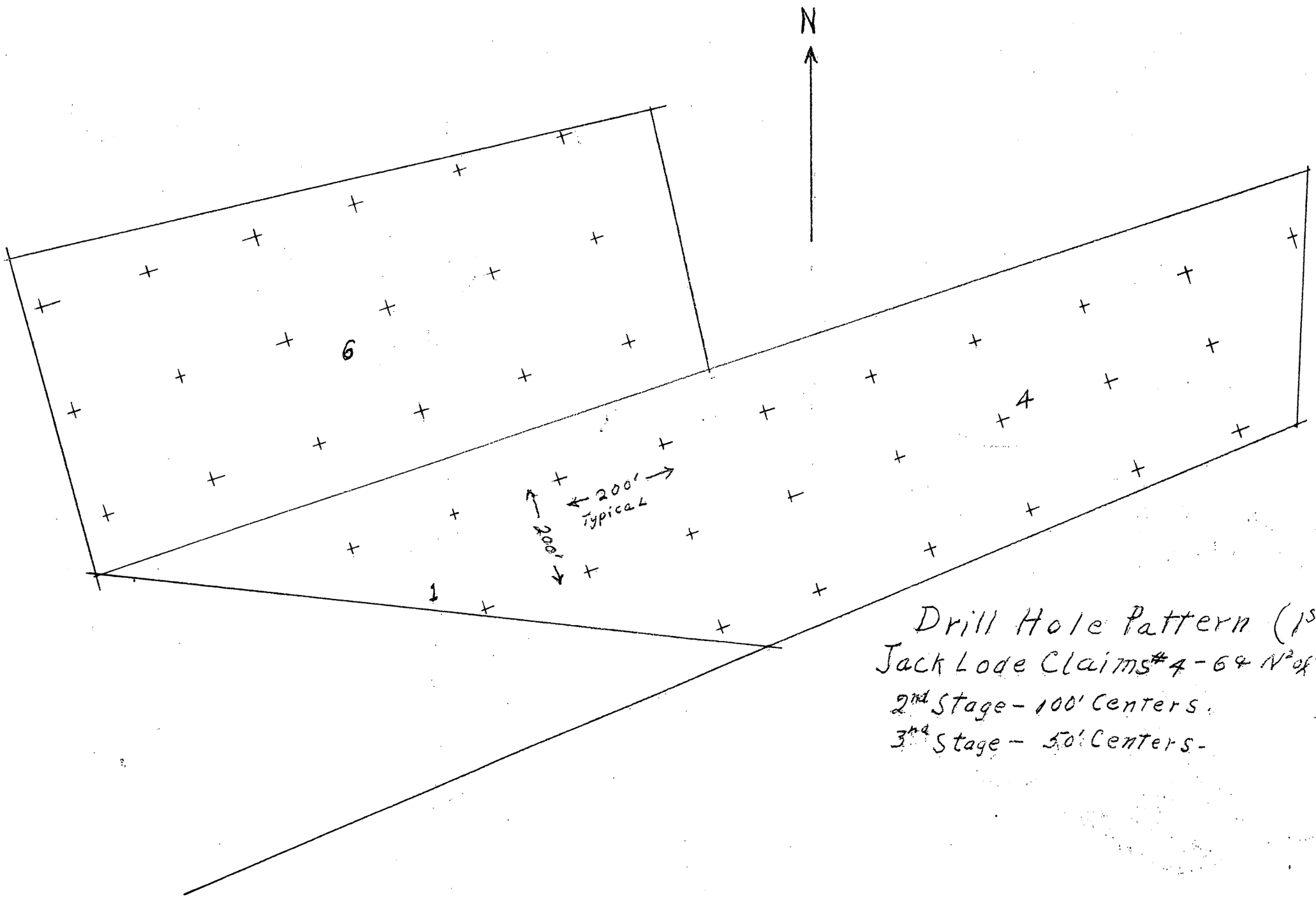
Mrs. R. C. Trauger

STATE OF COLORADO)
) ss.
COUNTY OF MESA)

The above and foregoing Agreement was subscribed and sworn to before me, a Notary Public in and for the County of Mesa and State of Colorado, this 28th day of June, A.D. 1958 by V. Lee Potter, George Maxwell by Power of Attorney to V. Lee Potter, W. J. MacCabe, and Russ Trauger.

My commission expires February 17, 1959.

Maurice G. Hall
Notary Public



Drill Hole Pattern (1st Stage)
Jack Lode Claims #4 - 6 & N½ of #1
2nd Stage - 100' Centers.
3rd Stage - 50' Centers.

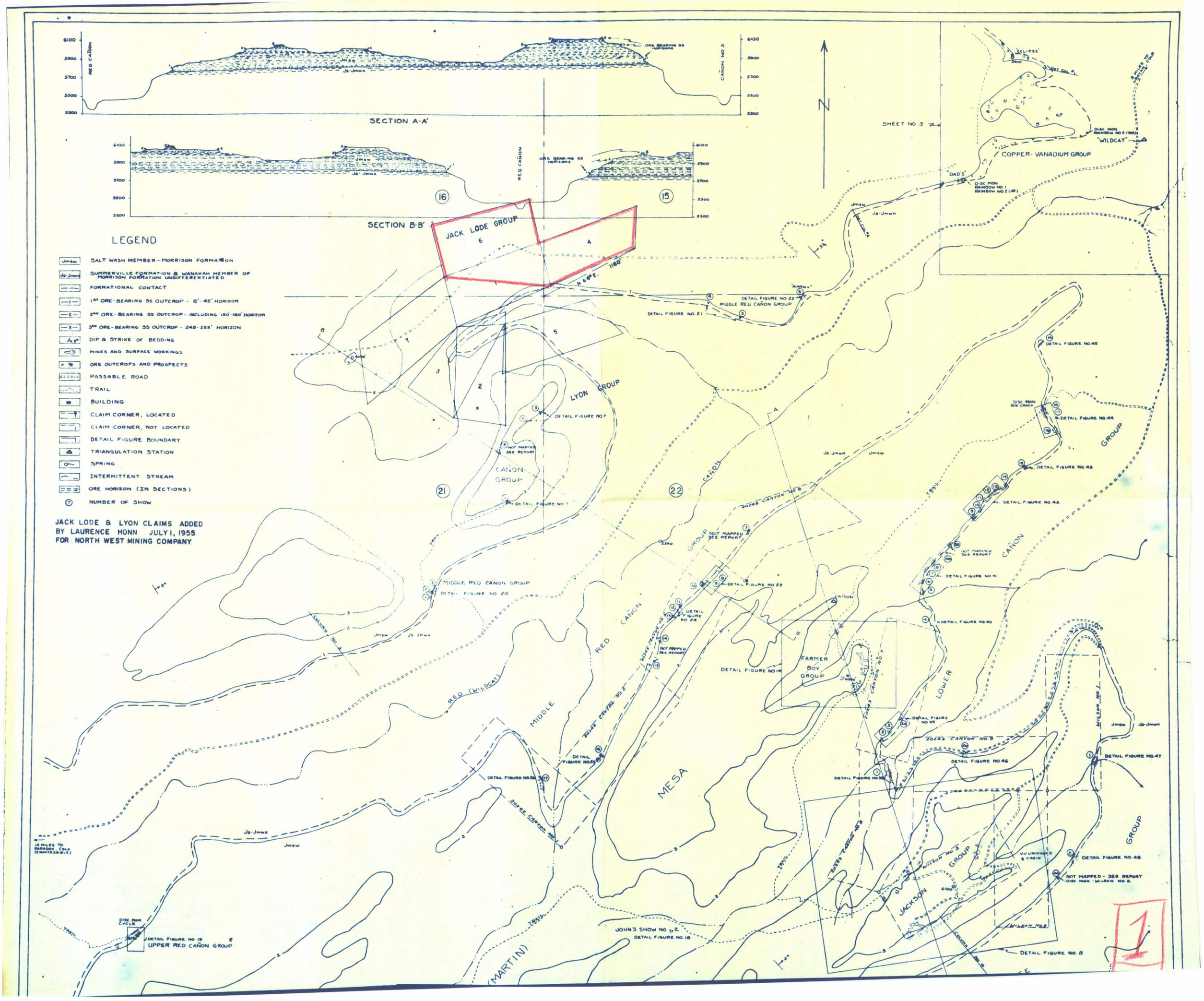
OFFICIAL BUSINESS

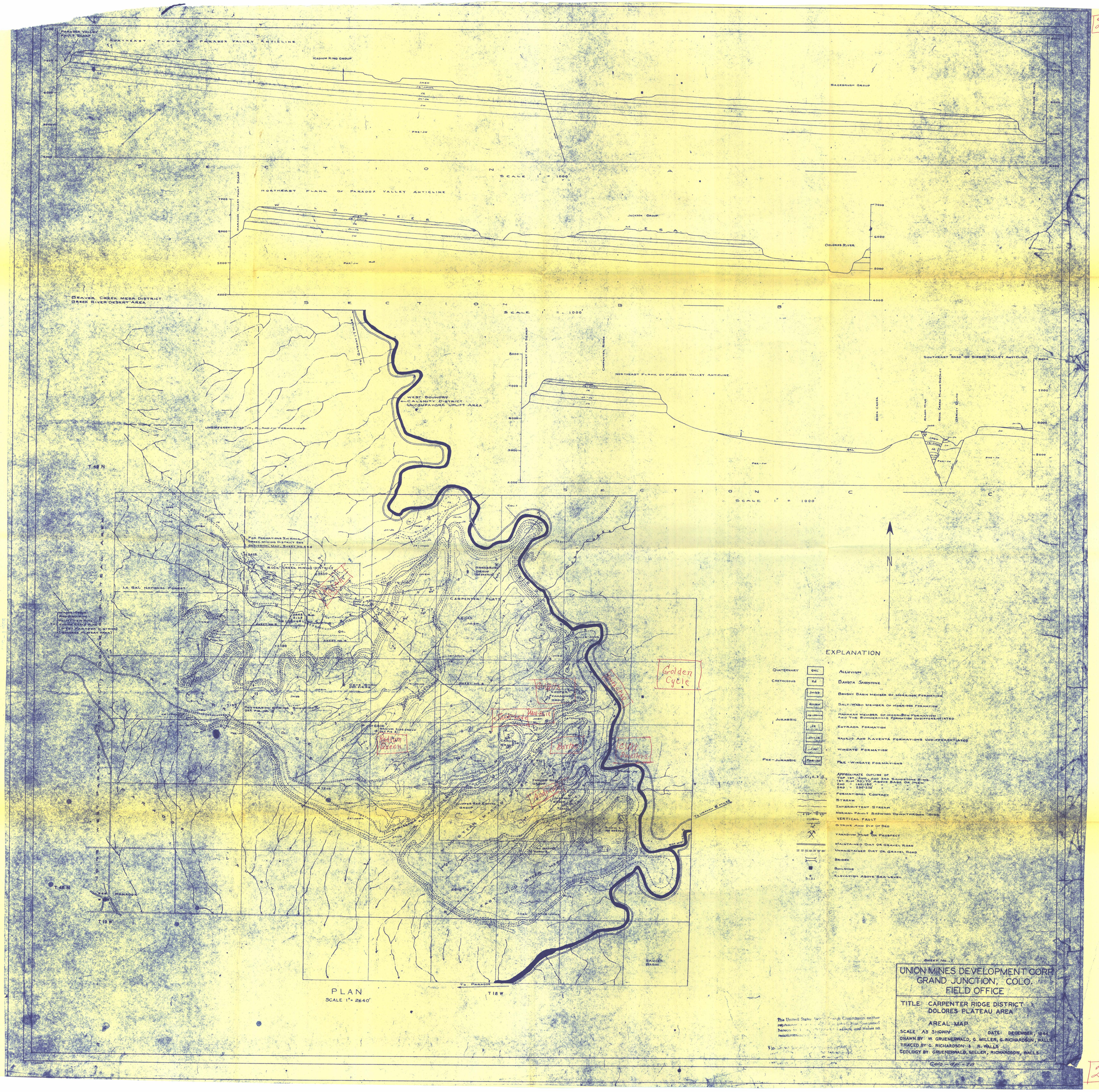
U. S. GEOLOGICAL SURVEY
SOUTH 157 HOWARD ST.
SPOKANE 4, WASHINGTON

10 CENTS 10 5 CENTS 5

JY 21 1960

Mr. George C. Selfridge
Chairman, Operating Committee
Defense Minerals Explor. Admin.
Department of the Interior
Washington 25, D. C.


SECTION A-A'
SECTION B-B'
RED CAÑON
CAÑON NO 3
ORE BEARING SS HORIZONS
Jmsw
Js-Jmwk
LEGEND
SALT WASH MEMBER - MORRISON FORMATION
SUMMERVILLE FORMATION & WANAKAH MEMBER OF MORRISON FORMATION UNDIFFERENTIATED
FORMATIONAL CONTACT
1ST ORE-BEARING SS OUTCROP - 8'-45' HORIZON
2ND ORE-BEARING SS OUTCROP - INCLUDING 150'-160' HORIZON
3RD ORE-BEARING SS OUTCROP - 245-255' HORIZON
DIP & STRIKE OF BEDDING
MINES AND SURFACE WORKINGS
ORE OUTCROPS AND PROSPECTS
PASSABLE ROAD
TRAIL
BUILDING
CLAIM CORNER, LOCATED
CLAIM CORNER, NOT LOCATED
DETAIL FIGURE BOUNDARY
TRIANGULATION STATION
SPRING
INTERMITTENT STREAM
ORE HORIZON (IN SECTIONS)
NUMBER OF SHOW
JACK LODE & LYON CLAIMS ADDED BY LAURENCE HONN JULY 1, 1955 FOR NORTH WEST MINING COMPANY
JACK LODE GROUP
LYON GROUP
CAÑON GROUP
MIDDLE RED CAÑON GROUP
DETAIL FIGURE NO 20
DETAIL FIGURE NO 21
DETAIL FIGURE NO 22
DETAIL FIGURE NO 7
DETAIL FIGURE NO 1
NOT MAPPED SEE REPORT
N 64° E. 1160'
SHEET NO 3
"ECLIPSE"
"WILDCAT"
COPPER-VANADIUM GROUP
"DAD'S"
DISC MON RAINBOW NO 1
RAINBOW NO 2 (LOT)
DISC MON RAINBOW NO 2 (LOT)
"RINGROCK"
DETAIL FIGURE NO 45
DISC MON BIG CRACK
DETAIL FIGURE NO 44
DETAIL FIGURE NO 43
DETAIL FIGURE NO 42
DETAIL FIGURE NO 41
DETAIL FIGURE NO 40
DETAIL FIGURE NO 23
DETAIL FIGURE NO 24
DETAIL FIGURE NO 14
DETAIL FIGURE NO 39
DETAIL FIGURE NO 46
DETAIL FIGURE NO 47
DETAIL FIGURE NO 48
DETAIL FIGURE NO 8
NOT MAPPED - SEE REPORT DISC MON - WILSON NO 2
FARMER BOY GROUP
LOWER RED CAÑON
MIDDLE RED CAÑON
MESA
JACKSON GROUP
WILSON GROUP
WILSON NO 3
WILSON NO 8
20243 CANYON NO 1
20243 CANYON NO 2
20243 CANYON NO 3
20243 CANYON NO 6
20243 CANYON NO 7
20243 CANYON NO 8
COLUMN NO 4
RED (WILDCAT)
TRAIL
DISC MON CYCLE
DETAIL FIGURE NO 19
UPPER RED CAÑON GROUP
JOHN'S SHOW NO 2
DETAIL FIGURE NO 18
(MARTIN)
12 MILES TO PARADOX, COLO (INACCESSIBLE)
1


SECTION A — A'
SCALE 1" = 1000'
NORTHEAST FLANK OF PARADOX VALLEY ANTICLINE
PARADOX VALLEY FAULT SCARP
RADIUM KING GROUP
SAGEBRUSH GROUP
DOLORES RIVER
SECTION B — B'
SCALE 1" = 1000'
WILDSTEER MESA
JACKSON GROUP
SECTION C — C'
SCALE 1" = 1000'
SOUTHEAST NOSE OF SHIBAD VALLEY ANTICLINE
CARPENTER RIDGE
ROCK CREEK
ROCK CREEK MINING DISTRICT
GRAVEL GULCH
BEAVER CREEK MESA DISTRICT
GREEN RIVER DESERT AREA
WEST BOUNDRY
CALAMITY DISTRICT
UNCOMPAHGRE UPLIFT AREA
UNDIFFERENTIATED Jn, Jk, AND Jw FORMATIONS
T 48 N
LA SAL NATIONAL FOREST
ROCK CREEK MINING DISTRICT
CARPENTER FLATS
SAGEBRUSH GROUP
PATTERSON SPRING SHOWING
CAVE SHOW
UPPER RED CANYON GROUP
EAST WILD STEER MESA
SAUCER BASIN
TO PARADOX
T 18 W
T 19 W
T 48 N
N
PLAN
SCALE 1" = 2640'
EXPLANATION
QUATERNARY
QAL
ALLUVIUM
CRETACEOUS
Kd
DAKOTA SANDSTONE
JURASSIC
Jmbb
BRUSHY BASIN MEMBER OF MORRISON FORMATION
Jmsw
SALT WASH MEMBER OF MORRISON FORMATION
Jz-Jmwa
WANAKAH MEMBER OF MORRISON FORMATION AND THE SUMMERVILLE FORMATION UNDIFFERENTIATED
Je
ENTRADA FORMATION
Jn-Jk
NAVAJO AND KAYENTA FORMATIONS UNDIFFERENTIATED
Jw
WINGATE FORMATION
PRE-JURASSIC
Pre-Jw
PRE-WINGATE FORMATIONS
APPROXIMATE OUTLINE OF TOP 1ST, 2ND, AND 3RD SANDSTONE RIMS
1ST RIM 50-70 ABOVE BASE OF Jmsw
2ND " 150-180 "
3RD " 250-270 "
FORMATIONAL CONTACT
STREAM
INTERMITTENT STREAM
NORMAL FAULT SHOWING DOWNTHROWN SIDE
VERTICAL FAULT
STRIKE AND DIP OF BED
VANADIUM MINE OR PROSPECT
MAINTAINED DIRT OR GRAVEL ROAD
UNMAINTAINED DIRT OR GRAVEL ROAD
BRIDGE
BUILDING
ELEVATION ABOVE SEA LEVEL
5131
Golden Cycle
Radium Queen
Burton
Cliff Dwellers
The United States Atomic Energy Commission neither represents ... hereon to ... and makes no recommendation ...
SHEET No. 1
UNION MINES DEVELOPMENT CORP.
GRAND JUNCTION, COLO.
FIELD OFFICE
TITLE: CARPENTER RIDGE DISTRICT
DOLORES PLATEAU AREA
AREAL MAP
SCALE: AS SHOWN
DATE: DECEMBER, 1944
DRAWN BY: W. GRUENERWALD, G. MILLER, G. RICHARDSON, WALLS
TRACED BY: G. RICHARDSON & R. WALLS
GEOLOGY BY: GRUENERWALD, MILLER, RICHARDSON, WALLS
Colo-dp-70

MINERAL INVESTIGATIONS
FIELD STUDIES MAP MF 16

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
W. E. WRATHER, DIRECTOR

PREPARED IN COOPERATION WITH THE
U. S. ATOMIC ENERGY COMMISSION
DIVISION OF RAW MATERIALS

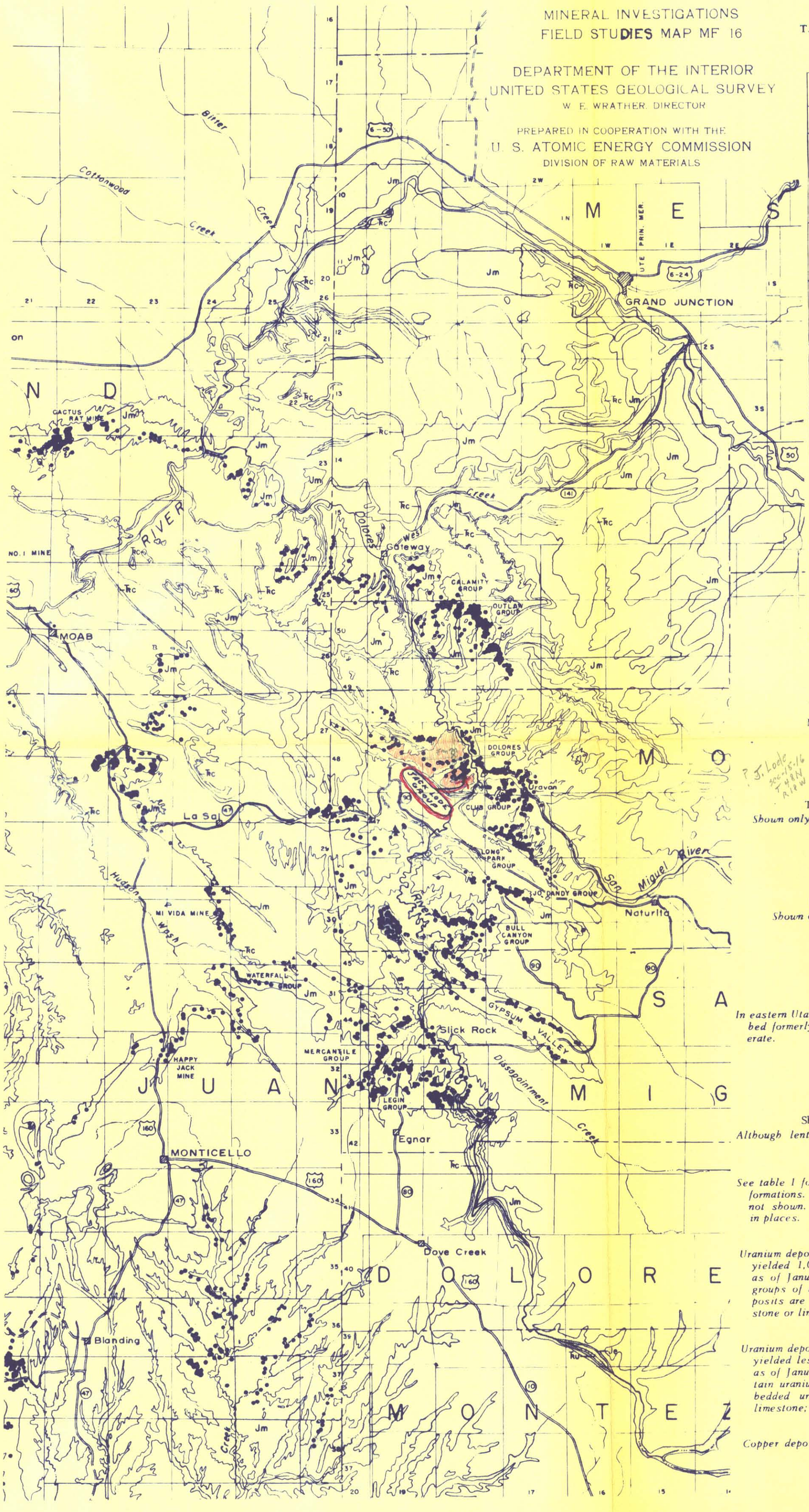


TABLE 1. STRATIGRAPHIC DISTRIBUTION OF URANIUM, VANADIUM, AND COPPER DEPOSITS OF THE COLORADO PLATEAU.

System	Series	Formation		Type of deposit [1]
Eastern Utah - western Colorado				
Tertiary		Uinta fm.		V-Cu-U; V-U; Cu-U.
		Bridger fm.		
		Green River fm.		U
		Wasatch fm.		U
		Tuscher fm.		U-V
Cretaceous	Upper	Mesaverde grp.		V-U
		Mancos sh.		U
		Dakota ss.		U
	Lower	Burro Canyon fm.		V-U; Cu
Jurassic	Upper	Morrison fm.	Brushy Basin mem.	V-U; Cu
			Salt Wash mem.	V-U; V-Cu-U
		Bluff ss.		
		Summerville fm.		V-U
		Curtis fm.		V-U
		Entrada ss.		Cu-V-U
	Upper and Middle	Carmel fm.		
	Lower	Navajo ss.		V-U
Jurassic(?)		Kayenta fm.		U
Triassic	Upper	Wingate ss.		V-U-Cu
		Chinle fm.		V-U
			Moss Back ss. member of local usage. [2]	V-U; Cu-U; U.
				U
		Shinarump cgl.		V-U; Cu-U; V-Cu-U
	Middle and Lower	Moenkopi fm.		Cu-U
Permian		Cutler fm.		V-U; Cu-U
Permian (?) and Pennsylvanian		Rico fm.		
Pennsylvanian		Hermosa ls.		V-U

EXPLANATION

JURASSIC

Jm — Morrison formation

Jt — Todilto limestone
Shown only in northwestern New Mexico.

Je — Entrada sandstone
Shown only in western Colorado.

TRIASSIC

Trc — Chinle formation
In eastern Utah it includes prominent sandstone bed formerly mapped as Shinarump conglomerate.

Tru — Upper Triassic rocks undifferentiated
Mostly Shinarump or Chinle equivalents in western Colorado and northwestern New Mexico.

Trs — Shinarump conglomerate
Although lenticular, a continuous outcrop is shown in places.

See table 1 for stratigraphic relations of these formations. Igneous and metamorphic rocks not shown. Width of outcrops exaggerated in places.

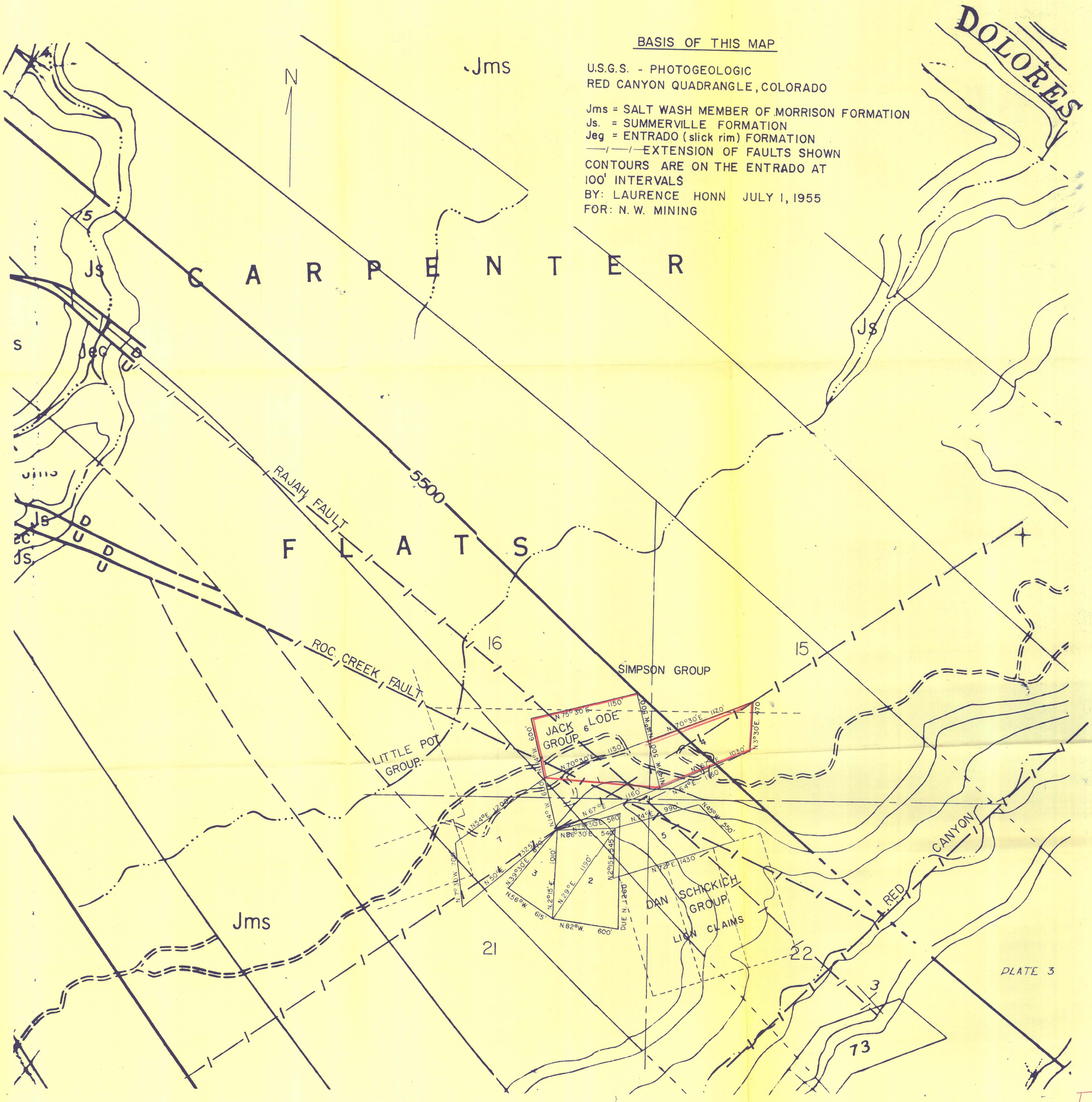
• *Uranium deposit or group of deposits that have yielded 1,000 tons or more of uranium ore as of January 1, 1954. Many of the larger groups of deposits are named. All the deposits are bedded uranium deposits in sandstone or limestone.*

• *Uranium deposit or group of deposits that have yielded less than 1,000 tons of uranium ore as of January 1, 1954, or are known to contain uranium ore. Most of the deposits are bedded uranium deposits in sandstone or limestone; a few occur as vein deposits.*

▲ *Copper deposits in sandstone that contain no known uranium.*

PLATE I

3


BASIS OF THIS MAP
U.S.G.S. - PHOTOGEOLOGIC
RED CANYON QUADRANGLE, COLORADO
Jms = SALT WASH MEMBER OF MORRISON FORMATION
Js. = SUMMERVILLE FORMATION
Jeg = ENTRADO (slick rim) FORMATION
—/—/—EXTENSION OF FAULTS SHOWN
CONTOURS ARE ON THE ENTRADO AT
100' INTERVALS
BY: LAURENCE HONN JULY 1, 1955
FOR: N. W. MINING
N
DOLORES
CARPENTER
FLATS
5500
RAJAH FAULT
ROC CREEK FAULT
LITTLE POT GROUP
SIMPSON GROUP
JACK LODE GROUP
DAN SCHICKICH GROUP
LION CLAIMS
RED CANYON
Jms
Js
Jeg
16
15
21
22
73
PLATE 3