IMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

IMEA NO. 4559

Application (Denied ✓
(~~Withdrawn~~
(After disposition, delete items not applicable)

Contract (Terminated - not Certified
(Cancelled
(Terminated - Certified
(Royalty Agreement

This is the official contract file containing all official records of the project. The records contained in the files are checked and are arranged in this order:

Left Side

Interim Royalty Audits
Reports of Royalty Review
Certification of Discovery
Certificate of Audit (Final)
Interim Audit(s)
Report of Review
Termination Notice or Agreement
Recision Notice
Assignment of Contract
Contract Amendments (latest on top)
Contract with all exhibits and annexes
✓Owner's Consent to Lien
✓Subordination Agreement
✓Leases and assignments of leases
Application and attachments
(3) Envelope for maps

Right Side

Project summary
Work completed analysis
All other material is filed in chronological order with correspondence including the following reports as checked:

Final Field Team Report (Tab)
Operator's Final Report
(2R) Interim Reports
(2R) Operator's monthly reports and all attachments (latest on top)
✓On-site Exam Report(s) (Tab)
(4) Settlement Sheets

When the volume of records is expected to warrant additional folders, or when convenience of reference warrants separate folders for certain records, they should be set up in this order:

Left Side

Folder No. 2: (In chron. order)
Interim Summary Reports by W. O. Engineers

Right Side

Operator's Semi-Annual Report for Certified Project, Field Team Interim Reports, Operator's Monthly Report with transmittal, narrative, maps, and Field Team review.

Folder No. 3: Maps (Use pocket folder or envelope. Fold maps with title block out and show reference to related document or correspondence.)

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E
Contract Date

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Garfield, State of Utah, described as follows: 2/

Ann 1-31 Inclusive James 1-10 Inclusive
Ann-Marie 1-26 " Yvonne Mae 1-6 "
Dorothy 1-12 " Dolly 1-11 "
Pine 1-2 "

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

As to the signer Boyd Bunnell: The claims are subject to a contract of sale in favor of the other signers of this instrument with final payment due January 16, 1957.

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

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

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: _____ (State "None" or "See Annex No. ____")

Dated this _____ day of _____, 195__.

Robert R. Dunfield by Robert G. Dunfield Jr. Atty.	[Seal]	Price Utah	[Address]
Mabel Perry Dunfield	[Seal]		[Address]
Kenneth L. Miller	[Seal]	12342 Pine St Garden Grove Calif	[Address]
Charles A. Schrandt	[Seal]	P.O. Box 361 Garden Grove, Calif.	[Address]
Robert G. Dunfield	[Seal]	Price Utah	[Address]
Gary L. Bennett	[Seal]	Price Utah	[Address]

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

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Operator
Docket No. DMEA-
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1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

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6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: _____ (State "None" or "See Annex No.____")

Dated this _____ day of _____, 195__.

Robert L. Dunfield	[Seal]	Price Utah	[Address]
by Robert L. Dunfield pr. atty			
Mable Perry Dunfield	[Seal]	" " " " "	[Address]
Kenneth L. Miller	[Seal]	12342 Pine St Garden Grove Calif.	[Address]
Charles A. Schrandt	[Seal]	P.O. Box 361 Garden Grove, Calif.	[Address]
	[Seal]		[Address]
Lorna L. Dunfield	[Seal]	Price, Utah	[Address]

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

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[Corporate Seal]

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(Combines and supercedes MF-201 and MF-203)
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EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
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Contract Date

RECEIVED NOV 30 1956 D.M.E.A.

CONSENT TO LIEN and SUBORDINATION AGREEMENT 1/

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Dated this _____ day of _____, 195__.

Robert P. Dunfield by Robert P. Dunfield per atty	[Seal]	Price Utah	[Address]
	[Seal]		[Address]
Mable Perry Dunfield	[Seal]		[Address]
Kenneth L. Miller	[Seal]	12342 Pine St Garden Grove Calif	[Address]
Charles A. Schrandt	[Seal]	P.O. Box 361, Garden Grove, Calif	[Address]
Gary L. Gammell	[Seal]	Price, Utah	[Address]

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Dated this _____ day of _____, 195__.

Robert P. Dunfield by _____ [Seal] Price Utah [Address]
Robert P. Dunfield pr. atty.
Mable Perry Dunfield [Seal] " [Address]
Kenneth L. Miller [Seal] 12342 Pine St Garden Grove Calif [Address]
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_____ [Seal] _____ [Address]
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_____
[Corporate Seal]

Power of Attorney

GENERAL

Know All Men by These Presents: That I, Robert Roy Dunfield

the undersigned (jointly and severally, if more than one) hereby make, constitute and appoint

Mr. Robert G. Dunfield or Mable Perry Dunfield,

my true and lawful Attorney for me and in my name, place and stead and for my use and benefit:

(a) To ask, demand, sue for, recover, collect and receive each and every sum of money, debt, account, legacy, bequest, interest, dividend, annuity and demand (which now is or hereafter shall become due, owing or payable) belonging to or claimed by me, and to use and take any lawful means for the recovery thereof by legal process or otherwise, and to execute and deliver a satisfaction or release therefor, together with the right and power to compromise or compound any claim or demand;

(b) To exercise any or all of the following powers as to real property, any interest therein and/or any building thereon: To contract for, purchase, receive and take possession thereof and of evidence of title thereto; to lease the same for any term or purpose, including leases for business, residence, and oil and/or mineral development; to sell, exchange, grant or convey the same with or without warranty; and to mortgage, transfer in trust, or otherwise encumber or hypothecate the same to secure payment of a negotiable or non-negotiable note or performance of any obligation or agreement;

(c) To exercise any or all of the following powers as to all kinds of personal property and goods, wares and merchandise, choses in action and other property in possession or in action: To contract for, buy, sell, exchange, transfer and in any legal manner deal in and with the same; and to mortgage, transfer in trust, or otherwise encumber or hypothecate the same to secure payment of a negotiable or non-negotiable note or performance of any obligation or agreement;

(d) To borrow money and to execute and deliver negotiable or non-negotiable notes therefor with or without security; and to loan money and receive negotiable or non-negotiable notes therefor with such security as he shall deem proper;

(e) To create, amend, supplement and terminate any trust and to instruct and advise the trustee of any trust wherein I am or may be trustor or beneficiary; to represent and vote stock, exercise stock rights, accept and deal with any dividend, distribution or bonus, join in any corporate financing, reorganization, merger, liquidation, consolidation or other action and the extension, compromise, conversion, adjustment, enforcement or foreclosure, singly or in conjunction with others of any corporate stock, bond, note, debenture or other security; to compound, compromise, adjust, settle and satisfy any obligation, secured or unsecured, owing by or to me and to give or accept any property and/or money whether or not equal to or less in value than the amount owing in payment, settlement or satisfaction thereof;

(f) To transact business of any kind or class and as my act and deed to sign, execute, acknowledge and deliver any deed, lease, assignment of lease, covenant, indenture, indemnity, agreement, mortgage, deed of trust, assignment of mortgage or of the beneficial interest under deed of trust, extension or renewal of any obligation, subordination or waiver of priority, hypothecation, bottomry, charter-party, bill of lading, bill of sale, bill, bond, note, whether negotiable or non-negotiable, receipt, evidence of debt, full or partial release or satisfaction of mortgage, judgment and other debt, request for partial or full reconveyance of deed of trust and such other instruments in writing of any kind or class as may be necessary or proper in the premises.

Giving and Granting unto my said Attorney full power and authority to do and perform all and every act and thing whatsoever requisite, necessary or appropriate to be done in and about the premises as fully to all intents and purposes as I might or could do if personally present, hereby ratifying all that my said Attorney shall lawfully do or cause to be done by virtue of these presents. The powers and authority hereby conferred upon my said Attorney shall be applicable to all real and personal property or interests therein now owned or hereafter acquired by me and wherever situate.

My said Attorney is empowered hereby to determine in his sole discretion the time when, purpose for and manner in which any power herein conferred upon him shall be exercised, and the conditions, provisions and covenants of any instrument or document which may be executed by him pursuant hereto; and in the acquisition or disposition of real or personal property, my said Attorney shall have exclusive power to fix the terms thereof for cash, credit and/or property, and if on credit with or without security.

The undersigned, if a married woman, hereby further authorizes and empowers my said Attorney, as my duly authorized agent, to join in my behalf, in the execution of any instrument by which any community real property or any interest therein, now owned or hereafter acquired by my spouse and myself, or either of us, is sold, leased, encumbered, or conveyed.

When the context so requires, the masculine gender includes the feminine and/or neuter, and the singular number includes the plural.

Witness my hand this 29th day of June, 19 56

Robert R. Dunfield

STATE OF CALIFORNIA
COUNTY OF
Los Angeles } SS.

On June 29, 1956, before me, the undersigned, a Notary Public in and for said County and State, personally appeared

Robert R. Dunfield

known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same.

WITNESS my hand and official seal.

(Seal) Alice E. Mayer
Notary Public in and for said County and State

ALICE E. MAYER, Notary Public in and for said County

SPACE BELOW FOR RECORDER'S USE ONLY

LEASE & AGREEMENT

This lease and agreement, made and entered into this 21st day of August, 1956, by and between Robert G. Dunfield and Mable Perry Dunfield, husband and wife, of LaJolla, San Diego County, State of California; Robert R. Dunfield and Alene F. Dunfield, husband and wife, of Los Angeles, Los Angeles County, State of California; Charles A. Schrandt and Dorothy H. Schrandt, husband and wife, and Kenneth L. Miller and Elizabeth M. Miller, husband and wife, of Garden Grove, Orange County, State of California; (hereinafter called "Lessors"); and Minerals, Inc., a Michigan corporation authorized to do business in the State of Utah, (hereinafter called "Lessee"), WITNESSETH:

That whereas the Lessors now own and hold a possessory interest, under the mining laws of the United States and the State of Utah, in and to the unpatented lode mining claims, located in the Henry Mountain Mining District, in Garfield County, State of Utah, described as follows, to-wit:

Ann Claims No. 1 to 31 both inclusive	Recorded August 2, 1954 in Book 38 of Notices at Page 462, records of Garfield County, Utah.
Pine Claims No. 1 and No. 2	Recorded _____ in Book 38 of Notices at Page 438, records of Garfield County, Utah.
Dolly Claims No. 1 to 11 both inclusive	Recorded _____ in Book 39 of Notices at Page 444, records of Garfield County, Utah.
Dolly Claim No. 11A	As located by Robert R. Dunfield
Ann Marie Claims No. 1 to 26 both inclusive	Recorded August 2, 1954 in Book 38 of Notices at Page 412, records of Garfield County, Utah.
James Claims No. 1 to 10 both inclusive	Recorded August 2, 1954 in Book 38 of Notices at Page 440, records of Garfield County, Utah.
Yvonne Mae Claims No. 1 to 6 both inclusive	Recorded August 2, 1954 in Book 38 of Notices at Page 406, records of Garfield County, Utah.
Dorothy Claims No. 1 to 12 both inclusive	Recorded August 2, 1954 in Book 38 of Notices at Page 450, records of Garfield County, Utah.
Five Star Claims No. 27 and No. 29	Recorded May 25, 1955 in Book 78 of Notices at Page 381, records of Garfield County, Utah.

And, whereas the Lessors are desirous of leasing said claims to the Lessee, and the Lessee is desirous of leasing said claims from the Lessors, now therefore,

IT IS MUTUALLY AGREED AS FOLLOWS:

That the Lessors, in consideration of the royalties, covenants and agreements hereinafter reserved and by the Lessee to be paid, kept, observed and performed, hereby lease to the Lessee all of the above described mining claims, together with all appurtenances, rights and franchises thereunto belonging, or in anywise appertaining.

To have and to hold the same unto the Lessee for a term ending at 12:00 o'clock noon on June 7, 1960, unless sooner terminated or forfeited through, or by reason of, the violation or nonobservance of any agreements or covenants hereinafter set forth on the part of the Lessee to be kept, observed and performed; subject however to the option of the Lessee to renew this lease for an additional period of six (6) years upon the same terms and conditions as herein contained, and after the expiration of said six (6), year period of renewal, providing production has been

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FROM
CROOKS STUDIO
FLINT, MICHIGAN

established, to renew this lease from year to year upon the same terms and conditions as herein contained, for so long as valuable ores or minerals are in production from the above described claims. In connection, however, with any renewal of this lease following June 7, 1960, it is mutually understood that such renewal will include only an undivided one-half (½) interest in Five Star Claims No. 27 and No. 29 in the event that Lawrence M. Wilson of Ashland, Oregon, has not, prior to said date, received the sum of Seventeen Thousand & Five Hundred Dollars ($17,500.00), for his undivided one-half (½) interest in said Five Star Claims by virtue of royalties or otherwise; he, the said Lawrence M. Wilson being now the owner of an undivided one-half (½) interest in said Five Star Claims and the lessor of said interest to Robert G. Dunfield one of the Lessors herein; nothing herein contained, however, shall preclude the Lessee from negotiating a further separate agreement with the said Lawrence M. Wilson upon the Lessee exercising its option to renew this lease following June 7, 1960. The option to renew this lease, as above provided, shall be exercised by the Lessee giving ninety (90) days written notice to the Lessors prior to June 7, 1960 of its intention to renew.

That the Lessee will enter upon said described claims not later than September 15, 1956, and will perform all necessary yearly assessment work on all of said mining claims during the term of this lease and agreement, and expend not less than Ten Thousand Dollars ($10,000.00), in each and every year that this lease is in force and effect; and will file the necessary affidavits of such assessment work, and mail copies of same to the Lessors, prior to May 1, 1957, and prior to May 1st of each and every year thereafter. In this connection, the Lessors represent that the necessary assessment work on all of said mining claims has been performed for the fiscal year July 1, 1955 to July 1, 1956, and the necessary affidavit of such assessment work filed.

That the Lessee will properly appraise and evaluate said mining claims for the development of ore, and the formulation of a development and mining program, including necessary engineering and geological work, and begin and continue exploration and development work thereon, and thereafter carry such work forward in the manner necessary to good and economical mining so as to reach and take out the greatest amount of ore possible, with due regard to the operation, development and preservation of said mining claims as workable and commercially profitable mining property.

That the Lessors, and their duly constituted agents, may at all reasonable times, enter upon and into all parts of the leased claims for the purpose of inspecting the same, sampling ore and general investigation; and that the Lessee will make available to the Lessors the lithology and gamma logs of all drilling procedure on said claims.

That the Lessee will cause to be paid by the purchasers of any and all ores mined, to the Lessors or their designated agent, as royalty upon all ores that may be mined, shipped or sold from the property during the term of this lease or any renewal thereof:

(a) Twelve & One-Half per cent (12½), of the net mill returns;
i.e. (1) The term "net mill returns" is hereby defined to mean the amounts (payments) received by the Lessee from authorized agents of the U. S. Atomic Energy Commission, including any and all bonuses, under the schedule of settlements for uranium-vanadium ores now in effect, or hereafter to be placed in effect by said Commission, and exclusive of any allowances for trucking or transportation charges to the mills, and exclusive of any development allowances; or,

(2) In the event markets become available for uranium-vanadium ores other than through the Atomic Energy Commission or its authorized agents, net mill returns are hereby defined to mean the amounts (payments) received by the Lessee from any lawful purchaser of uranium-vanadium ores after the payment of trucking or transportation charges of said ores to the place of purchase, and milling or processing costs, if any; but, any ore marked by the Lessee other than under the schedule of settlements then in effect by the Atomic Energy Commission shall be sold at a price and under such arrangements as will return to the Lessors the same amount in royalty as they would receive if marketed under the schedule of settlements then in effect

by the Atomic Energy Commission, except that if at the time of marketing any such ores there is no schedule of settlements then in effect by the Atomic Energy Commission, the ores shall be sold at the highest price obtainable for such ores in the open market, and settlements shall be made with the Lessors by delivering to them 12½ per cent of the net mill returns after the payment of trucking or transportation charges to the place of purchase, and milling or processing costs, if any.

That the Lessee will keep a separate and destinct record of all ore mined, produced and sold, and taken from the above mentioned Five Star Claims No. 27 and No. 29, and furnish a copy of such record to the Lessors.

That the Lessors agree to amend the Notice of Location on the most southeasterly James Claims above mentioned, to read: "thence on and along the northerly line of Dorothy Claim No. 1," in order to definitely establish the contiguity of said claims.

That in the event that any liens attach to any of said claims, by operation of law or otherwise, as the result of any act or acts of the Lessors, or any of them, or by virtue of their default; and if such liens or lien are about to result in a forfeiture of a part or all of the above described claims, then, and in that event, the Lessors will notify the Lessee of such impending forfeiture at least thirty (30), days prior thereto; and the Lessee shall thereupon have the right, at its option, to purchase such claim or claims, by payment of the amount of the lien or liens about to result in such forfeiture, and after such purchase the Lessee is to be relieved of any and all obligations hereunder as to such claim or claims so purchased, and shall be entitled to demand and receive of the Lessors a Quitclaim Deed thereto.

That the Lessee will occupy and hold all cross or parallel lodes, spurs or mineral deposits of any kind which may be discovered by them, or any person under them, in any manner, by working within the demised mining claims as the property of the Lessors, with the privilege to the Lessee of working the same as part of said demised premises.

That the Lessee will take out, carry and maintain full industrial insurance with the Utah Industrial Commission for any and all persons employed in or upon said mining claims by the Lessee, and will conduct all operations so as to comply fully with the laws of the United States and the State of Utah, relating to mining, safety regulations and in every other respect; will comply with all Federal and State laws in regard to Social Security, Unemployment Compensation and Withholding Tax; and will pay any and all taxes that may be assessed against said mining claims and Lessee's operation thereof.

That the Lessee will post notices in at least three (3), conspicuous places on the mining property showing that the property is being operated by the Lessee, and that all creditors must look to the Lessee for payment of any accounts incurred after operations commence by the Lessee, and to hold harmless the Lessors from any and all claims or demands arising or growing out of the exploration, development and operation of said mining claims by the Lessee.

That upon the failure of the Lessee to keep, observe or perform any of the agreements or covenants herein contained, and if such failure shall continue for thirty (30), days after receipt of notice from the Lessors particularly describing the default, the term of this lease shall, at the option of the Lessors, expire, and the same and the mining claims hereby demised, together with all structures erected thereon, and all fixed machinery placed therein, shall become forfeited to the Lessors; and the Lessors, or their agents or attorneys, may thereupon, immediately after demand for possession, enter upon the said claims and dispossess all persons occupying the same, with or without force and with or without process of law; or, at the option of the Lessors, the Lessee, and all persons found in occupation of the property, or any part thereof, might be proceeded against as guilty of unlawful detainer; and the Lessors shall be entitled, in case of forfeiture, or at any other termination of this lease, to recover from the Lessee any and all sums that may be due to them under the terms hereof or because of any failure or neglect of the Lessee, or of any person or persons acting under them, to keep, observe or perform all or any of the agreements or covenants hereof.

CROOKS STUDIO
FLINT, MICHIGAN

That upon the termination of this lease, by expiration, forfeiture or otherwise, the Lessee shall have sixty (60), days in which to remove all its non-fixed machinery, equipment and supplies, and it shall deliver up the property, with all structures erected thereon, and all fixed machinery placed thereon, in good order and condition, with the properties ready for immediate and continuous working, so far as the same shall have been opened or re-opened, unavoidable accidents alone excepted.

That all notices provided for in this lease shall be in writing and by prepaid telegram or by United States registered mail, postage prepaid, addressed to the Lessors or Lessee, as the case may be, to such address as the Lessors and Lessee may hereafter designate. Notices given as aforesaid shall be deemed sufficiently given upon receipt, if by telegram, and if by mail upon deposit for registry at any post office or branch post office regularly maintained by the United States government in the continental United States.

That the privilege of assigning the estate, in whole or in part, of either the Lessors or the Lessee, is hereby expressly allowed, subject to all of the terms and conditions hereof; but no change in the ownership of the said properties or assignment of royalties shall be binding upon the Lessee until the Lessors shall have furnished the Lessee with a true copy of such transfer or assignment; and the Lessee, upon the making of any assignment of its interest, or upon any sub-letting, shall give written notice of the same to the Lessors.

That the Lessee is hereby expressly given an option, at any time, on thirty (30), days written notice to the Lessors, to purchase all of the mining claims herein described, excepting the undivided one-half ($\frac{1}{2}$) interest in the Five Star Claims No. 27 and No. 29 which is owned by Lawrence M. Wilson, for the sum of One Million Dollars ($1,000,000.00), payable in cash, less the royalties paid to the Lessors hereunder prior to the exercise of said option; and upon the exercise of such option the Lessors will, by Quitclaim Deed, convey all of their right, title and interest in and to said mining claims to the Lessee.

That the Lessee agrees to pay any and all costs and expenses, including a reasonable attorney's fee, that may be incurred by the Lessors in enforcing any of the terms, conditions or covenants of this lease.

That this lease shall extend to and be binding upon the heirs, executors, administrators and assigns of the Lessors, and to the successors and assigns of the Lessee.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands this _____ day of _____, A.D. 1956.

Lessors:

_____
Robert G. Dunfield

_____
Mable Perry Dunfield

ROBERT R. DUNFIELD
By _____
His Attorney-in-Fact

_____
Alene F. Dunfield

_____
Charles A. Schrandt

_____
Dorothy H. Schrandt

PHOTOSTAT COPY
FROM
CROOKS STUDIOS
FLINT MICHIGAN

Kenneth L. Miller
Kenneth L. Miller

Elizabeth M. Miller
Elizabeth M. Miller

Lessee:

ATTEST:

MINERALS, INC.

William B. Thomas
Its Secretary

By
Its President

STATE OF UTAH,)
) ss.
COUNTY OF CARBON,)

On the _____ day of _____, A.D. 1956, personally appeared before me ROBERT G. DUNFIELD AND MABLE PERRY DUNFIELD, husband and wife, two of the signers of the above instrument, who, each for himself and herself and not one for the other, duly acknowledged to me that he and she executed the same.

Notary Public

Residing at Price, Utah.
My commission expires Nov. 19, 1959.

STATE OF UTAH,)
) ss.
COUNTY OF CARBON,)

On the _____ day of _____, A.D. 1956, personally appeared before me ROBERT G. DUNFIELD, who, being by me duly sworn did say that he is the attorney in fact of Robert R. Dunfield, and that said instrument was signed in behalf of said Lessor by authority, and said ROBERT G. DUNFIELD acknowledged to me that he as such attorney in fact executed the same.

Notary Public

Residing at Price, Utah.
My commission expires Nov. 19, 1959.

STATE OF CALIFORNIA,)
) ss.
COUNTY OF LOS ANGELES,)

On the _____ day of _____, A.D. 1956, personally appeared before me ALENE F. DUNFIELD, one of the signers of the above instrument, who duly acknowledged to me that she executed the same.

Notary Public

Residing at: _____

My commission expires: _____

PHOTOSTAT COPY
FROM
CROOKS STUDIO
FLINT, MICHIGAN

STATE OF CALIFORNIA,)
) ss.
COUNTY OF ORANGE)

On the [illegible] day of [illegible], A.D. 1956, personally appeared before me CHARLES A. SCHRANDT and DOROTHY H. SCHRANDT, husband and wife; and KENNETH L. MILLER and ELIZABETH M. MILLER, husband and wife; four of the signers of the above instrument, who, each of himself and herself and not one for the other, duly acknowledged to me that he and she executed the same.

[illegible]
Notary Public

Residing at: [illegible]

My commission expires: [illegible]

STATE OF MICHIGAN,)
) ss.
COUNTY OF GENESEE,)

On the [illegible] day of [illegible], 1956, personally appeared before me JOHN W. BENNETT, who being by me duly sworn did say that he is the president of MINERALS, INC., and that said instrument was signed in behalf of said corporation by authority of a resolution of its board of directors, and said JOHN W. BENNETT acknowledged to me that said corporation executed the same.

[illegible]
Notary Public

Residing at Flint, Michigan.

My Commission Expires: [illegible]

RECEIVED
NOV 30 1956
U.A.E.A.

PHOTOSTAT COPY
FROM
CROOKS STUDIO
FLINT, MICHIGAN

John W. Bennett, President Harley D. Anderson, Vice President William B. Thomas, Secy.-Treas.

Minerals Incorporated
Mining and Exploration
1843 S. Averill
Flint 3, Michigan

RECEIVED
NOV 30 1956
D.M.E.A.

November 26, 1956

U.S. Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D.C.

To whom it may concern:

Enclosed you will please find an application for a minerals exploration loan from the D.M.E.A. With the application you will also find maps depicting the location and layout of the mining claims concerned, as well as the geologic characteristics of the property. Included is a photostatic copy of the Leasing Agreement between the claim-holders and Minerals Incorporated and a copy of a bill of sale for an ore shipment made from the property.

Your sincere consideration of this application will be greatly appreciated.

Yours very truly,

John W. Bennett

John W. Bennett, President

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED NOV 30 1956 D.M.E.A.

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. 4559
Metal or Mineral Uranium
Date Received 11-30-56
Estimated Cost $40,000.00
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: John W. Bennett, President, "Minerals Incorporated", 1843 S. Averill, Flint 3, Michigan --- Incorporated in Michigan
Harley O. Anderson, Vice-Pres., 1538 Indiana, Flint, Michigan
William B. Themas, Secy-Treas., 3209 Brownell, Flint, Michigan

(*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 (99) unpatented claims in Garfield County, Township 32 South, Ranges 10 and 11 East, Salt Lake Base and Meridian (See attached photostatic copy of lease, page 1, for description of claims. Note: Five Star #27 & 29 not to be incl. for this loan)

(*b*) State any mine name by which the property is known Area known as Henry Mts. Mining District

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise
Leased by Minerals Incorporated for an indefinite period.

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

(*e*) If you own the land, describe any liens or encumbrances on it No lein.

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. See page 1 of Lease (Exclude Five Star #27 & 29)

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. (See Attached sheet)

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

(*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. (See attached sheet)

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

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

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore (See attached sheet)

(*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 sheet)

(*c*) The work will start within 60 days and be completed within 10 months from the date of an exploration project contract.

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

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 (See att.)

(*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 sheet)

(*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 sheet)

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

(*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. (See attached sheet)

(*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. (See attached sheet)

(*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 (See att.)

(*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. (See attached sheet)

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

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

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

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

[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 11-27, 1956

John W. Bennett, President
(Applicant)
By Minerals Incorporated

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

John W. Bennett, President Harley D. Anderson, Vice President William B. Thomas, Secy.-Treas.

Minerals Incorporated

Mining and Exploration

1843 S. Averill
Flint 3, Michigan

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SUPPLEMENT
(Refer to Form MF 103)

4. (a) At the present time exploratory drilling is being done, supervised by our geologist, Mr. Robert Boyce. The property has been thoroughly investigated and mapped by Mr. Boyce. (Copy of geological map enclosed.)

(b) Copy of Bill of Sale and Assay for a truck load of ore removed from the property in 1955 is enclosed.

(c) The sedimentary beds on the property are in the form of a breached structural anticline, laying south of "Ragged Mountain", with the axis of the anticline dipping 15 degrees to the south.

See enclosed transparency made by Mr. Boyce, showing the geologic formations contained in the property. See also enclosed map titled "Uranium Map of the Colorado Plateau", showing the location of our claims.

The basic formations contained in our property, beginning with the oldest are as follows:

SEDIMENTS:
- A. Jurassic
  - 1. Entrada
  - 2. Summerville
  - 3. Morrison
    - Salt wash member
    - Brushy basin member
- B. Cretaceous
  - 1. Dakota

INTRUSIVE:
- Diorite porphry sill

Type of deposits contained: Bedded.

(d) Distances from base of operations:

Hanksville, Utah - 40 miles (Source of food and misc.)

Green River, Utah - 99.5 mi. (Source of major equip. & supplies)

Ore buying station east of Green River - 100.5 mi.

John W. Bennett, President Harley D. Anderson, Vice President William B. Thomas, Secy.-Treas.

Minerals Incorporated

Mining and Exploration

1843 S. Averill
Flint 3, Michigan

4. (d) (cont.)

There is a good oiled road 39 miles towards Hanksville from Green River; 15 additional miles are to be oiled this year and the remaining 6 miles to Hanksville next year. The 26 miles from Hanksville to North Wash is a good gravel road. The remaining 14 miles to the property will require one to two weeks of bulldozer work to be suitable for large ore trucks. This road may be shortened by two to three miles with very little additional work.

(c) The drilling is to be done by "Mac Exploration Company" of Spanish Fork, Utah, with all manpower and equipment provided.

Road work and clearing of sites is to be done with the equipment of R. Dunfield of Price, Utah, with operator provided.

5.(a) Primarily:

Carnotite - $K_2(UO_2)_2(VO_4)_2 \cdot 1\text{-}3H_2O$

Hewettite - $CaV_6O_{16} \cdot 3\text{-}9H_2O$

Possibly:

Primary U & V minerals.

Probably:

Minor amounts of other secondary U & V minerals.

(b) See enclosed transparency with claims, roads, drill sites, etc. shown.

(d) Experience of John W. Bennett - Business-administrative, as a Mechanical-Industrial Engineer with the Fisher Body Division of General Motors. Activity will be restricted to management of the financial and administrative end of the business.

Robert Boyce ; Geologist - Graduate of Houghton School of Mines, Michigan and former employee of Anaconda Copper. He will supervise the geologic and exploratory work.

John W. Bennett, President Harley D. Anderson, Vice President William B. Thomas, Secy.-Treas.

Minerals Incorporated
Mining and Exploration
1843 S. Averill
Flint 3, Michigan

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5. (d) (cont.)

Bruce Fay - Former auto dealer in Flint with a considerable amount of prospecting and geologic background in recent years. He will assist Mr. Boyce. Also he is responsible for field contacts, supplies and equipment.

6. Costs - $40,000.00

(a) Independent contracts: $27,460.00
$1500.00 - Bulldozing for clearing of drill sites and extending roads on the property, includes operator and rental of equipment.
$24,460.00 - Drilling(Rotary and Core) (Approx. 16,000 ft.)
$1,500.00 - Drifting
$8.00 per foot for labor and materials.
$25.00 per day for rental of equipment.

(b) Supervisory & geologic services - $7,700.00
$300.00 per mo. - Field Supervisor: On expense acct. only.
$500.00 per mo. - Geologist: $75 per week plus expenses.
$500.00 (Total) - Miscellaneous services

(c) Operating materials and supplies - $600.00
$300.00 - Fuel
$200.00 - Dynamite
$100.00 - Miscellaneous

(d) Operating equipment to purchase or rent - $2450.00
$250.00 - Scintillator & probe (purchase-used)
$200.00 - Tractor (rental)
$1000.00 - Jack Hammer
$1000.00 - Pick-up truck (purchase-used)

(e) None.

(f) None.

(g) Miscellaneous - $790.00
$100.00- Repair and maintenance of truck
$50.00 - " " " " detectors
$20.00 - " " " " Jack Hammer
$150.00 - Analytical work
$20.00 - Accounting (incl. supplies)
$100.00 - Workmen's Compensation & Employers' Liability Insurance
$350.00 - Payroll Taxes

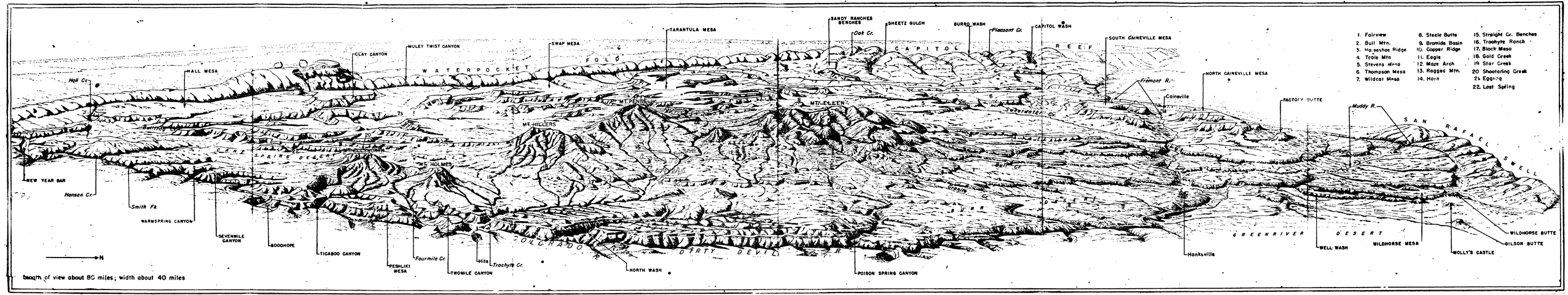
John W. Bennett, President
Harley D. Anderson, Vice President
William B. Thomas, Secy.-Treas.

Minerals Incorporated
Mining and Exploration
1843 S. Averill
Flint 3, Michigan

(h) Contingencies - $1,000.00
$200.00 - Loss or damage to equipment.
$300.00 - Operating equipment not anticipated.
$500.00 - Miscellaneous.

NOTE ON CORPORATE STRUCTURE OF MINERALS INCORPORATED:

Minerals Incorporated has a capitalization of $100,000. Ownership is held by 27 individuals from Flint and its environs; no one owns more than 7%.



PLEASE RETURN TO NOMENCLATURE SECT.

RECEIVED
NOV 30 1956
D.M.E.A.

OFFICIAL FILE COPY
DMEA
RECEIVED
1957
CODE
7/5 C 220
225

224 New Customhouse
Denver 2, Colorado

July 2, 1957

Mr. John W. Bennett
MINERALS INCORPORATED
Mining and Exploration
1843 S. Averill
Flint 3, Michigan

Re: Docket DMEA 4559 (Uranium)
Minerals Incorporated
Ann Claim Group, et al
Garfield County, Utah

Dear Mr. Bennett:

In response to your request of June 13, 1957, directed to Mr. Ernest Wm. Ellis of the Washington Office, DMEA, we are enclosing two copies of the following which were attached to the application assigned the above-captioned docket number:

1. Geological Report on the Dunfield Claims Garfield County, Utah
2. Map - Dunfield Claims leased by Minerals Incorporated
3. Assay report by Smith's Laboratory dated February 3, 1957

Thank you for the use of this material.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer
DMEA Field Team, Region III

Enclosures
MHM:eh
cc: Ch. Op. Comm. (2)
DMEA/G. Jct.)
Hasler) W/cy of Bennett's request, Administrator's
Harshman) reply, & Chairman's letter of referral
Docket)
Chron.

EXTRA COPY
D M E A
RECEIVED JUL 5 1957

DATE	INITIALS	CODE

224 New Customhouse
Denver 2, Colorado

July 2, 1957

Mr. John W. Bennett
MINERALS INCORPORATED
Mining and Exploration
1843 S. Averill
Flint 3, Michigan

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W. H. KING

W. H. King
Executive Officer
DMEA Field Team, Region III

Enclosures
MHM:eh
cc: Ch. Op. Comm. (2)
DMEA/G. Jct.)
Hasler) W/cy of Bennett's request, Administrator's
Harshman) reply, & Chairman's letter of referral
Docket)
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/27	Knouse	700
6/27	Ellis	700
6/28	Selfridge	130
6/28	Gopp	130
6/28	Nelson	130
"	Johnson	110
"	Hartenberg	100
6/28	C	220
		225

JUN 28 1957

Mr. John W. Bennett, President
Minerals Incorporated
1843 S. Averill
Flint 3, Michigan

Re: Docket No. DMEA-4559 (Uranium)
Ann Claim Group, et al.
Garfield County, Utah

Dear Mr. Bennett:

This responds to your request, dated June 13, to reconsider the subject application for exploration assistance which was denied on May 10, 1957.

A further review of all our information relating to the proposed project indicates the probability of making a significant discovery on the referenced property is not sufficiently encouraging for Government participation in an exploration project. We note that some mineralized exposures exist on the property. However, the lack of encouraging results from the previous work performed on the property and the small size and erratic distribution of the mineralized occurrences in the area do not favor the probability of finding significant ore deposits on your property. Therefore, I regret that we are unable to find sufficient support to alter our opinion of this proposed project.

If your company can obtain additional factual information which would show the probability of finding sufficient ore to be important economically or for National Defense, we shall be glad to re-open the case upon application and submission of the new information.

Pursuant to your request, we have written to Mr. William H. King, Executive Officer, DMEA Field Team, Region III, 224 New Customhouse Building, Denver 2, Colorado, to return all copies of the Geological Report, assay certificate, and maps submitted in connection with your proposed project, that are presently in the field. However, we are retaining one copy of the Geological Report, assay certificate and maps which are necessary for our Washington files.

FLKnouse/izm 6-27-57 (6-25-57)
cc to: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

Sincerely yours,

J. J. Nittendorf
(By ES)
Administrator

DMEA FT Reg. 3 (2) enclosed w/let. this date

8623

Suggested rewrite for 3rd sentence, 2nd paragraph.

However, the lack of encouraging results from the previous work performed on the property and the small size and erratic distribution of the mineralized occurrences in the area do not favor the probability of finding significant ore deposits on your property.

FEJ

RWR

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/25	Knouse	700
6/25	Ellis	700
		130
6/26	Yopes	130
6/26	Nelson	130
		110
		100
		220

noted

Mr. John W. Bennett, President
Minerals Incorporated
1843 S. Averill
Flint 3, Michigan

Re: Docket No. DMEA-4559 (Uranium)
Ann Clain Group, et al.
Garfield County, Utah

Dear Mr. Bennett:

This responds to your request, dated June 13, to reconsider the subject application for exploration assistance which was denied on May 10, 1957.

A further review of all our information relating to the proposed project indicates the probability of making a significant discovery on the referenced property is not sufficiently encouraging for Government participation in an exploration project. We note that some mineralized exposures exist on the property. However, mining these types of deposits, small, discontinuous ore bodies at different horizons, would not, in our opinion, result in a self-sustaining operation. Therefore, I regret that we are unable to find sufficient support to alter our opinion of this proposed project.

If your company can obtain additional factual information which would show the probability of finding sufficient ore to be important economically or for National Defense, we shall be glad to re-open the case upon application and submission of the new information.

Pursuant to your request, we have written to Mr. William H. King, Executive Officer, DMEA Field Team, Region III, 224 New Customhouse Building, Denver 2, Colorado, to return all copies of the Geological Report, assay certificate, and maps submitted in connection with your proposed project, that are presently in the field. However, we are retaining one copy of the Geological Report, assay certificate and maps which are necessary for our Washington files.

Sincerely yours,

Administrator

FLKnouse/izm 6-25-57
cc to: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
DMEA FT Reg. 3 (2) enclosed w/let. this date

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/27	Knouse	700
6/27	Ellis	700
6/28	GCS	130
6/24	JSmith	110
"	Whitehead	100
		220

JUN 28 1957

Mr. William H. King
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4559 (Uranium)
Minerals Incorporated
Ann Claim Group, et al.
Garfield County, Utah

Dear Mr. King:

We are enclosing copies of a letter, dated June 13, 1957, from the subject Applicant and copies of our reply of this date in which we advised your office would return copies of the Geological Report, assay certificate, and maps, submitted in connection with its application.

Please take the necessary action to return this material.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

P. F. Yopes (GCS)
Member, Bureau of Mines

N. E. Nelson (GCS)
Member, Geological Survey

FLKnouse/izm 6-27-57 (6-25-57)
cc to: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/25	Knouse	700
6/25	Ellis	700
		130
		110
		100
		220
		[illegible]

Mr. William H. King
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. [illegible]-4559 (Uranium)
Minerals Incorporated
Ann Claim Group, et al.
Garfield County, Utah

Dear Mr. King:

We are enclosing copies of a letter, dated June 13, 1957, from the subject Applicant and a copy of our reply of this date in which we advised your office would return to him copies of the Geological Report, assay certificate, and maps, submitted in connection with its application.

Please take the necessary action to return this material.

Sincerely yours,

Chairman, Operating Committee

Enclosures

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

FIKnouse/izm 6-25-57
cc to: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

John W. Bennett, President
Harley D. Anderson, Vice President
William B. Thomas, Secy.-Treas.

Minerals Incorporated

Mining and Exploration

1843 S. Averill
Flint 3, Michigan

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 20 1957

DATE	INITIALS	CODE
6/20	ZWD	220
~~21~~	~~FLK~~	700

June 13, 1957

Mr. Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division
D.M.E.A.
U.S. Department of the Interior
Washington 25, D.C.

Re: Docket No. DMEA-4559
(Uranium)

Dear Mr. Ellis:

We received a letter recently rejecting our application for an explora tion loan. Is there any possib ility that this application may be given additional consideration. We are still of the opinion that our property has great mineral potential. If there is no possibility of reconsideration, will you please arrange to have the maps, geological reports, etc. returned to us.

Yours very truly,

John W. Bennett

John W. Bennett

A Form 7
(2-56)

OFFICIAL FILE COPY

Date	Surname	Code
5-9	Ellis	700
5/10	Selfridge	4130
5/10	Yager	130
5/10	Kiilsgaard	2130
5/10	Johnson	110
"	Mittendorf	100
		220

7-3

MAY 10 1957

Mr. John W. Bennett, President
Minerals Incorporated
1843 S. Averill
Flint 3, Michigan

Re: Docket No. DMEA-4559 (Uranium)
Ann Claim Group, et al.
Garfield County, Utah

Dear Mr. Bennett:

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 minor uranium mineralization on your property, indicates that the probability of disclosing significant ore reserves 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 Exploration Program and for bringing your property to our attention.

Sincerely yours,

E. O. Mittendorf (fw)

Administrator

EWEllis/dlm 5-8-57 (5-9-57)
cc to Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
DMEA FT Reg. 3 (2)

8623

OFFICIAL FILE COPY

Date	Surname	Code
5/8	Ellis	700
"	Mitchell	100
5/9	C	220
		700

MAY - 9 1957

Mr. John W. Bennett, President
Minerals Incorporated
1843 S. Averill
Flint 3, Michigan

Re: Docket No. DMEA-4559 (Uranium)
Ann Claim Group, et al.
Garfield County, Utah

Dear Mr. Bennett:

Reference is made to your letter of April 30, 1957, wherein you inquire as to the progress of the captioned application.

This is to inform you that it is expected that final action will be taken on the said application early next week, at which time you will be duly notified.

Sincerely yours,

SIGNED

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

EWEllis/gla
5/8/57
cc to: Admr.'s Reading File
DMEA Field Team, Region III (2) w/2cc incoming letter

8623

W. Bennett, President

Harley D. Anderson, Vice President

William B. Thomas, Secy.-Treas.

Minerals Incorporated

Mining and Exploration

1843 S. Averill
Flint 3, Michigan

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 3 1957

DATE	INITIALS	CODE
5/3	C	220
~~5/3~~	~~Krause~~	~~700~~
		225

April 30, 1957

Mr. Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division
Defense Minerals Exploration A dministration
U.S. Depa rtment of the Interior
Washington 25, D.C.

Re: Docket No. DMEA-4559
(Uranium)

Dear Mr. Ellis:

Will you please inform us as to the progress or disposition of our application for an exploration loan. We are somewhat concerned about the eventual disposition of our application, since we are withholding operations for the current year in lieu of some definite word from your department. We feel, of course, that we are losing valuable time in the pursuit of our proposed program.

Yours very truly,

John W. Bennett

John W. Bennett, President

Docket

Ellis

May 8, 1957

Summary of Proposed Project

Object: Denial of application for exploration aid.

Docket No.: DMEA-4559

Commodity: Uranium

Applicant: Minerals Incorporated
1843 S. Averill
Flint 3, Michigan

Property: Ann Group et al., in unsurveyed sections 23, 24, 25, and 26, T. 32 S., R. 10 E., and sections 19, 31, 32, and 33, T. 32 S., R. 11 E., S.L.B.M., Garfield County, Utah.

Date of Application: November 27, 1956

Additional information received: February 4, 1957

Amount of Application: $40,000.00

Referred to Reg. 3: February 13, 1957

Field Examination made: March 20, 1957

Field Team Report received: May 1, 1957

Work Proposed: Applicant proposes a program of about 16,000 feet of non-core and core drilling and an unspecified amount of drifting.

Estimated Costs: Independent contracts

(a) Bulldozing	$1,500	
(b) Drilling	24,460	
(c) Drifting	1,500	$27,460.00
Labor & supervision		7,700.00
Materials & supplies		600.00
Equipment (purchase or rent)		2,450.00
Miscellaneous		790.00
Contingencies		1,000.00

Estimated cost of project $40,000.00

Government participation @ 75% $30,000.00

Excerpts from Field Team Report:

The property consists of 99 unpatented claims in the Henry Mountains, Garfield County, Utah. The altitude of the property ranges from 6,000 feet to 7,000 feet. Claims are situated on a steep, rough bench with numerous steep-walled canyons cutting through the Morrison sediments which form the surface.

Formations exposed on the subject claims are, in ascending order, the Entrada sandstone, the Summerville, and the Morrison, all of Jurassic age. The Salt Wash sandstone member of the Morrison formation crops out on the claims. The Salt Wash ranges up to 300 feet in thickness and consists of alternating beds of sandstone and mudstone with the former predominating.

Mineralized zones in the district range from 50 feet to as much as 250 feet above the base of the Salt Wash. Prospecting along the exposed Salt Wash rims has apparently been done and two outcrops of weakly mineralized, hard, red sandstone found. These two mineralized sandstone lenses are near the base of the Salt Wash and, in the Henry Mountains, are not indicative of possible higher grade ore bodies at depth. Fossilized logs carrying a small amount of mineralization are fairly common on the exposed rims. The only production to date from the subject property came from a pocket of fossilized logs and was hand picked from a shallow prospect pit. No other mining has been attempted on the claims.

During 1956, the Applicant drilled a total of 17 holes at various places on the property without discovering any significant mineralization or developing any ore trends which would permit determination of the most favorable areas.

In 1952, the Atomic Energy Commission undertook a reconnaissance drilling program in the area without finding any worthwhile deposits.

The examining team concluded that, although small ore bodies in discontinuous deposits at different horizons within the Salt Wash sandstone member may be found on the subject claims, the possibility for significant uranium production is poor. Accordingly the field examiners recommended the application for DMEA assistance be denied and the Field Team concurred in the recommendation.

Commodity Member's Comments: (excerpts)

USBM, James Paone, May 3, 1957:

Mr. Paone concurred in the Field Team's denial recommendation.

USGS, N. E. Nelson, May 7, 1957:

Applicant's drilling in 1956 failed to discover any significant mineralization. Also, prospecting along the rims produced only two outcrops of weakly mineralized hard, red sandstone. Agrees with the field examiners that there is little possibility of discovering more than small isolated bodies of ore. Concurs with the recommendation of denial.

Conclusion and Recommendation:

In the light of work previously done by the Applicant and that of the AEC in 1952, none of which resulted in discovering significant mineralization, and furthermore, the absence of ore trends that might point to favorable areas, denial of the application appears to be quite in order. Accordingly, this Division agrees with the findings of the Field Team and the field examiners and recommends denial of the subject application.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

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DMEA
MAY 7 1957
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1. | Response | 700

IN REPLY REFER TO:

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

May 7, 1957

Re: DMEA 4559
Minerals Incorporated
Ann Group
Garfield Co., Utah
$40,000.00 - Uranium

Memorandum

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

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

Subject: Review of Field Team Report.

The applicant requested assistance in exploring by core and non core drilling, claims underlain by the Salt Wash member of the Morrison formation.

In 1956 the applicant drilled 17 holes at various places on the property without discovering significant mineralization. Prospecting of the rims located only two outcrops of weakly mineralized hard, red sanstone. A small production, 4.5 tons has been obtained from a pocket of fossilized logs.

Work in the general area has disclosed several small orebodies, but the total production has been small, about 3,000 tons of o.3% U_3O_8. The examiners say small orebodies may exist on the referenced property but "the possibility of significant uranium production is poor". The opinion appears to be apt and their recommendation that the application be denied well justified, inasmuch as no trends have been indicated and there are no defined targets.

I concur with the recommendation of the examiners and the Field Team that the application be denied.

N. E. Nelson

N. E. Nelson

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"	Ellis	700

[illegible]
[illegible]
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Washington 25, D. C.

Date May 3, 1957

DMEA Docket No. 4559
DMEA Contract No.
Commodity Uranium
Name of applicant Minerals Incorporated
Name of property Ann Group of Claims
Location of property Garfield County, Utah
Estimated cost of project $40,000.00

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee
From: James Paone, Bureau of Mines Alternate Member
Uranium Commodity Committee
Subject: Review of Field Team Report
(Application, Field Team Report, etc.)

1. Date of subject document: 4/29/57. 2. Date received by reviewer: 5/2/57

3. Other reports on this property known to reviewer: Yes [ ] No [ ]

4. Other reports on nearby properties known to reviewer: Yes [ ] No [ ]

5. Information available on past production: Yes [ ] No [ ]

6. Other pertinent factors known to reviewer: Yes [ ] No [ ]

7. Explain items marked yes above:

8. Factors meriting special consideration:
   a. Location [ ]
   b. Ownership [ ]
   c. Evidence of mineralization [ ]
   d. Geology [ ]
   e. Proposed exploration method [ ]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. _____ [ ]

9. Action advised:
   a. Obtain information from applicant [ ]
   b. Refer to Field Team [ ]
   c. Denial [X]
   d. Agree with Field Team [X]
      1. Consult with Mr. _____ at _____ AEC office.
   e. Discuss with Field Team [ ]
   f. Suggest alternate plan [ ]
   g. Request another consultation [ ]
   h. Approval [ ]

10. Remarks: (Use back of page if necessary)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 1 1957

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5/1	C	220
		130
5/3	C	220
	Ellis	700

April 29, 1957

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 4559 (Uranium) Minerals Incorporated, (Ann Group of Claims) Garfield County, Utah

Enclosed are the original and three copies of a joint report of examination on the subject property by Howard F. Albee, U. S. Geological Survey, and H. F. Robertson, U. S. Bureau of Mines.

The field examiners conclude that the proposed exploration will not result in a significant discovery of uranium ore and accordingly they recommend denial of the subject application.

The Field Team concurs with the conclusions and recommendations.

E. N. Harshman

By E. N. Harshman
Acting Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
5-3-57
(date)

ON-SITE EXAM. REPORT

MINERAL REPORTS

IN REPLY REFER TO:

RECEIVED

APR 25 1957

UNITED STATES

DMEA DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

APR 26 1957 P. O. Box 360

REGION III Grand Junction, Colorado

DENVER, COLORADO

OFFICIAL FILE COPY

GEOLOGICAL SURVEY DMEA

DENVER, COLORADO

RECEIVED MAY 1 1957

DATE	INITIALS	CODE
		130
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April 23, 1957

Memorandum

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

Through: E. N. Harshman

From: J. William Hasler John F. Shaw

Subject: DMEA docket No. 4559 (Uranium), Minerals Incorporated, Ann group of claims, Garfield County, Utah

Minerals Incorporated, 1843 South Averill, Flint, Michigan, applied to the Defense Minerals Exploration Administration for assistance to explore for uranium on claims located in the Henry Mountains, Garfield County, Utah. The application was forwarded to the Examining Team on February 20, 1957, and a field examination was made March 20, 1957, the DMEA examining team consisting of Howard F. Albee, U. S. Geological Survey, and H. F. Robertson, U. S. Bureau of Mines.

The applicant proposed a program of about 16,000 feet of non-core and core drilling and an unspecified amount of drifting, at an estimated cost of $40,000.00; Government participation, $30,000.00.

Known uranium deposits in the vicinity of the applicant's property are found in the lower 100 feet of the Salt Wash member of the Jurassic Morrison formation. The Ann group of claims are in unsurveyed secs. 23, 24, 25, and 26, T. 32 S., R. 10 E., and secs. 19, 31, 32, and 33, T. 32 S., R. 11 E., Salt Lake Base and Meridian, Garfield County, Utah. The nearest accessible buying stations for uranium ores are at Moab, Utah and Grand Junction, and Grand Junction is the nearest major source of supplies.

The claims are situated on a steep, rough bench with numerous steep-walled canyons cutting through the Morrison sediments which form the surface. The remote location and relatively high altitude of the property contribute to a high cost of operation and low-grade ores cannot be profitably mined. No vanadium-uranium deposits of any significant size have been found to date. The most productive areas in the Henry Mountains district are in the vicinity of Trachyte Wash, approximately two miles east of the Ann group of claims. Mining operations along the rim exposures have been small and tonnages from individual mines have all been small.

Reviewed by DMEA OPERATING COMMITTEE

5-3-57

(date)

TRANSMITTED

APR 29 1957

DMEA 4559 4/23/57

In view of the applicant's having drilled a total of 17 holes at various places on the property during 1956, none of which developed significant mineralization or ore trends, and prospecting along the exposed Salt Wash rims resulted in weakly mineralized, hard, red sandstone with the result no other mining has been attempted on the claims, the Examining Team concludes that the possibility for finding significant uranium production is poor and recommends the application for DMEA assistance be denied. I concur with the conclusions and recommendations of the Examining Team.

This application was brought to the attention of Atomic Energy Commission personnel.

Enclosed are 12 copies of the report together with figures 1 and 2, and the brochure which was sent to us.

J. William Hasler

J. William Hasler,
Geologist

JWH/mlr

Enclosures

FOR UNITED STATES GOVERNMENT USE ONLY

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 1 1957

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UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

TRANSMITTED
APR 29 1957

DMEA 4559

Minerals Incorporated

Ann group of claims

Garfield County, Utah

Uranium

Joint Engineering and Geologic Report

by

H. F. Albee
U. S. Geological Survey

H. F. Robertson
U. S. Bureau of Mines

April 1957

Reviewed by
DMEA OPERATING COMMITTEE
5-3-57
(date)

DMEA 4559
MINERALS INCORPORATED
ANN GROUP OF CLAIMS
GARFIELD COUNTY, UTAH

CONTENTS

Joint engineering and geologic report

	Page
Introduction and Summary	1
Acknowledgments	3
Location, Topography, and Climate	3
History and Production	5
Ownership and Extent	5
Present Status	
Exploration and development	7
Mining equipment and other facilities	8
Geology	8
Ore Deposits	9
Proposed Exploration	11
Conclusions and Recommendations	12

ILLUSTRATIONS

Figure		Follows Page
1.	Location map, Ann group of claims, Minerals Inc., Henry Mountains area, Garfield County, Utah	12
2.	Geologic map of part of the Henry Mts., area showing mineral deposits, Ann group of claims, Minerals Inc., Garfield County, Utah	12

OFFICIAL FILE COPY
D M E A
RECEIVED MAY 1 1957

DATE	INITIALS	CODE

DMEA 4559
Minerals Incorporated
Ann group of claims
Garfield County, Utah

INTRODUCTION AND SUMMARY

Minerals Incorporated, 1843 South Averill, Flint, Michigan, applied for Government assistance to explore for uranium on 99 unpatented claims located in the Henry Mountains, Garfield County, Utah. A program of about 16,000 feet of non-core and core drilling and an unspecified amount of drifting was proposed at an estimated cost of $40,000.00. Government participation at 75 percent would be $30,000.00.

A field examination was made on March 20, 1957, by a DMEA examining team consisting of H. F. Albee, U. S. Geological Survey, and H. F. Robertson, U. S. Bureau of Mines. The applicant's representative failed to meet the examining team at the pre-arranged time and place and was not present during the inspection.

Known uranium deposits in the vicinity of the applicant's property are found in the lower 100 feet of the Salt Wash member of the Jurassic Morrison formation.

During 1956, the applicant drilled a total of 17 holes at various places on the property without discovering any significant mineralization or developing any ore trends which would permit determination of the most favorable drilling areas. Prospecting along the exposed Salt

Wash rims has apparently been done and two outcrops of weakly mineralized, hard, red sandstone found. These mineralized sandstone lenses are near the base of the Salt Wash and, in the Henry Mountains area, are not indicative of possible higher grade ore bodies at depth. Fossilized logs carrying a small amount of mineralization are fairly common on the exposed rims. The only production to date from the subject property came from a pocket of fossilized logs and was hand picked from a shallow prospect pit. No other mining has been attempted on the claims.

The examining team concluded that, although small ore bodies in discontinuous deposits at different horizons within the Salt Wash sandstone member may be found on the subject claims, the possibility for significant uranium production is poor. A reasonable operation for exploiting a deposit of this type would combine wagon drilling with actual mining operations--the drilling being done just ahead of the mining faces and not on a predetermined pattern. Such work would necessarily be confined--by economic considerations and the depth capacity of the wagon drills--to the most shallow uranium occurrences on the property. An operation of this type does not lend itself to DMEA procedures.

All information concerning the specific area of the applicant's claims indicates that the chances of discovering any significant uranium ore bodies are very poor.

The examining team recommends denial of the application for DMEA participation in the proposed project.

ACKNOWLEDGMENTS

Personnel of the Atomic Energy Commission and the Geological Survey familiar with the Henry Mountains area were consulted, as was a Geological Survey publication.[1/] Information contained in a report of examination (DMEA 4429, Sunburst Mining Corporation) has been freely used in evaluating the subject property.

Production data from properties in the area were obtained from the Atomic Energy Commission.

1/ Charles B. Hunt, Paul Averitt, and Ralph L. Miller, 1953, Geology and Geography of the Henry Mountains Region, Utah, U. S. G. S. Prof. paper 228, 234 pp.

LOCATION, TOPOGRAPHY, AND CLIMATE

The Ann group of claims are in unsurveyed sections 23, 24, 25, and 26, T. 32 S., R. 10 E., and sections 19, 31, 32, and 33, T. 32 S.. R. 11 E., Salt Lake Base and Meridian, Garfield County, Utah (figs. 1 and 2). They are 39 miles south of Hanksville, Utah, and are reached by traveling over Utah Highway 95, a graded road, and a connecting access road along the eastern flank of the Henry Mountains. The last 13 miles of access road is fair except when wet or snow-covered, then it becomes almost impassable. Hanksville, Utah is 60 miles south of Green River, Utah, the nearest rail point, over Utah

Highway 24, 40 miles of which has been recently hard surfaced. Grand Junction, Colorado, the nearest major source of supplies, is 220 miles northeast of the subject property.

The nearest accessible buying stations for uranium ores are at Moab, Utah and Grand Junction, Colorado.

Power, mining supplies, water, labor, housing, and ore marketing present no unusual problems. The remote location and relatively high altitude of the property contributes to a high cost of operation and low-grade ores cannot be profitably mined.

The claims are situated on a steep, rough bench with numerous steep-walled canyons cutting through the Morrison sediments which form the surface. Altitudes on the property range from about 6,000 feet on the canyon floors to about 7,000 feet on the higher benches.

The climate at the base of the Henry Mountains is arid and characterized by moderate winters and extremely hot summers. However, the Ann group of claims is located well up on the mountain and receives a substantial amount of moisture in the form of snow or rain during the winter months. Access roads are usually blocked by drifting snow from November until March.

HISTORY AND PRODUCTION

There has been mining activity in the Henry Mountains area since pioneer days. Exploration and mining operations for vanadium date from the 1920's. No vanadium-uranium deposits of any significant size have been found to date. Present activity dates from 1950. In 1952, the Atomic Energy Commission undertook a reconnaissance drilling program in the area without finding any worthwhile deposits.

One of the most productive areas in the Henry Mountains district has been in the vicinity of Trachyte Wash about 2 miles easterly from the Ann group of claims. The mines are situated along the rim exposures where small lenses of uranium ore have been clustered and, in places, where mineralized logs were exposed. The operations were small and tonnages from individual mines have all been small. Ore produced from Trachyte Wash area during the past 3 years has amounted to about 3,000 tons averaging about 0.30 percent U_3O_8 and 2.00 percent V_2O_5.

OWNERSHIP AND EXTENT

The 99 claims included in the subject application were originally located by various groups of people and later transferred to one individual, Boyd Bunnell. The examining team assumes that he is the owner of the claims leased to Minerals Incorporated. The copy of lease referred to by the applicant in items 3(a) and 3(d) of the form

MF-103 was not included in the brochure available to the examining team.

Recording data on the original location notices of 98 of the subject claims are shown below. No record of the Dolly No. 11a claim was found and time was not available for further search of the records at the Garfield County Courthouse, at Panguitch, Utah.

Locators -- D. L. Gross, Walt Mulford, Wels Mulford, Bert Bunnell

Claim Name	Location Date	Book	Page
Ann 1 thru 31	7-17-54	38	462 thru 492
Dolly 1 thru 11	8-9-54	39	444 thru 454
Ann Marie 1 thru 26	8-2-54	38	412 thru 437
Pine 1 and 2	8-2-54	38	438 and 439

Locators -- Bert Bunnell, J. W. Mulford, E. O. James

Claim Name	Location Date	Book	Page
Yvonne Mae 1 thru 6	8-2-54	38	406 thru 411

Locators -- Dwendon Lee, Bert Bunnell, D. L. Gross, Wels Mulford, Walt Mulford

Claim Name	Location Date	Book	Page
Dorothy 1 thru 12	8-2-54	38	450 thru 461

Locators -- Bert Bunnell, J. W. Mulford

Claim Name	Location Date	Book	Page
James 1 thru 10	8-2-54	38	440 thru 449

All claim ownership was transferred to Boyd Bunnell on February 21, 1955 by means of quitclaim deeds from each of the original locators.

The only conflicts noted in the groups of claims are within the boundaries of the property and consist of overlapping claims controlled by the applicant. It appears that Minerals Incorporated has a valid lease on the subject property. The terms of the lease are not known to the examining team.

PRESENT STATUS

Exploration and Development

A map submitted by the applicant shows 17 holes which were probably drilled during 1956. No other information concerning the holes was given so it is assumed that negative results were obtained. Prospecting along the exposed Salt Wash rims has apparently been done and two outcrops of weakly mineralized, hard, red sandstone found. Fossilized logs carrying a small amount of mineralization are fairly common on the exposed rims. The only production to date from the property came from a pocket of fossilized logs and was hand picked from a shallow prospect pit. No other mining has been attempted on the claims.

Mining Equipment and Other Facilities

There was no exploration or mining equipment on the property when examined. A few roads have been built by the applicant to the more accessible parts of the area.

GEOLOGY

The Ann group of claims lies high on the northeastern flank of Mount Pennel near the center of the Henry Mountains, and although the Henry Mountains lie within a structural basin, the sedimentary strata on the claims dip from 5° to 6° easterly because of the intrusive influence of the mountains. At Ragged Mountain near the north edge of the claims (fig. 2), Morrison formation sandstone strata have been dragged into a nearly vertical position where they are in contact with the intrusion but lie nearly horizontal a short distance from it.

Rocks exposed on the claims are, in ascending order, the Entrada sandstone, Summerville formation, and the Morrison formation, all of Jurassic age. The potential ore-bearing Salt Wash sandstone member of the Morrison formation crops out on the claims and for several miles northerly from the claims on either side of the basin-like area that extends northerly from the claims.

The Salt Wash ranges up to 300 feet thick in the area and consists of alternating beds of sandstone and mudstone with sandstone beds predominating. The sandstone is commonly cross-bedded and composed of yellowish brown, medium to coarse-grained clear quartz grains. Small

amounts of interstitial clay and thin seams of mudstone are included in the sandstone units.

ORE DEPOSITS

Mineralized zones in the district range from about 50 feet to as much as 250 feet above the base of the Salt Wash. Most of the occurrences high in the section consist of sparse mineralization around the outer surface of silicified logs. Other occurrences of uranium deposits in the district are typified by thin lenses of mineralized carbonaceous material that do not constitute an ore body in themselves. Considerable mining has been done over a period of many years where such lenses are clustered or relatively close together. In places, logs have constituted ore bodies.

One of the most productive areas in the Henry Mountains district has been in the vicinity of Trachyte Wash about 2 miles easterly from the Ann group of claims. The mines are situated along the rim exposures where small lenses of uranium ore have been clustered and, in places, where mineralized logs were exposed. The operations are all small and tonnages from individual mines have all been small. The Trachyte area has produced about 3,000 tons in the last 3 years that has averaged about 0.30 percent U_3O_8 and a little over 2.00 percent V_2O_5.

From an inspection of figure 2, it can be seen that the easternmost rim exposures of the Morrison contain nearly all of the known ore deposits. The middle and westernmost exposures of Morrison that extend northerly from the applicant's claims represent over twice as many miles of exposed Salt Wash sandstone than the easternmost exposure, yet only one prospect is shown. One more prospect could be shown inasmuch as 4.5 tons of ore has been shipped from a claim in the Ann group.

The prospect on the Ann group consisted of a cluster of silicified and partly carbonized logs from which the shipment had been hand picked. Personal communication with AEC personnel who have mapped in the area indicates this to be typical of many prospects in the district from which one to two tons have been shipped.

No one place on the property was seen that would warrant exploration. Ore deposits even in more productive parts of the district, because of their small size and erratic distribution, do not lend themselves to a predetermined drilling project. Inasmuch as no drilling targets are known on the Ann group, an exploration project cannot be justified and is not recommended.

PROPOSED EXPLORATION

The applicant proposes a single stage exploration program consisting of 80 non-core and core drilled holes averaging 200 feet in depth and spaced 200 feet apart in fences approximately paralleling the rims. Three small areas are included in which the exploration could be done by jackhammer drilling and possible drifting. No specified number of units is proposed for the shallow drilling and drifting although an estimate of the cost of the work is submitted. The applicant's estimated cost of the proposed project is $40,000.00. Government participation at 75 percent would be $30,000.00.

A program for drilling 80 holes to a depth of 200 feet is not justified either geologically or economically by conditions on the property. Work done to date indicates that the potential ore bodies in this particular area are small and scattered as demonstrated by the 4.5 tons of ore mined from Five Star No. 29 claim. Holes drilled 15 to 25 feet from the deposit disclosed no further mineralization.

It would not be feasible to mine such occurrences unless they could be followed in from rim exposures and, even then, the probable returns from production would not pay for development in barren ground. In such an operation, mineralization exposed on rim outcrops could be followed by underground or surface working, with supplementary wagon drilling ahead of the mining operation to guide the advance of underground or surface work. This type of work would be a combination of exploration and development which would be impractical to

set up as a DMEA project. For this reason, an alternate plan of exploration is not suggested by the examining team.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that, although small ore bodies in discontinuous deposits at different horizons within the Salt Wash member may be found on the property of Minerals Incorporated, the possibility for significant uranium production is poor. A reasonable operation for exploiting a deposit of this type would combine wagon drilling with actual mining operations--the drilling being done just ahead of the mining faces and not on a predetermined pattern. Such work would necessarily be confined--by economic considerations and the depth capacity of the wagon drills--to the most shallow uranium occurrences on the property. There are no known ore trends which would permit determination of the more favorable drilling areas.

All information concerning the specific area of the applicant's claims indicates that the chances of discovering any significant uranium ore bodies are very poor.

The examining team recommends that the application for DMEA assistance be denied.

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
APRIL 1957 DOCKET 4559

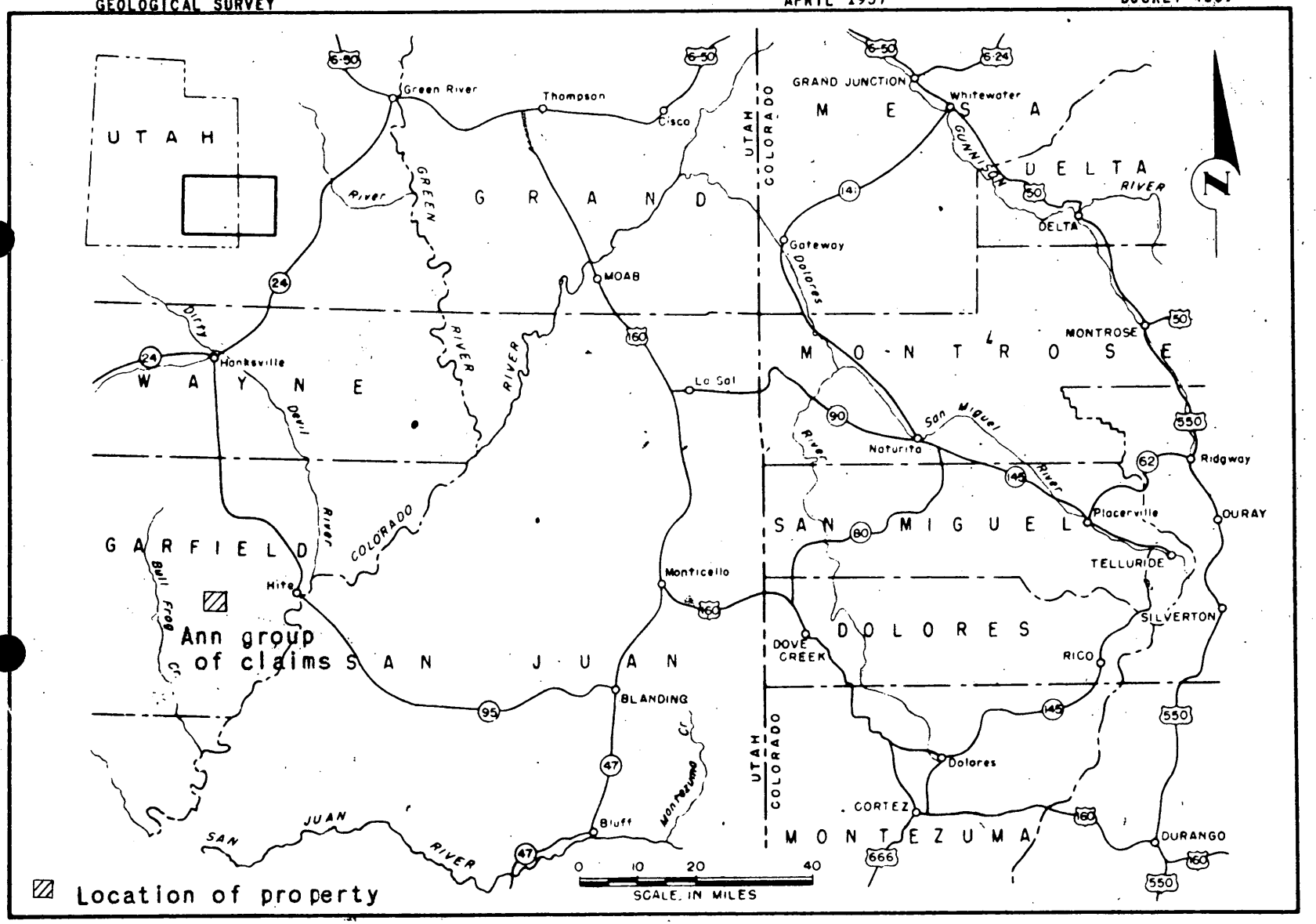
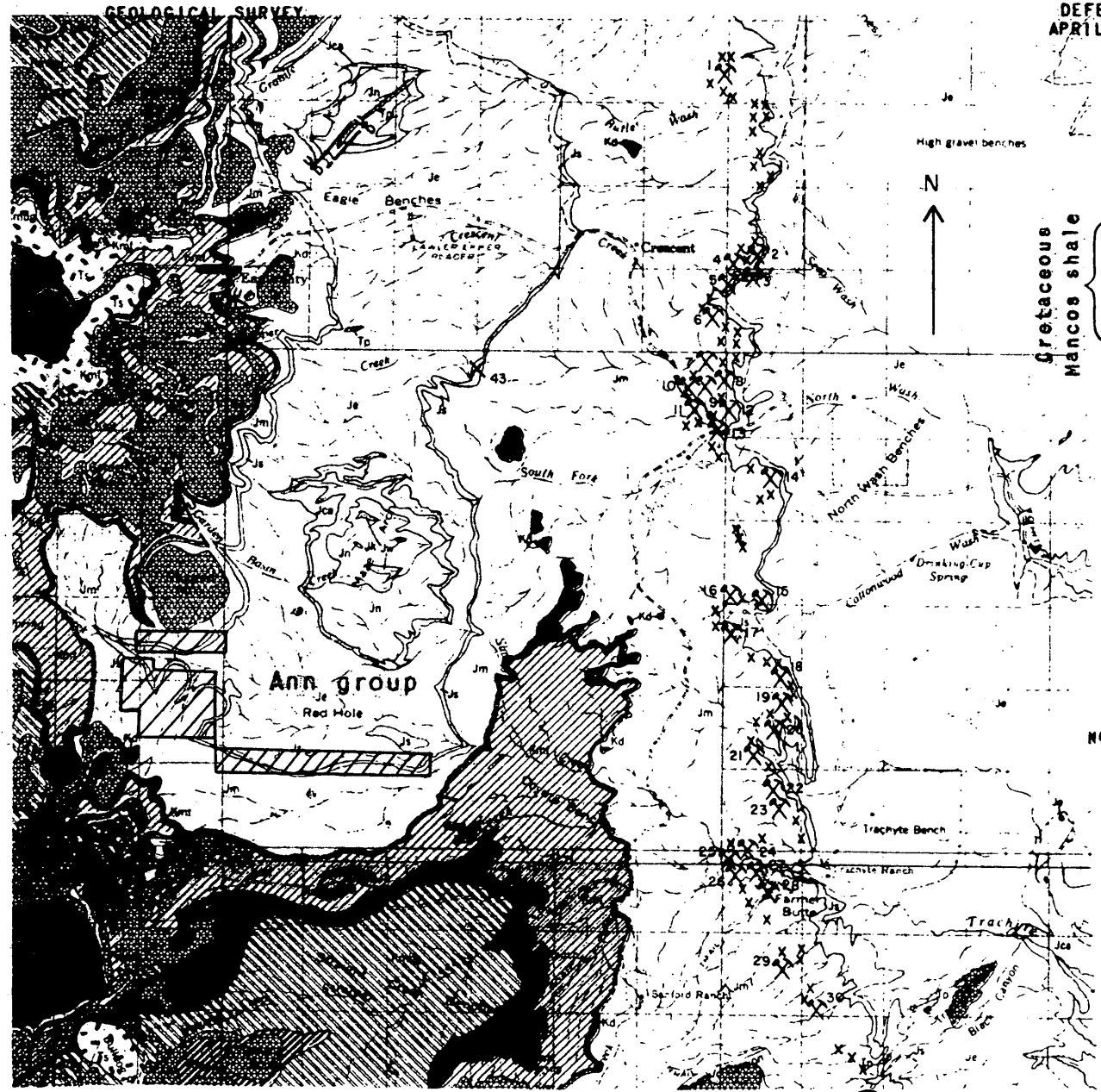


FIGURE 1.--LOCATION MAP, ANN GROUP OF CLAIMS, MINERALS, INC., HENRY MOUNTAINS AREA, GARFIELD COUNTY, UTAH.

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
APRIL 1957 DOCKET #559



EXPLANATION

Ts	SHATTERED SEDIMENTARY ROCKS INTRUDED BY IGNEOUS ROCKS
Tdp	STOCKS, MOSTLY DIORITE PORPHYRY
Tp	LACCOLITHS, etc., MOSTLY DIORITE PORPHYRY
Cretaceous Mancos shale: Kme	EMERY SANDSTONE MEMBER
Cretaceous Mancos shale: Kmbg	BLUE GATE SHALE MEMBER
Cretaceous Mancos shale: Kmf	FERRON SANDSTONE MEMBER
Cretaceous Mancos shale: Kmt	TUNUNK SHALE MEMBER
Kd	CRETACEOUS DAKOTA SANDSTONE
Jm	JURASSIC MORRISON FORMATION
Js	JURASSIC SUMMERVILLE FORMATION
Je	JURASSIC ENTRADA SANDSTONE
U/D	FAULT, DASHED WHERE APPROXIMATELY LOCATED. U,UPTHROWN SIDE, D,DOWNTHROWN SIDE
⚒	MINE, PRODUCTION > 25 TONS
X	PROSPECT, PRODUCTION < 25 TONS
▨	MINERALS, INC. CLAIM GROUPS

Note: GEOLOGY FROM P.P. 228 PLATE I.
LOCATION OF ORE DEPOSITS BY
A.E.C. PERSONNEL.

1 0 3 MILES

FIGURE 2.--GEOLOGIC MAP OF PART OF THE HENRY MTS. AREA SHOWING DISTRIBUTION OF MINERAL DEPOSITS AND LOCATION OF THE ANN GROUP OF CLAIMS, MINERALS INC., GARFIELD COUNTY, UTAH.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 25 1957

DATE	INITIALS	CODE
2/25	C	225
2/25	Known	700

February 20, 1957

Memorandum

To: S. R. Wilson

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4559 (Uranium) Minerals Incorporated (Ann claim group) Garfield County, Utah

The application for Minerals Incorporated, Docket DMEA 4559 in the amount of $40,000.00 is enclosed.

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

W. KING

W. H. King

cc: W. M. Traver (3)
E. H. Harshman (2)
W. H.King

DMEA
DEPARTMENT OF THE INTERIOR
FEB 20 1957
REGION III
DENVER, COLORADO

Sec(2)

OFFICIAL FILE COPY DMEA RECEIVED FEB 21 1957		
DATE	INITIALS	CODE
2/21	C	220
2/21	[illegible]	700

224 New Customhouse
Denver 2, Colorado

February 19, 1957

Memorandum

To: W. H. King (2) w/copy of application, Chm's. letter and memoranda
J. W. Hasler w/copy of application, Chm's. letter and memoranda

From: DMEA Field Team, Region III

Subject: Docket DMEA-4559 (Uranium) Minerals Incorporated (Ann claim group) Garfield County, Utah

Enclosed are the subject application in the amount of $40,000.00 with copies of supplemental information, its transmittal to the Executive Officer from the Chairman, Operating Committee, and memoranda of review by J. E. Crawford, USBM, and N. E. Nelson, USGS. A field examination and suitable covering joint Report of Examination are requested. The one copy furnished of Power of Attorney for Robert Dunfield, Jr., referred to in the Chairman's letter, is retained with the Denver office file copy of the application.

Apparently the Applicant has furnished Forms MF-205 for the claims listed, except the Dolly No. 11A claim, and they are being retained in the Washington office file. In the event the examiners recommend a contract, this office should be advised as early as possible in order that steps can be taken to obtain Consent to Lien and Subordination Agreement forms for the cited claim. Please return the Bureau of Mines' copy of the brochure with your Report of Examination.

DMEA Field Team, Region III

Original signed by
W. M. TRAVER

By W. M. Traver
Executive Officer

Enclosures
WMT:jy
cc: Sec. Op. Comm. (2)
Docket 4559 } w/copy Chm's. ltr and memoranda
Harshman }
Chron.

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
2/12	Knouse	700
"	Ellis	700
2/13	Selbridge	130
"	Johnson	110
"	Mittendorf	100
		220

700

Land Nelson

FEB 13 1957

Mr. John W. Bennett, President
Minerals Incorporated
1843 S. Averill
Flint 3, Michigan

Re: Docket No. DMEA-4559 (Uranium)
Ann Claim Group, et al.
Garfield County, Utah

Dear Mr. Bennett:

Your letter of January 29, 1957, containing a map of the Dunfield claims, a report, dated November, 1956, by Robert C. Boyce, entitled "Geological Report on the Dunfield Claims, Garfield County, Utah," and your letter of February 6, containing the Power of Attorney for Robert Dunfield, Jr., and the assay certificate from Smith's Laboratory, dated February 3, 1957, have been received. Your application is now being referred to Mr. W. M. Traver, Executive Officer, DMEA Field Team, Region III, 224 New Customhouse Building, Denver 2, Colorado, for further consideration and possibly a field examination.

The Regional Office will contact you at an early date if an examination is to be made. Any assistance you may give the members of the Field Team during the examination will be appreciated.

Sincerely yours,

G. C. Mittendorf

Administrator

FIKnouse/gla
2-12-57
cc to: Admr.'s Reading File
Code 700
Mr. Knouse
DMEA Field Team, Region III (2)

8623

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
2/12	Knouse	700
"	[illegible]	700
2/13	Selfridge	130
"	[illegible]	110
"	[illegible]	100
2/14	C	220

FEB 13 1957

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

Re: Docket No. DMEA-4559 (Uranium) 700
Minerals Incorporated
Ann Claim Group, et al.
Garfield County, Utah

Dear Mr. Traver:

The captioned application is referred to your office for either a field examination and report or the Field Team's recommendations based on information available to your office. A Consent to Lien and Subordination Agreement for all the claims listed in the Lease & Agreement except the Dolly Claim No. 11A was forwarded by the Applicant.

Enclosed are copies of memoranda, dated January 15 and 17, 1957, from John E. Crawford, USBM, and N. E. Nelson, USGS, respectively, relating to the proposed project, and an extra copy of the application for the use of the Field Team. Also enclosed are three copies of supplementary information furnished by the Applicant, namely, a letter, dated January 29, 1957, with a report entitled "Geological Report of the Dunfield Claims, Garfield County, Utah," and a map entitled "Dunfield Claims, Leased by Minerals Incorporated"; also a letter, dated February 6, 1957, and copies of an assay certificate from Smith's Laboratory, dated February 3, 1957, and one copy of a Power of Attorney for Robert Dunfield, Jr.

If the Field Team recommends an exploration project, we will require, in addition to the usual information, a Consent to Lien and Subordination Agreement for the Dolly Claim No. 11A.

FIKnouse/gla 2-12-57
cc to: Admr.'s Reading File
Operating Committee
Code 700
Mr. Knouse
T. H. Kiilsgaard, 5224
Jack Kratchman - AEC

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (-45)

Enclosures

APPROVED:

Frank D. Lamb (-45)
Member, Bureau of Mines

N. E. Nelson (-45)
Member, Geological Survey

8623

John W. Bennett, President
Harley D. Anderson, Vice President
William B. Thomas, Secy.-Treas.

Minerals Incorporated
Mining and Exploration
1843 S. Averill
Flint 3, Michigan

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 11 1957

DATE	INITIALS	CODE
2-11	C	220
"	Kramer	700
		225

February 6, 1957

Mr. Ernest Wm. Ellis
Rare and Misc. Metals Division

Dear Mr. Ellis:

Enclosed you will find the power of attorney for Robert Dunfield, Jr. and the assay report on the sample from exposure (B) on the map sent to you recently. These items are related to Docket # 4559 (Uranium).

Please bear in mind that, although the sample was below the content of marketable ore, it is a surface indication only.

This I believe completes the added information requested by you.

Yours very truly,

John W. Bennett

John W. Bennett

Smith's Laboratory

CHEMIST AND ASSAYER

MOAB, UTAH

Minerals Incorporated
1843 S. Averill
Flint 3, Michigan

Feb. 3, 1957

Sample Description	% U_3O_8	% V_2O_5	%	%	%	%			
Henry Mountain	0.035								

TOTAL CHARGES $ 3.00

J. Earl Smith
CHEMIST

RECEIVED
FEB 11 1957
D.M.E.A.

John W. Bennett, President
Harley D. Anderson, Vice President
William B. Thomas, Secy.-Treas.

Minerals Incorporated
Mining and Exploration
1843 S. Averill
Flint 3, Michigan

OFFICIAL FILE COPY DMEA RECEIVED FEB 4 1957		
DATE	INITIALS	CODE
2-4	C	220
2-4	Knowlse	700

January 29, 1957

Mr. Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division
U.S. Dept. of the Interior - D.M.E.A.
Washington 25, D.C.

Dear Mr. Ellis:

Re: Docket No. DMEA*4559 (Uranium)

Enclosed you will find a map of the Dunfield Claims showing previous drilling locations, proposed drill sites, proposed roads and the location of uranium exposures. A description of the exposures may be found in the enclosed Geologists Report, on page 4, along with other information as to the geology of the area. Jack hammer exploration and possible drifting will be done at (3) exposures where inacessibility makes drilling difficult.

Also shown on the map are the missing claims referred to in your letter. A sample taken from exposure (B), see map, has been sent for an assay. A copy of this and the "power of attorney" for Robert Dunfield will be sent to you as soon as they are received.

Yours very truly,

John W. Bennett

John W. Bennett

RECEIVED
FEB 4 1957
D.M.E.A.

GEOLOGICAL REPORT

on the

DUNFIELD CLAIMS

GARFIELD COUNTY, UTAH

by

Robert C. Boyce

November, 1956

Contents

	Page
Location and Road Log	1
Climate and Vegetation	2
Supplies and Services	2
General Geology	2
Salt Wash Geology and Mineralization	3
Conclusions and Recommendations	5

Maps

Geology and Topography

Claim boundries and roads

Location and Road Log

The Dunfield claims are located on sections 23, 24, 25, and 26, T.32S, R.10E; and sections 19, 31, 32, and 33, T.32S, R.11E. in the Henry Mountains Mining District, Garfield County, Utah.

The property is reached via State Highway 24 to Hanksville, then 26 miles south on State Highway 95 to North Wash.

Miles from North Wash

at 0.0	Turn right
0.6	Straight
1.0	Straight
2.0	Turn left
3.7	Turn left
4.2	Turn right
4.6	Turn right
6.4	Straight
7.0	Turn right
13.2	Junction on south side of Sec. 31. (see map)

(Alternate route)

7.0	Turn left
7.6	Turn right
9.8	Switchbacks up hill
14.4	Turn right
14.7	Turn right
16.1	Junction south of Sec. 26. (see map)

Climate and Vegetation

The climate is suitable for year-around mining operations, but the roads would be inaccessible to heavy trucks during January, February, and part of March. Snow stays all winter only where sheltered, most winter snowfall being removed by a few days of sunshine.

During the rainy season of July and August, short, hard rains fall in the afternoon two or three days a week.

Supplies and Services

Supplies would have to come from Green River or Hanksville. Good water is available from a spring and pond on the NW quarter of Sec. 36. Electricity is not available anywhere in the area. The nearest ore-buying station is at Green River, a distance of just under 100 miles.

General Geology

The sedimentary formations comprising the Dunfield Claims are domed, dipping gently (up to 15°) in all directions from the center of the dome, which is located in the SE quarter of Sec. 25.

The Entrada sandstone is the oldest formation exposed on the claims. It is a massive, brick red sandstone, somewhat crumpled and contorted.

The Summerville Formation, above the Entrada and separated by an erosional unconformity, is a shale about 200 feet thick. The upper 50 feet is a dark grey-green color and the lower 150 feet is a dark red.

The Salt Wash member of the Morrison Formation, laying above the Summerville, is a white, crossbedded, sandstone with interbedded lenses of dark red, light green, and tan mudstone. The sandstone contains abundant petrified wood. The contact between the Salt Wash and the underlying Summerville is largly obscured by loose rock.

Laying conformably above the Salt Wash is the Brushy Basin member of the Morrison Formation. This is a vari-colored shale about 150 feet thick. Much of the petrified wood and dinosaur bone now laying on the Salt Wash surface is from the Brushy Basin, left by the erosion and removal of the softer shales.

Above the Brushy Basin is the rusty yellow Dakota Sandstone Formation.

Salt Wash Geology and Mineralization

The Salt Wash consists of three main sandstone rims

of about equal thickness, separated by thinner mudstone horizens. The main sandstone rims also contain smaller mudstone lenses throughout. The sandstone is fine and well sorted in the two lower horizens, but contains many chert pebbles in the upper horizon, especially near the top.

(A) Shipments assaying .27% U_3O_8 and .29% V_2O_5 were made from a small pocket of fossilized logs on the 5-Star 29 claim, 120 feet above the bottom of the Salt Wash. Drilling discloses no further mineralization in this area.

(B) A tree showing considerable radiation is located at the bottom of the Salt Wash, on the west end of the Dorothy #8 claim. No drilling has been done within 200 yards of this tree.

(C) A two foot seam of hard red sandstone, outcropping for 30 feet at the Salt Wash-Summerville contact on the west end of the Dorothy #1 claim, assayed .041% U_3O_8; not commercial grade but possibly indicative of higher grade material nearby. No drilling has been done behind this outcrop.

(D) A 3 foot seam of similar material, assaying .046% U_3O_8, outcrops for over 100 yards on the Ann Marie #10 claim. Because of the rugged terrain, no access road was put to this location.

Conclusions and Recommendations

Radioactive fossilized trees on the 5-Star 29 and Dorothy #8 claims, and the presence of the red uranium-bearing sandstone on the Dorothy #1 and the Ann Marie #10 claims indicate the widespread, though spotty, uranium mineralization on the Dunfield claims.

Badly fractured ground, encountered throughout the 1956 drilling program, is a condition favorable for uranium mineralization. Delays in future drilling, due to trouble with wet and fractured ground, can be avoided by caseing the holes to a depth of 100 feet.

It is recommended that the 1957 drilling be done along the north side of the Dorothy group of claims, to explore behind the low-grade outcrop on the Dorothy #1, and to find any continuation of the fossil stream channel containing the uranium-bearing log on the Dorothy #8.

Further drilling on the Dorothy claims would be planned to develop any findings of these holes. Drilling on the Dorothy claims would be to a maximum depth of 175 feet, with an average depth of 150 feet.

orm 7
-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
1-18	Knouse	700
18	Mittendorf	100
1-22	CW	220
		700

JAN 18 1957

Mr. John W. Bennett, President
Minerals Incorporated
1843 S. Averill
Flint 3, Michigan

Re: Docket No. DMEA-4559 (Uranium)
Ann Claim Group, et al.
Garfield County, Utah

Dear Mr. Bennett:

Please clarify and furnish the following information so that we can continue to process your application.

1. A copy of the Power of Attorney from Robert R. Dunfield to Robert G. Dunfield, the signer of your Lease Agreement; and

2. The claim map forwarded with your application does not show the locations of claims Ann Nos. 28, 30, and 31, Dolly No. 11A, and Dorothy No. 12, nor does the map show all the proposed work, i.e., locations of drill holes, drifts, and roads, and the extent of mineralized exposures. On a map or sketch, drawn to scale, you should show the following:

   (a) The location and extent of all uranium mineralized exposures;

   (b) Locations of any samples taken, with their chemical analyses and/or radiometric determinations, if any; and

   (c) Locations of all proposed work, i.e., drifts, roads, and drill holes, all in relation to the claim boundaries. Also, please furnish a narrative description of each mineralized exposure, including the length, width, and mineralization; also any additional local geological information that is available as justification for your proposed project.

You should furnish two copies of the Power of Attorney (Item 1) and four copies of the other information so we can process your application with a minimum of delay.

FIKnouse/gla/izm 1-18-57
cc to: Code 700
Mr. Knouse
Admr.'s Reading File
DMEA FT Reg. 3 (3)
Messrs. JECrawford, 3643
THKiilsgaard, 5224
JKratchman, AEC

Sincerely yours,

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

RCK.

8623

IN REPLY REFER TO:

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

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 17 1957

DATE	INITIALS	CODE
1-17	CW	220
1-17	[illegible]	700

January 17, 1957
Re: DMEA 4559
Minerals Incorporated
Five Star Group
Garfield Co., Utah
$40,000.00 - Uranium

Memorandum

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

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

Subject: Review of application

The applicant requests assistance in exploring by core and non-core drilling and drifting, claims probably at the head of Trachyte Creek.

Probably the Field Office has enough general information concerning the general locality to enable it to judge the application without an examination.

Referral of the application to the field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

OFFICIAL FILE COPY DMEA RECEIVED JAN 15 1957		
DATE	INITIALS	CODE
1-15	cw	220
1-16	Ellis	700
	Kramer	700

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

Date January 15, 1957

DMEA Docket No. 4559
DMEA Contract No.
Commodity Uranium
Name of applicant John W. Bennett, President
Name of property Minerals Incorporated
Location of property Garfield County, ~~Mich.~~ Utah
Estimated cost of project $40,000.00

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

Subject: Review of Application
(Application, Field Team Report, etc.)

1. Date of subject document: _____. 2. Date received by reviewer: _____.

3. Prior reports on this property known to reviewer: Yes [ ] No [x]

4. Prior reports on nearby properties known to reviewer: Yes [ ] No [x]

5. Information available on past production: Yes [ ] No [x]

6. Other pertinent factors known to reviewer: Yes [ ] No [x]

7. Explain items marked yes above:

8. Factors needing special consideration:
   a. Location [ ]
   b. Ownership [ ]
   c. Evidence of mineralization [ ]
   d. Geology [ ]
   e. Proposed exploration method [ ]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. _____ [ ]

9. Action advised:
   a. Obtain information from applicant [ ]
   b. Refer to Field Team [x]
   c. Denial [ ]
   d. Agree with Field Team [ ]
   e. Disagree with Field Team [ ]
   f. Suggest alternate plan [ ]
   g. Request another examination [ ]
   h. Approval [ ]
   i. Consult with Mr. _____ at _____ AEC office.

10. Remarks: (Use back of page if necessary) Mr. J. O. Hosted, Washington representative of the Atomic Energy Commission, assisted in the review.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/4	Kanouse	700
1/4	Ellis	700
1/4	Selfridge	130
1/4	Matheusday	110
		100
1-7	C	225
		700

4 JAN 1957

Department of the Interior

DMEA
14X4401(01) Revolving Fund
Defense Production Act,
Interior (Allocated Working Fund to the
Office of the Secy.)

T E L E T Y P E

W. M. TRAVER, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REURTT JANUARY 3 DMEA 4559 MINERALS INC., NO, WE WILL PROCESS APPLICATION. PLEASE ADVISE WHEN WE MAY EXPECT GRAND JUNCTION MEMORANDA FOR DMEA 4566 COLUMBIA URANIUM INC., AND DMEA 4573 CHESAPEAKE AND COLORADO CORPORATION.

George C. Selfridge (by ccf)
CHAIRMAN, OPERATING COMMITTEE

FLKnouse/izm 1-4-57
cc to: Confirmation to Reg. III
Code 700
Operating Committee
Admr.'s Reading File
Mr. Knouse
Docket 4566
Docket 4573
JOHosted, Rm. 3210, GSA
CRAWford, Rm. 3643
THKiilsgaard, Rm. 5224

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/4/57	F.L.K.	700
1/4	Ellis	700
1/4	Nelson	130
		110
		100
		225
1/4	Lamb	130

Department of the Interior

DMEA

14X4401(C1) Revolving Fund
Defence Production Act,
Interior (Allocated Working Fund to the
Office of the Secy.)

T E L E T Y P E

W. L. HAVEN, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REFER JANUARY 3, DMEA 4559 [illegible] INC., YOU FORWARD GRAND JUNCTION RECOMMENDATION. ALSO ADVISE WHEN WE MAY EXPECT GRAND JUNCTION RECOMMENDATION FOR DMEA 4566 COLUMBIA URANIUM INC., AND DMEA 4573 CHESAPEAKE AND COLORADO CORPORATION.

FLKnouse/izm 1-4-57
cc to: Confirmation to Reg. III
JOHosted, Rm. 3210, GSA
JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
Operating Committee
Admr.'s Reading File
Code 700
Mr. Knouse
Docket 4566
Docket 4573

CHAIRMAN, OPERATING COMMITTEE

8623

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 3 1957

DATE	INITIALS	CODE
1/3/57	[illegible]	700

Mr George Selfridge

1-3-57

DN 235 BUR MINES 1-3-57 8-28

CHAIRMAN, OPERATING COMMITTEE, DMEA

REURTT DMEA 4559, MINERALS INC., APPLICATION RECEIVED FROM YOUR OFFICE AND HANDLED IN ACCORDANCE WITH PARAGRAPH 3 YOU XX YOUR LETTER JUNE 29,1955 PLATEAU APPLICATIONS. SHALL ZE NOW SEND TO GRAND JUNCTION FOR RECOMMENDATIONS.

W M TRAVER

Denver, Colo.

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
1/2/57	[illegible]	700
"	[illegible]	700
1/2	Selfridge	130
		110
"	[illegible]	100
1/3/57	C. W.	225

(Uranium)

Department of the Interior

DMEA

14X1401(01) Revolving Fund,
Defense Production Act, Interior (Allocated Working Fund to the Office of the Secy.)

T E L E T Y P E

W. M. TRAVER, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REFERENCE DMEA-4559 MINERALS INCORPORATED, WHEN MAY WE EXPECT TO RECEIVE THE GRAND JUNCTION MEMORANDUM.

George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE

FIKnouse/gla
1-2-57
cc to: Admr.'s Reading File
Operating Committee
Messrs. JECrawford, 3643
THKiilsgaard, 5224
JOHosted, 3210, GSA
Code 700
Mr. Knouse
Confirmation to DMEA Field Team, Region III

8623

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

November 30, 1956

Minerals Incorporated
1843 S. Averill
Flint, Michigan

Subject: DMEA-4559

Gentlemen:

Your application for exploration assistance, dated November 27, 1956 submitted to our office at Washington, D. C. has been assigned Docket Number DMEA 4559 and referred to the Rare & Miscellaneous Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

(Sgd) Allen S. Dakan

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to:

6416

UNION CARBIDE NUCLEAR COMPANY
A Division of Union Carbide and Carbon Corporation

ORE SETTLEMENT

Receiving Station Monticello Utah
Liquidation No. P R 1041
Bought of Mable Perry Bonfield
Address Monticello, Utah
Type of Ore Carnotite
Mining Claim Red Star Long Claim #9
Mining District Henry Mts - Fremont Blanding Co Utah

Rifle, Colorado, September 21, 19 5
Lot No. F-12741
Shippers Lot No.
A.E.C. License No. P-2671
Date Received 9-1-55
File No.

Lot No.	Net Weight Pounds	% H_2O	Dry Weight Pounds	SETTLEMENT ASSAYS U_3O_8	V_2O_5	$CaCO_3$	CONTENTS POUNDS U_3O_8	V_2O_5	$CaCO_3$
	4020	0.7	8456.86	0.25	0.38		22.39	34.04	

PRICED PER A.E.C. CIRCULAR NO.5 (Revised)

	POUNDS	PER LB	DRY SHORT TONS	PER TON	VALUE	TOTAL VALUE
U308 Payment	22.37	3.50	4.48		78.37	
Development Allowance	22.39	.50	4.48		11.20	
Excess 4 lbs. per ton Premium	4.47	.75	4.48		3.35	
Excess 10 lbs. per ton Premium						
Total U308 Payment						92.92
V205 Payment	34.04	.31	4.48		10.55	
Total V205 Payment						10.55
Less High Lime Penalty over 6% CaCo3						
Base Penalty						
.....%—.....%=.....% Penalty @ $ .04 per 1/10th						
TOTAL						
Haulage Allowance 100 Miles 4.51 Wet Tons @ .06 per wet ton mile						27.06
Total U308, V205 and Haulage Payment						130.53

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Union Carbide Nuclear Company, a Division of Union Carbide and Carbon Corporation.

I certify that I hold the A.E.C. Source Material License numbered above.

I hereby transfer to the Union Carbide Nuclear Company, a division of Union Carbide and Carbon Corporation, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

The amount set opposite "Total U308, V205 and Haulage Payment" shown above constitutes the entire amount payable to me in respect of ore deliveries described herein and is accepted by me in full payment thereof.

Voucher Number Date
Check Number 1887 Date 9 21 55
Approved for Payment

Direct to Above

(Mail to Mills Collection)

RECEIVED
NOV 30 1956
D.M.E.A.

DUNFIELD CLAIMS.

LEASED BY

MINERALS INCORPORATED

SCALE : 1" = 1000'

CONTOUR INTERVAL : 100'

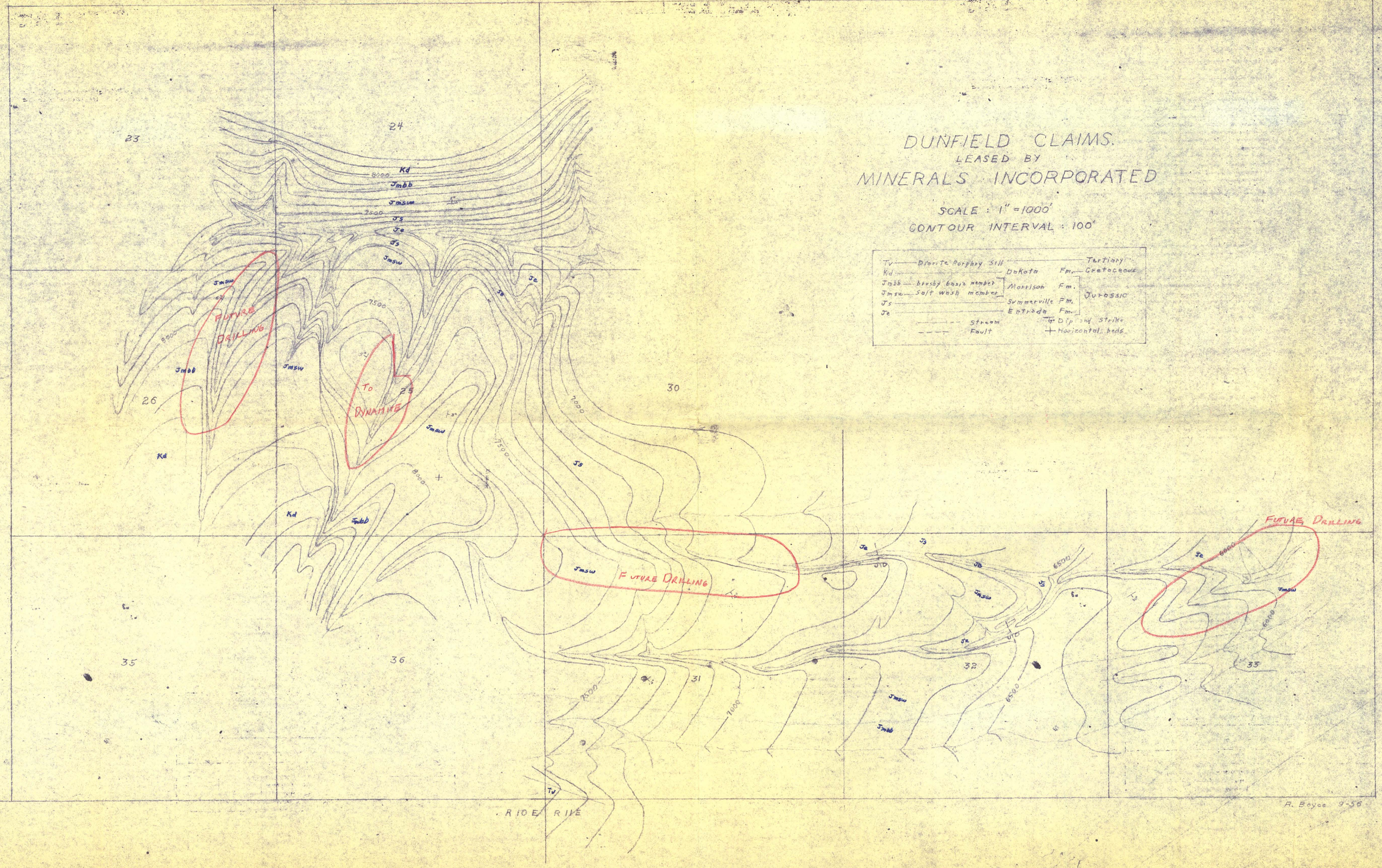
Tv	Diorite Porphyry Sill		Tertiary
Kd	Dakota	Fm.	Cretaceous
Jmbb	Brushy basin member	Morrison Fm.	Jurassic
Jmsw	Salt wash member		
Js	Summerville Fm.		
Je	Entrada Fm.		

Stream

Fault

Dip and Strike

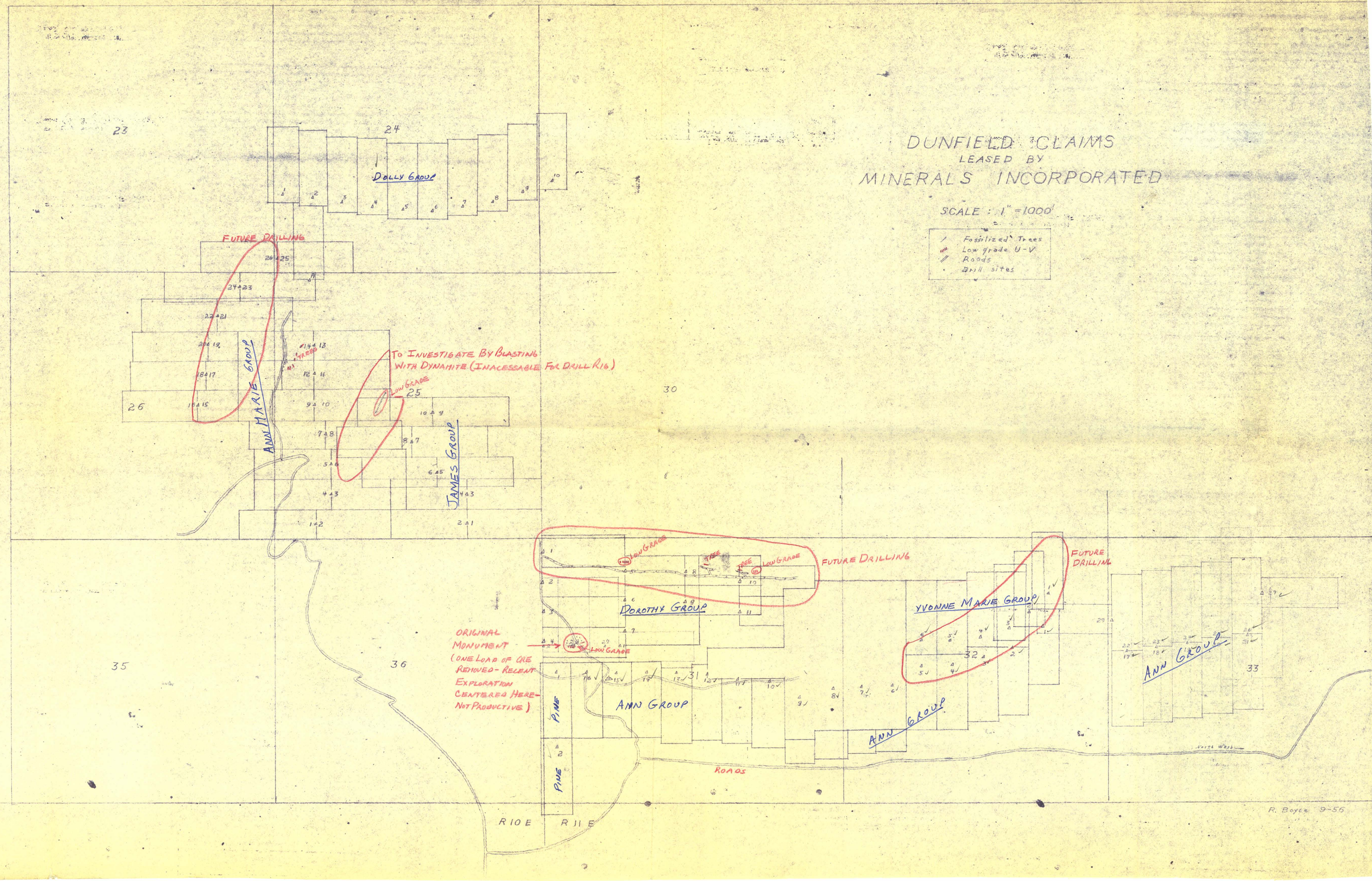
Horizontal beds

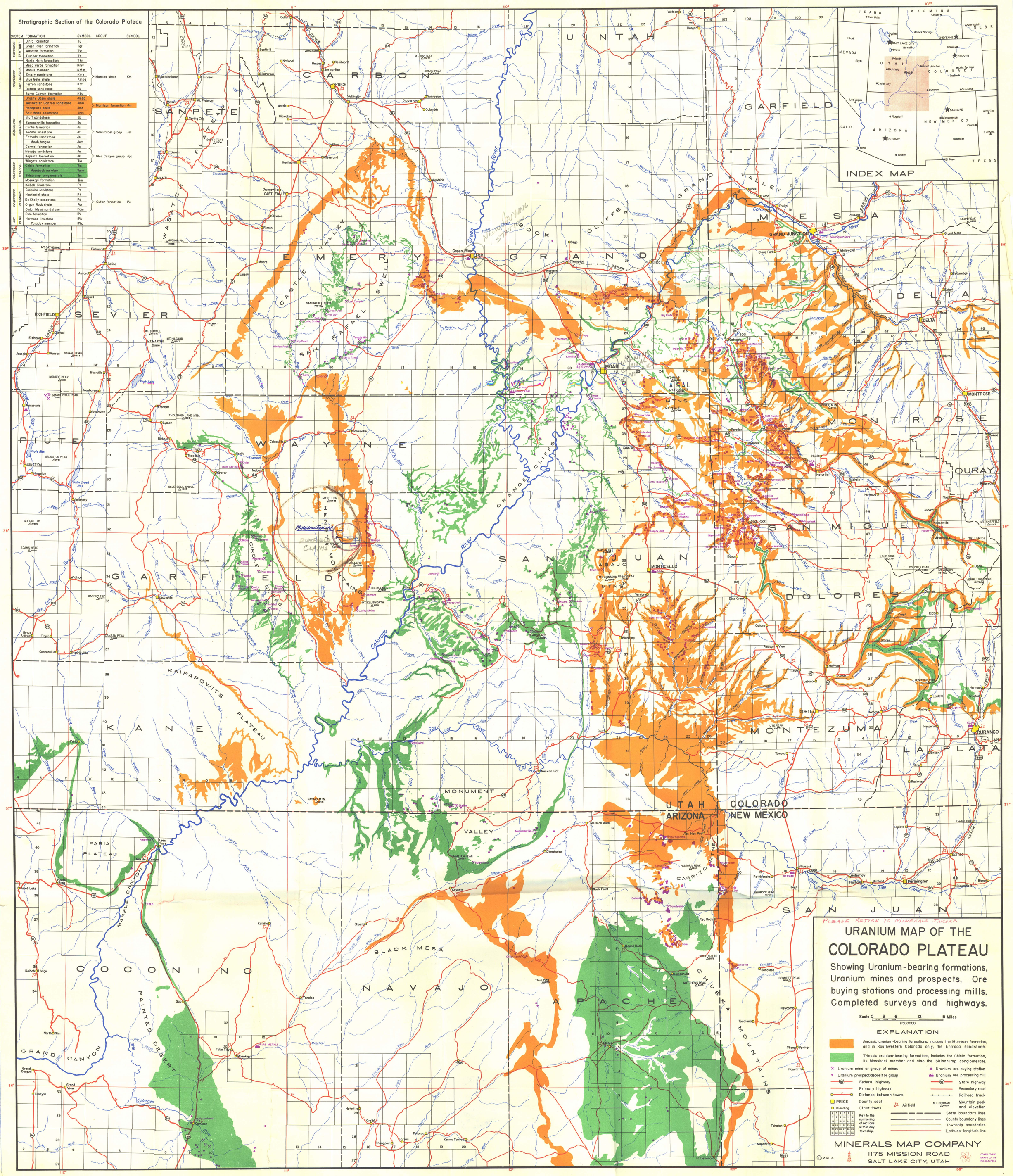


DUNFIELD CLAIMS
LEASED BY
MINERALS INCORPORATED

SCALE : 1" = 1000'

/ Fossilized Trees
Low grade U-V
// Roads
• Drill sites

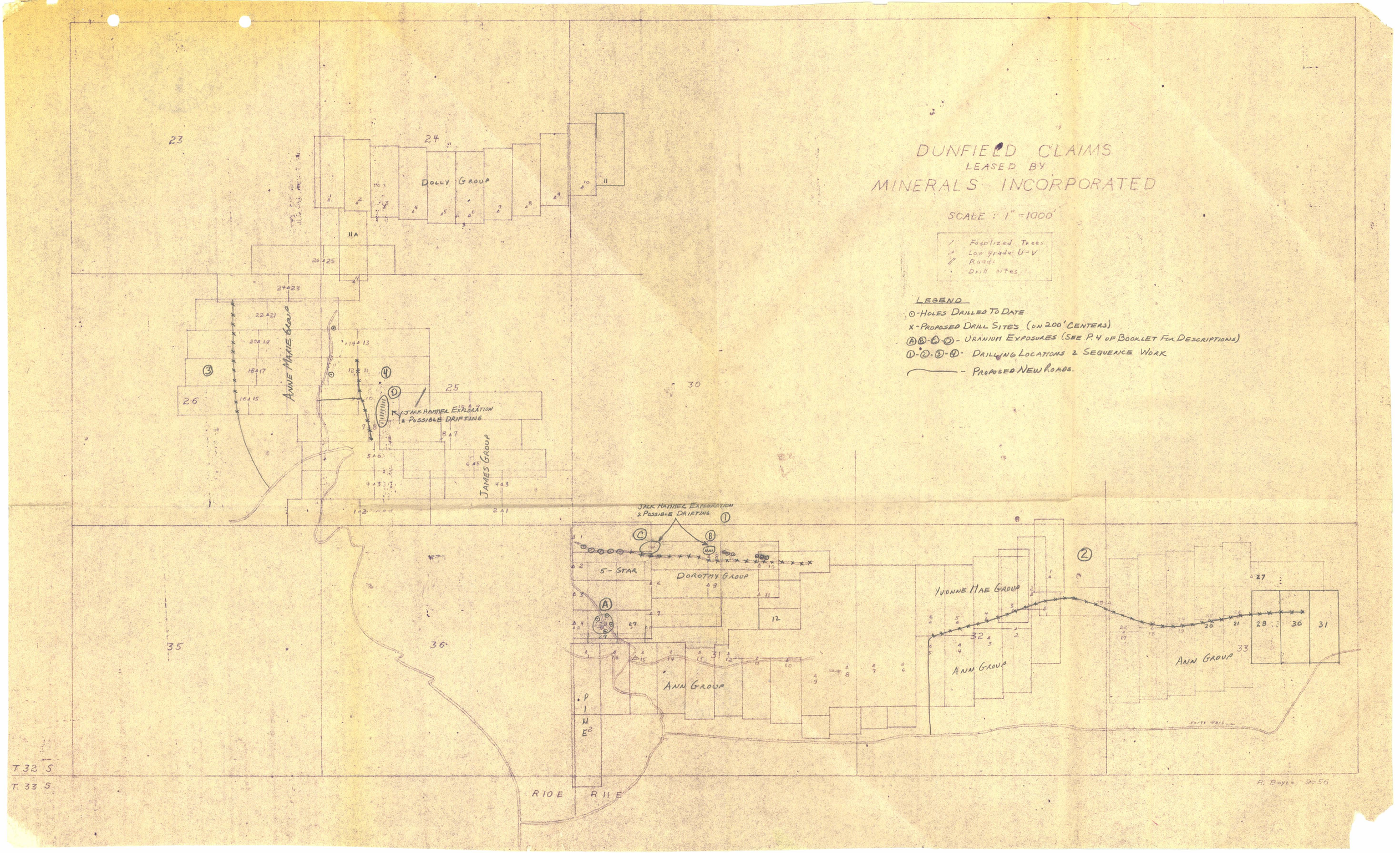



Stratigraphic Section of the Colorado Plateau
SYSTEM FORMATION SYMBOL GROUP SYMBOL
TERTIARY
Uinta formation Tu
Green River formation Tgr
Wasatch formation Tw
Tuscher formation Tt
North Horn formation Tkn
CRETACEOUS
Mesa Verde formation Kmv
Masuk member Kmm
Emery sandstone Kme
Blue Gate shale Kmbg
Ferron sandstone Kmf
Mancos shale Km
Dakota sandstone Kd
Burro Canyon formation Kbc
JURASSIC
Brushy Basin shale Jmbb
Westwater Canyon sandstone Jmw
Recapture shale Jmr
Salt Wash sandstone Jms
Morrison formation Jm
Bluff sandstone Jb
Summerville formation Js
Curtis formation Jc
Todilto limestone Jt
Entrada sandstone Je
Moab tongue Jem
Carmel formation Jc
Navajo sandstone Jn
Kayenta formation Jk
San Rafael group Jsr
Wingate sandstone Jw
Glen Canyon group Jgc
TRIASSIC
Chinle formation Trc
Mossback member Trcm
Shinarump conglomerate Trs
Moenkopi formation Trm
PERMIAN
Kaibab limestone Pk
Coconino sandstone Pc
Hoskinnini shale Ph
De Chelly sandstone Pd
Organ Rock shale Por
Cedar Mesa sandstone Pcm
Cutler formation Pc
PENN.
Rico formation IPr
Hermosa limestone IPh
Paradox member IPho
INDEX MAP
IDAHO
WYOMING
NEVADA
UTAH
COLORADO
CALIF.
ARIZONA
NEW MEXICO
TEXAS
SALT LAKE CITY
DENVER
PHOENIX
SANTA FE
UINTAH
CARBON
SANPETE
GARFIELD
EMERY
GRAND
SEVIER
DELTA
MESA
MONTROSE
PIUTE
WAYNE
OURAY
SAN MIGUEL
GARFIELD
SAN JUAN
DOLORES
KANE
MONTEZUMA
LA PLATA
COCONINO
NAVAJO
APACHE
UTAH
COLORADO
ARIZONA
NEW MEXICO
PRICE
MOAB
MONTICELLO
GRAND JUNCTION
MONTROSE
DURANGO
CORTEZ
Green River
Colorado
San Juan
URANIUM MAP OF THE
COLORADO PLATEAU
Showing Uranium-bearing formations, Uranium mines and prospects, Ore buying stations and processing mills, Completed surveys and highways.
Scale 0 3 6 12 18 Miles
1:500000
EXPLANATION
Jurassic uranium-bearing formations, includes the Morrison formation, and in Southwestern Colorado only, the Entrada sandstone.
Triassic uranium-bearing formations, includes the Chinle formation, its Mossback member and also the Shinarump conglomerate.
Uranium mine or group of mines
Uranium prospect/deposit or group
Federal highway
Primary highway
Distance between towns
PRICE County seat
Blanding Other towns
Key to the numbering of sections within any township.
Uranium ore buying station
Uranium ore processing mill
State highway
Secondary road
Railroad track
Airfield
MT. HERMAN Mountain peak and elevation
State boundary lines
County boundary lines
Township boundaries
Latitude-longitude line
MINERALS MAP COMPANY
1175 MISSION ROAD
SALT LAKE CITY, UTAH
© M.M.Co.
COMPILED AND DRAFTED BY H.A. SALFELD
PLEASE RETURN TO MINERALS INCORP.

DUNFIELD CLAIMS
LEASED BY
MINERALS INCORPORATED

SCALE : 1" = 1000'

/ Fossilized Trees
Low grade U-V
// Roads
. Drill sites.

LEGEND

⊙ - HOLES DRILLED TO DATE
X - PROPOSED DRILL SITES (ON 200' CENTERS)
Ⓐ Ⓑ Ⓒ Ⓓ - URANIUM EXPOSURES (SEE P. 4 OF BOOKLET FOR DESCRIPTIONS)
① ② ③ ④ - DRILLING LOCATIONS & SEQUENCE WORK
——— - PROPOSED NEW ROADS.