DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 4246

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

Exploration

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Cys. Kiilsgaard

Routing Slip

To:	700	Date	4/11/56
To:	Oper. Com	Date	5-3-56
To:	Administrator	Date	5-4-56
To:	Operating Com.	Date	8-30-56
To:	Admn. Det.	Date	9-5-56
To:		Date	
To:		Date	
To:		Date	
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CONTROLLED DOCUMENT

Please reply to
35 No. Raymond Avenue
Pasadena 1, California

ALTURA MINING COMPANY
Uranium Property Development

SALT LAKE CITY, UTAH PASADENA, CALIFORNIA

CARSON CITY, NEVADA

U. S. Dept. of the Interior
Defense Minerals Exploration Admin.
Washington 25, D. C.

Gentlemen:

Re: Docket DMEA-4246
Red Hot Claims
San Juan Co., Utah

We enclose application for aid in an exploration project, pursuant to DMEA Order 1, under the Defense Production Act of 1950, as amended.

You will note from the above mentioned Docket number which you have on file that our Company has previously applied (March 29, 1956). Since that time, we have done considerable more work on the property, and wish to re-apply for aid on the same group of claims. Additional field work, excavating, and grading indicates without doubt the presence of very good ore reserves in quantities that would justify further development of the property.

May we hear from you at the earliest possible date?

Very truly yours,

ALTURA MINING COMPANY

By /s/ O. D. Sisson
O. D. Sisson, Pres.

ODS:psv
Encl. 4
cc - W. M. Traver
Field Team, Region III
Denver, Colorado

c
o
p
y

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED JUL 29 1957 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. .....
Metal or Mineral .....
Date Received .....
Estimated Cost .....
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: ALTURA MINING CO., a corporation (Nevada) licensed to do business in Utah. O. D. Sisson, Pres. 1013 San Rafael St., San Leandro/ Calif.
Jack Cooper, V/Pres. 647 S. Bixel, L.A., Calif.
Roscoe G. Neiger, Sec. 500 N. 2nd, Alhambra, Calif.

(*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 Letter attached

(*b*) State any mine name by which the property is known. none

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(*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.

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated July 25, 1957

ALTURA MINING COMPANY
(Applicant)

By O.D.Sisson
O. D.Sisson, President

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

Please reply to
35 No. Raymond Avenue
Pasadena 1, California

ALTURA MINING COMPANY
Uranium Property Development

SALT LAKE CITY, UTAH PASADENA, CALIFORNIA

CARSON CITY, NEVADA

U. S. Dept. of the Interior
Defense Minerals Exploration Admin.
Washington 25, D. C.

Gentlemen:

Re: Docket DMEA-4246
Red Hot Claims
San Juan Co., Utah

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Very truly yours,

ALTURA MINING COMPANY

By /s/ O. D. Sisson
O. D. Sisson, Pres.

ODS:psv
Encl. 4
cc - W. M. Traver
Field Team, Region III
Denver, Colorado

c
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y

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.

RECEIVED JUL 29 1957 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. .....
Metal or Mineral .....
Date Received .....
Estimated Cost .....
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: ALTURA MINING CO., a corporation (Nevada) licensed to do business in Utah. O. D. Sisson, Pres. 1013 San Rafael St., San Leandro, Calif.
Jack Cooper, V/Pres. 647 S. Bixel, L.A., Calif.
Roscoe G. Meiger, Sec. 500 N. 2nd, Alhambra, Calif.

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(*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.

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Explain in detail on acompanying paper.

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Dated July 25, 1957

ALTURA MINING COMPANY
(Applicant)

By O. D. Sisson
O. D. Sisson, President

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U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

Please reply to
35 No. Raymond Avenue
Pasadena 1, California

ALTURA MINING COMPANY
Uranium Property Development

SALT LAKE CITY, UTAH PASADENA, CALIFORNIA

CARSON CITY, NEVADA

U. S. Dept. of the Interior
Defense Minerals Exploration Admin.
Washington 25, D. C.

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Red Hot Claims
San Juan Co., Utah

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ODS:psv
Encl. 4
cc - W. M. Traver
Field Team, Region III
Denver, Colorado

c
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MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED JUL 29 1957 DMEA

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. .....
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Date Received .....
Estimated Cost .....
Participation (Government %) .....

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Jack Cooper, V/Pres. 647 S. Bixel, L.A., Calif.
Roscoe G. Meiger, Sec. 500 N. 2nd, Alhambra, Calif.

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Dated July 25, 1957

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(Applicant)

By O. D. Sisson
O. D. Sisson, President

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U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

TELEPHONE
RYAN 1-8437

PLEASE REPLY TO
35 NO. RAYMOND AVENUE
PASADENA 1, CALIFORNIA

ALTURA MINING COMPANY

Uranium Property Development

SALT LAKE CITY, UTAH • CARSON CITY, NEVADA • PASADENA, CALIFORNIA

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 2 1957

DATE	INITIALS	CODE
8-2	C	220
8-2	~~FLK~~	700
		225

July 31, 1957

U. S. Dept. of the Interior
DMEA
Washington, D. C.

Re: DMEA ~~4246~~
Red Hot Claims
San Juan Co., Utah

Gentlemen:

Kindly disregard our letter to you dated July 25, 1957 with which we enclosed 4 copies of application for aid.

It was the intention of this office to ask for another contract to ship uranium ore, not ask for DMEA aid.

We trust that we have not inconvenienced you.

Very truly yours,

ALTURA MINING COMPANY

By O D Sisson
O. D. Sisson, Pres.

ODSPV

cc - W. M. Traver
Field Team, Region III
Denver, Colo.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/30	Knouse	700
7/30	Ellis	700
7/30	P.K.	220 ~~[illegible]~~
		700
		~~[illegible]~~

JUL 30 1957

Mr. O. D. Sisson, President
Altura Mining Company
35 North Raymond Avenue
Pasadena 1, California

Re: Docket No. DMEA-4246 (Uranium)
Red Hot Group of Claims
San Juan County, Utah

Dear Mr. Sisson:

In order for us to process the application submitted with your letter, dated July 25, 1957, or reinstate the subject application, you should furnish a supplement for each copy (original and three copies) of the application giving the following information:

1. Describe in detail the work that has been completed since the examination was made of your property by the DMEA field examiners. This information should include a detailed description of the work completed, e.g., (a) drill holes, with drill logs; trenching; drifting; raising; crosscutting, etc., and (b) exposures of mineralization, with assay results of samples from the exposures, and certified copies of assay certificates;

2. On a map or sketch drawn to scale, you should show the locations of (a) work completed on the property, (b) proposed work, and (c) extent of mineralized exposures, including locations of samples, indicating sample numbers shown on the assay certificates, all in relation to the mining claim boundaries;

3. Describe the work you propose to do to explore the property, and furnish detailed costs of the proposed work. You should also furnish any additional local geological information as justification for the proposed work; and

4. If you propose to explore the property by means of drilling, you should furnish bids from three drilling contractors covering the proposed drilling.

Upon receipt of the above information, we will continue processing your application.

Sincerely yours,

STGNED

Ernest Wm. Ellis, Director
Division of Rare and
Miscellaneous Metals

8623

Note to Region III:
Inasmuch as Applicant furnished only MF-103 forms, in quadruplicate, with no substantiating material, we are retaining the FT copy of the application until the information requested is received.

FLKnouse/gla/izm 7-30-57
cc to: Mr. Knouse
Admr.'s Reading File
DMEA FT Reg. 3 (2)
THKiilsgaard, 5224

TELEPHONE
RYAN 1-8437

PLEASE REPLY TO
35 NO. RAYMOND AVENUE
PASADENA 1, CALIFORNIA

ALTURA MINING COMPANY

Uranium Property Development

SALT LAKE CITY, UTAH • CARSON CITY, NEVADA • PASADENA, CALIFORNIA

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 29 1957

DATE	INITIALS	CODE

July 25, 1957

U. S. Dept. of the Interior
Defense Minerals Exploration Admin.
Washington 25, D.C.

Gentlemen:

Re: Docket DMEA 4246
Red ~~Hot Claims~~
San Juan Co., Utah

We enclose application for aid in an exploration project, pursuant to DMEA Order 1, under the Defense Production Act of 1950, as amended.

You will note from the above mentioned Docket number which you have on file that our Company has previously applied (March 29, 1956). Since that time, we have done considerable more work on the property, and wish to re-apply for aid on the same group of claims. Additional field work, excavating, and grading indicates without doubt the presence of very good ore reserves in quantities that would justify further development of the property.

May we hear from you at the earliest possible date?

Very truly yours,

ALTURA MINING COMPANY

By O.D. Sisson
O.D. Sisson, Pres.

ODS:psv
Encl. 4
cc - W. M. Traver
Field Team, Region III
Denver, Colorado

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED JUL 29 1957 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. .....
Metal or Mineral .....
Date Received .....
Estimated Cost .....
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: ALTURA MINING CO., a corporation (Nevada) licensed to do business in Utah. O. D. Sisson, Pres. 1013 San Rafael St., San Leandro/ Calif.
Jack Cooper, V/Pres. 647 S. Bixel, L.A., Calif.
Roscoe G. Neiger, Sec. 500 N. 2nd, Alhambra, Calif.

(*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 Letter attached

(*b*) State any mine name by which the property is known. none

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise owner

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

(*e*) If you own the land, describe any liens or encumbrances on it .....

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

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

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

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

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

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you w[illegible] to explore .....

.....

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated July 25, 1957

ALTURA MINING COMPANY
(Applicant)

By O. D. Sisson
O. D. Sisson, President

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

700

FILE COPY

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

OCT 24 1956

Mr. Richard F. Harless
Attorney at Law
1410 North Central Avenue
Phoenix, Arizona

Re: Docket No. DMEA-4246 (Uranium)
Altura Mining Company
Red Hot Group of Claims
San Juan County, Utah

Dear Mr. Harless:

This is in response to your letter, dated October 19, 1956, addressed to the Acting Administrator, in which you request information from our field examiner's report on the subject property.

I am sorry to have to inform you that reports made by the Government's field men are for the confidential use of the Government only, and are not made available to the applicant. Therefore, we are not permitted to furnish the requested information.

Sincerely yours,

C. O. Mittendorf

Administrator

FLKnouse/izm 10-23-56
cc to: Docket
Code 700
Mr. Knouse
Admr.'s Reading File
DMEA Field Team, Reg. III (2)
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.S.L.

10/22/56 gla

RICHARD F. HARLESS
ATTORNEY AT LAW
1410 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA
ALPINE 2-1148

October 19, 1956

RECEIVED
OCT 22 1956

AIR MAIL

Mr. Frank E. Johnson
Acting Administrator
Defense Mineral Exploration Administration
Department of the Interior
Washington, D. C.

Re: Docket DMEA 4246 (Uranium)
Altura Mining Company (Red Hot Group of Claims) San Juan County, Utah

Dear Mr. Johnson:

I am informed by Mr. J. W. Townsend of the Denver office of Defense Mineral Exploration Administration that notification of final disposition of the above entitled application was given on September 5, 1956, by your office. I am one of the attorneys for the applicant and my client would like very much to have information concerning the field report for future planning. Would you please supply us with any information concerning the findings of your field officers.

Very truly yours,

Richard F. Harless

RFH:jh

Richard F. Harless

10-19-56

RECEIVED
OCT 19 1956

224 New Customhouse
Denver 2, Colorado

October 15, 1956

Mr. Richard F. Harless
Attorney at Law
1410 North Central Avenue
Phoenix, Arizona

Re: Docket DMEA 4246 (Uranium)
Altura Mining Company (Red Hot Group of Claims) San Juan County, Utah

Dear Mr. Harless:

This will acknowledge receipt of your letter, dated October 11, 1956, requesting the status of the captioned application.

A review of our files shows that the Applicant was notified of the final disposition of the captioned docket on September 5, 1956, by Frank E. Johnson, Acting Administrator, DMEA.

Yours very truly,

J. W. Townsend

J. W. Townsend
Acting Executive Officer
DMEA Field Team, Region III

HMC:ytl

cc: Sec. Op. Comm. (2)
Docket 4246
Chron.

RICHARD F. HARLESS
ATTORNEY AT LAW
1410 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA
ALPINE 2-1148

RECEIVED
OCT 19 1956

October 11, 1956

DMEA
DEPARTMENT OF THE INTERIOR
OCT 15 1956
REGION III
DENVER, COLORADO

Defense Minerals Exploration Administration
Department of the Interior
224 New Custom House
Denver, Colorado

In Re: DMEA Loan Application
Docket No. 4246
Altura Mining Company
35 No. Raymond Ave.
Pasadena, California

Dear Sir:

The above entitled applicant has requested that I inquire as to the status of the application. It is important to us to have all information concerning the field report in order to assist us in our future planning.

An early reply will be appreciated.

Very truly yours,

Richard F. Harless

Richard F. Harless

RFH:jh

RECEIVED
OCT 19 1956

224 New Customhouse
Denver 2, Colorado

October 15, 1956

Mr. Richard F. Harless
Attorney at Law
1410 North Central Avenue
Phoenix, Arizona

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Altura Mining Company (Red Hot Group of Claims) San Juan County, Utah

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Yours very truly,

J. W. Townsend

J. W. Townsend
Acting Executive Officer
DMEA Field Team, Region III

HMC:ytl

cc: Sec. Op. Comm. (2)
Docket 4246
Chron.

RICHARD F. HARLESS
ATTORNEY AT LAW
1410 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA
ALPINE 2-1148

RECEIVED
OCT 19 1956
DMEA
DEPARTMENT OF THE INTERIOR
OCT 15 1956
DENVER, COLORADO

October 11, 1956

Defense Minerals Exploration Administration
Department of the Interior
224 New Custom House
Denver, Colorado

In Re: DMEA Loan Application
Docket No. 4246
Altura Mining Company
35 No. Raymond Ave.
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An early reply will be appreciated.

Very truly yours,

Richard F. Harless

Richard F. Harless

RFH:jh

Surname copy

700

FLKnouse
Ellis
Williams
Bishop
Selfridge

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

SEP - 5 1956

Mr. O. D. Sisson, President
Altura Mining Company
35 North Raymond Avenue
Pasadena, California

Re: Docket No. DMEA-426 (Uranium)
Red Hot Group of Claims
San Juan County, Utah

Dear Mr. Sisson:

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

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

Careful study of all our information, although noting some uranium ore on your property, indicates to us 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 Program and for bringing your property to our attention.

Sincerely yours,

Frank E. Johnson
by [illegible]
ACTING Administrator

FLKnouse/gla
8-30-56
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3621
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Knouse
DMEA Field Team, Region III (2)

R.C.S.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

DOCKET COPY

August 29, 1956

Summary of Proposed Project

Object: Denial of application for an exploration project.

Docket No.: DMEA-4246

Commodity: Uranium

Applicant: Altura Mining Company
35 North Raymond Avenue
Pasadena, California

Property: Consists of 36 contiguous unpatented lode mining claims as follows: Red Hot Nos. 1 through 36, in secs. 17, 18, 19, and 20, T. 38 S., R. 25 E., S.L.M.& B., San Juan County, Utah. The claims are owned by the Applicant.

Date of Application: March 29, 1956.

Proposed Work: A two-stage core and non-core drilling program of 60 holes aggregating 15,000 feet, or 3,250 feet of core and 11,750 feet of non-core drilling, at a total estimated cost of $46,225.00. Stage I consisted of drilling two rows of holes, or 30 holes (250 feet of core and 7,250 feet of non-core drilling), at right angles, with holes spaced 400 feet apart along the rows. Stage II consisted of drilling 30 holes (3,000 feet of core and 4,500 feet of non-core drilling) of offset drill holes. Average depth of the holes would be 250 feet.

Exploration consists of two miles of access road and of stripping by bulldozer of the top of a knoll from which 254 tons were produced that averaged 0.156% U_3O_8 and 0.061% V_2O_5 from the Brushy Basin member of the Morrison formation.

Stage I drilling - 30 holes

Cost of proposed work:

Independent contracts:

250 feet of core drilling @ $3.00/ft.	$750.00	
7,250 feet non-core drilling @ $2.00/ft.	14,500.00	
Hole probing - 30 holes @ $25.00 each	750.00	
Assaying	100.00	
		$16,100.00

Carried forward		$16,100.00
Offset drilling - 30 holes		
Independent Contracts		
Total cost (lumped) 3,000 feet of core and 4,500 feet of non-core drilling, including probing and assaying	$25,000.00	
Roads to drill sites	400.00	
Total		$25,400.00
Labor and Supervision		
Supervision and consulting fees @ $1,500/mo. - 3 mos.		4,500.00
Operating Materials & Supplies		
Gas, oil, lubricants for jeep - 3 mos. @ $75/mo.		225.00
Total Estimated Cost of Project		$46,225.00
Government Participation @ 75%		$34,668.75
Estimated cost per foot of drilling		$3.08

Field Team Report: August 7, 1956 (Joint report by Howard F. Albee, USGS, and Carl Belser, USBM)

The Red Hot Group of claims are located on the east side of Montezuma Canyon, and is in a large area of shallow depression into which the strata dips gently from the north, east, and west. The property is largely underlain by rocks of the Brushy Basin, Westwater Canyon, and Salt Wash members of the Jurassic Morrison formation.

Within the Montezuma area all the better known ore occurrences are in the Salt Wash member, scattered through four, and locally five, separate ore horizons. The ore is in the form of scattered thin lenses and pods and the grade of ore, in general, is low. AEC drilling several miles north revealed that ore bodies are small and scattered and rarely continuous throughout the vertical range of mineralization in the drill hoes. The Salt Wash outcrops on the property are not mineralized.

The production from the property was from a horizon about 100 feet above the Brushy Basin-Westwater contact. The ore-bearing material includes claystone, ~~and~~ siltstone and chert. The mineralization associated with the claystone and siltstone is within the material and is also in the form of coating of yellow uranium minerals along fractures. It is very low grade. The highest radioactivity was from the mineralized chert. The entire mineralized area is composed of very thin beds of the ore-bearing rock which has been mined by shallow stripping. There are no known ore reserves. Occurrences of mineralized material in small ore bodies are not uncommon in the Brushy Basin member; however, none have been proven to be of significant size, and are low grade.

The lenticular nature of the ore bodies, the spottiness of occurrences, the wide stratigraphic range, and the general low tenor of the ore found in the area render the area unsuitable for effective exploration. The closest project with a recorded production is about five miles north of these claims.

Therefore, it is concluded that the probability of finding significant uranium ore bodies on these claims in the Brushy Basin member, is not promising. Salt Wash member outcrops on the property are not mineralized, and uranium ore bodies found in this member, throughout the general area, are small, scattered, and low grade. These conditions render the area unsuitable for effective exploration.

The examining team recommends that the application be denied. The Field Team concurs with the examining team's recommendation.

Comments of Commodity Specialists:

U. S. Geological Survey - W. P. Williams, August 22, 1956.

Concurs with Field Team's recommendation.

U. S. Bureau of Mines - James Paone, August 22, 1956.

Concurs with Field Team's recommendations.

Rare and Miscellaneous Metals Division - F. L. Knouse, August 29, 1956.

The ore produced from this property has been from thin, low-grade bodies in the Brushy Basin member, no significant ore bodies have been found in this member, and the probability of finding significant ore bodies on this property in this member is not promising. The exposures of the Salt Wash member on these claims show NO evidence of uranium mineralization. Exploration drilling of the Salt Wash member in the general area has discovered only small, erratically-spaced, disconnected ore bodies, ~~and the probability of discovering significant ore bodies in this member on the property is not promising~~. Therefore, it is recommended that the application for Government exploration assistance should be denied.

Conclusions:

A review of all our information relating to the proposed project indicates that the probability of making a significant discovery is not sufficiently promising for Government participation. Therefore, the application should be denied.

Ernest Wm. Ellis

Ernest Wm. Ellis

K. 8/23/56

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

August 22, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: James Paone, Bureau of Mines Alternate Member
Uranium Commodity Committee

Subject: Report of Examination, DMEA Docket 4246 (Uranium), Altura Mining Company (Red Hot claims) San Juan County, Utah

I have reviewed the report of examination, DMEA Docket 4246, Altura Mining Company (Red Hot claims) San Juan County, Utah, dated August 7 and received in this office August 17, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The examining team recommend that the application for exploration assistance be denied because the nature of the ore bodies and the characteristics of the stratigraphy render the area unsuitable for effective exploration.

We concur in the denial.

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

James Paone
James Paone

RECEIVED
AUG 23 1956

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

August 22, 1956

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BUREAU OF MINES
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James Paone

8/22/56 gla

IN REPLY REFER TO:

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

August 22, 1956

Memorandum

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

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

Subject: Review of field examination report, DMEA 4246 (uranium), Altura Mining Company, Red Hot claims, Montezuma Canyon district, San Juan County, Utah

The field examiners' report contains the following statement:

"The lenticular nature and wide stratigraphic range of the ore bodies, the spottiness of occurrences, and the general low tenor of the ore found in Montezuma Canyon, render the area unsuitable for effective exploration."

I agree completely with that statement. Many additional unfavorable features in the vicinity of the property lead me to concur with the recommendation for denial of the application.

W. P. Williams

W. P. Williams

IN REPLY REFER TO:

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

August 22, 1956

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W. P Williams

WPWilliams:jeh
G-8/22/56
cc: Director's reading 4212
Branch reading 4212
DMEA (3)
Docket file
J. E. Crawford, 3641 Int.
J. O. Hosted, 3210 GSA

IN REPLY REFER TO:

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

August 22, 1956

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cc: Director's reading 4212
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DMEA (3)
Docket file
J. E. Crawford, 3641 Int.
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IN REPLY REFER TO:

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

August 22, 1956

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DMEA (3)
Docket file
J. E. Crawford, 3641 Int.
J. C. Hosted, 3210 GSA

8/20/56

RECEIVED
AUG 15 1956

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

August 13, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 4246 (Uranium) Altura Mining Company (Red Hot claims) San Juan County, Utah

Enclosed are the original and three copies of a joint engineering and geologic Report of Examination on the subject property.

The field examiners believe that the area is unsuitable for effective exploration, and they recommend that the application be denied. We concur in this recommendation since no production from the Brushy Basin has proved to be of a significant size and drilling behind the Salt Wash outcrop would be essentially blind drilling at an average depth of about 250 feet.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
8-17-56
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

IN REPLY REFER TO:

MINERAL DEPOSITS
DMEA
RECEIVED
JUL 26 1956

RECEIVED
AUG 15 1956

U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

DMEA
Rec'd
AUG 9 1956

TRANSMITTED
AUG 13 1956

July 25, 1956

Memorandum

BUREAU OF MINES
Denver, Colorado

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman
J. F. Shaw

From: Howard F. Albee for J. William Hasler

Subject: Transmittal of geologic report of examination, docket DMEA 4246 (Uranium) Altura Mining Company, Red Hot claims, San Juan County, Utah.

The Altura Mining Company applied to the Defense Minerals Exploration Administration for assistance to explore for uranium in the Salt Wash member of the Morrison formation in the Montezuma Canyon area, San Juan County, Utah.

The examination was made July 10, 1956, by Carl Belser, U. S. Bureau of Mines, and Howard F. Albee, U. S. Geological Survey, accompanied by James Perkins of Blanding, Utah.

The group of claims lies in Montezuma Canyon, some five miles south of the southernmost uranium production from the Salt Wash sandstone member of the Morrison formation. The Morrison formation on the claims consist of the Salt Wash, Westwater Canyon, and Brushy Basin members. Only about 65 feet of Salt Wash is exposed. No mineralized material is known in the Salt Wash outcrop on the claims.

About 254 tons of marginal uranium ore has been shipped from the property. The ore was stripped from the surface of the Brushy Basin about 100 feet above the Brushy Basin-Westwater contact. No production from the Brushy Basin has proved to be of a significant size.

Drilling behind the Salt Wash outcrop would average about 250 feet in depth and would be essentially blind drilling.

The lenticular nature and wide stratigraphic range of the ore bodies, the spottiness of occurrences, and the general low tenor of the ore found in the Montezuma Canyon area render the area unsuitable for effective exploration. The examining team, therefore, recommends denial of the application. I concur with the conclusions and recommendations of the examining team.

Reviewed by
DMEA OPERATING COMMITTEE
8-17-56
(Date)

DMEA 4246 7/25/56

Enclosed are the original application and 10 copies of figure 2 for inclusion in the examination report.

Howard F. Albee
For J. William Hasler,
Geologist

Enclosures

RECEIVED
AUG 15 1956

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

CONFIDENTIAL
not for public quotation
or inspection

TRANSMITTED
AUG 13 1956

DMEA 4246

Altura Mining Company

Red Hot Group

San Juan County, Utah

Uranium

Joint Engineering and Geological Report

by

Howard F. Albee, Geologist
Geological Survey

Carl Belser, Mining Engineer
Bureau of Mines

August 7, 1956

Reviewed by
DMEA OPERATING COMMITTEE
8-17-56
(date)

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2. Geologic map showing the Red Hot group of claims, Altura Mining Company, San Juan County, Utah. DMEA 4246..... 3

DMEA 4246

RECEIVED
AUG 15 1956

ALTURA MINING COMPANY
RED HOT GROUP
SAN JUAN COUNTY, UTAH

INTRODUCTION AND SUMMARY

Altura Mining Company, 35 North Raymond Avenue, Pasadena, California, made application on March 29, 1956, to the Defense Minerals Exploration Administration to explore for uranium on the Red Hot group of claims in the Montezuma Canyon area. The application, DMEA 4246, requested aid in drilling 60 holes containing about 3,250 feet of core drilling and 11,750 feet of noncore drilling at a total estimated cost of $46,225.

The claims were examined on July 10, 1956, by an examining team from the U. S. Bureau of Mines and the U. S. Geological Survey.

The property consists of a solid block of 36 unpatented claims on the east side of Montezuma Creek in secs. 17, 18, 19, and 20, T. 38 S., R. 25 E., S.L.M., San Juan County, Utah. Development work consists of a 2-mile access road and a shallow surface pit. Production totals 254.322 tons averaging .156 percent U_3O_8 and .061 percent V_2O_5.

The exposed rocks, in ascending order are the Morrison formation of Jurassic age and the Burro Canyon and Dakota

formations of Cretaceous age. The Morrison formation on the claims consists of the Salt Wash, Westwater Canyon, and Brushy Basin members. About 65 feet of Salt Wash is exposed and no uranium mineralization has been found in this formation on the claims.

The ore bodies found on the claims occurred in the Brushy Basin member; they are not of significant size.

Any exploration behind the Salt Wash outcrop would require drill holes about 250 feet deep which would be essentially blind drilling. The lenticular nature and wide stratigraphic range of the ore bodies, the spottiness of occurrences, and the general low tenor of the ore found in Montezuma Canyon render the area unsuitable for effective exploration. The examining team, therefore, recommends denial of the application.

ACKNOWLEDGMENTS

The examining team was accompanied by Donald P. Elston, Geological Survey geologist, and James A. Perkins, who represented the applicant.

The Atomic Energy Commission was consulted about the merits of the project before the examination was made.

LOCATION, TOPOGRAPHY, AND CLIMATE

The property consists of 36 unpatented claims in a solid block in secs. 17, 18, 19, and 20, T. 38 S., R. 25 E., S.L.M., San Juan

County, Utah (figs. 1 and 2). The claims are on the east side of Montezuma Creek at altitudes ranging from 3,700 feet to 4,400 feet.

A 2-mile dirt access road connects the property with the county road in Montezuma Canyon from whence it is 21 miles west to Blanding and 35 miles northwest to Monticello. The nearest railroad is the Denver and Rio Grand Western at Thompson, Utah, 131 miles to the north.

Labor and supplies can be obtained from Blanding or Monticello. The country is classified as semi-arid but water for drilling purposes is available from three artesian wells. Pinon pine, suitable for some mining uses, grows on nearby hills.

HISTORY AND PRODUCTION

Prospecting for vanadium and uranium was active in Montezuma Canyon following the building of the C.C.C. road before World War II. As a whole, deposits discovered have been small and low grade.

The Red Hot claims were located on August 15 and 16, 1954, by R. Perkins and Carl Mahon. Mining of a deposit in the Brushy Basin member on the Red Hot No. 12 claim started in November 1954 and was terminated in December 1955. A total of 254.322 tons averaging .156 percent U_3O_8 and .061 percent V_2O_5 was shipped. The claims were later transferred to the Altura Mining Company.

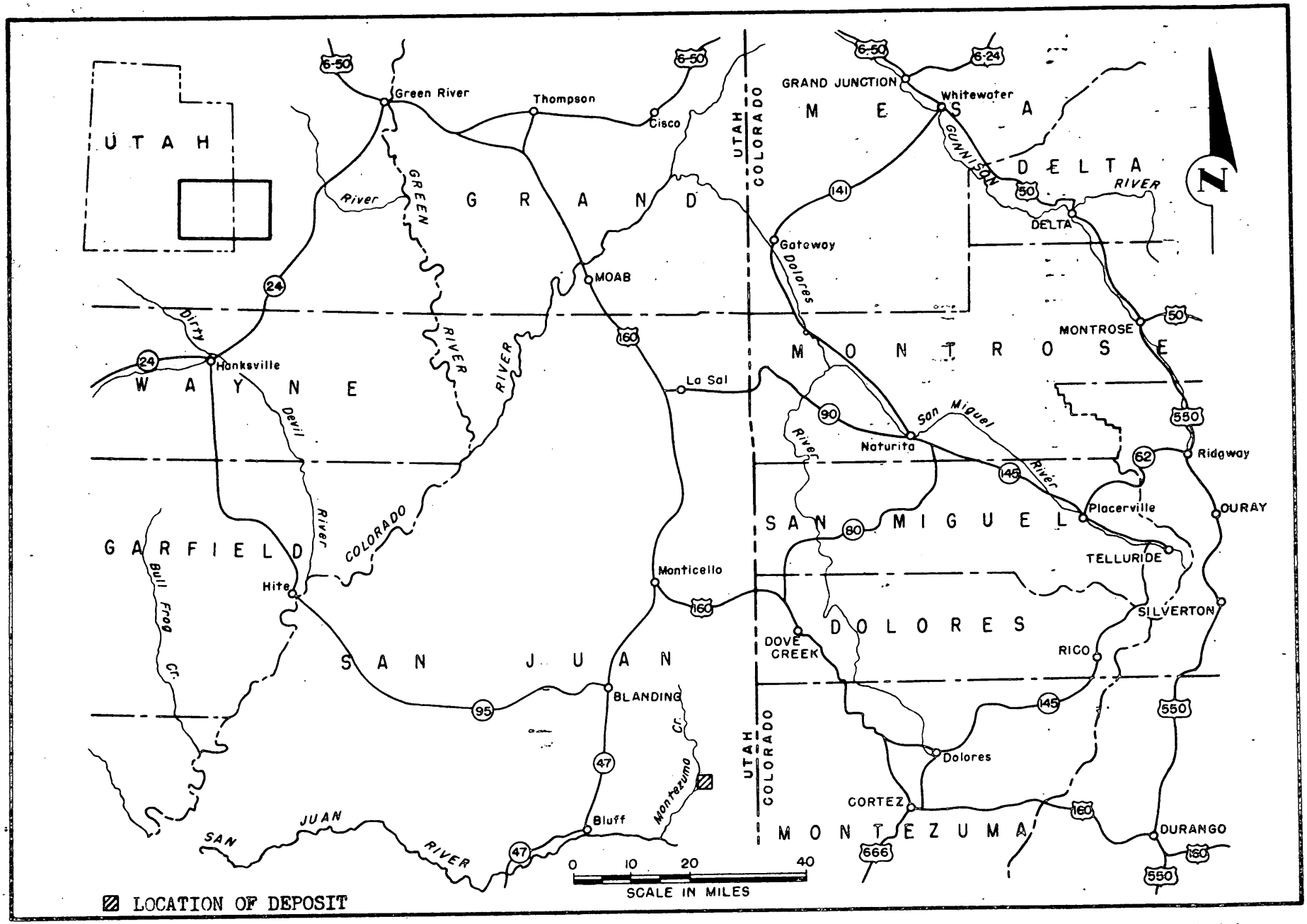
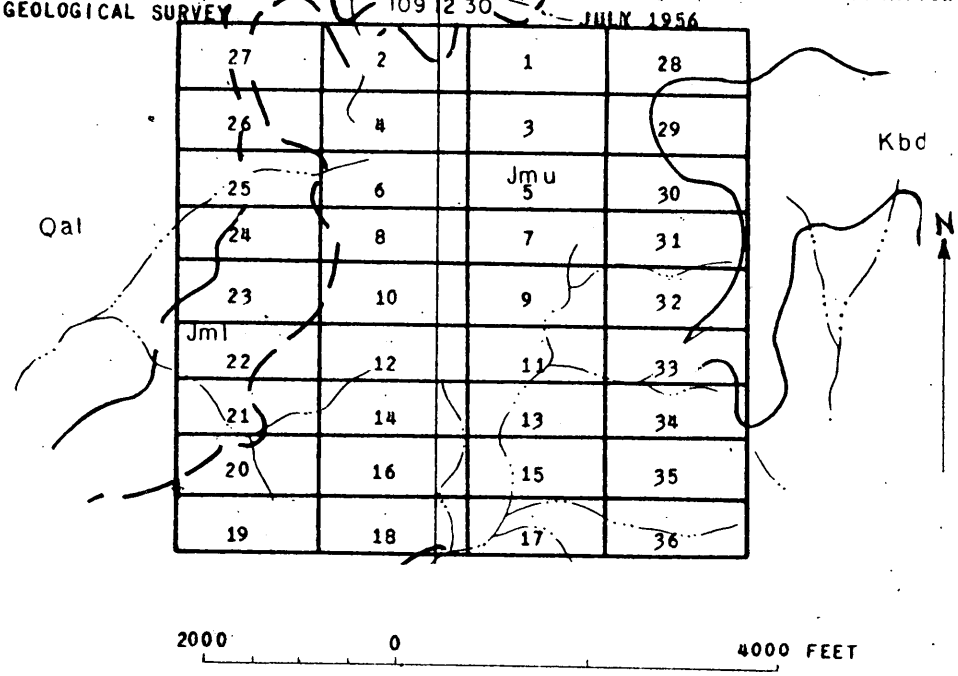


FIGURE 1 - LOCATION MAP, RED HOT GROUP, ALTURA MINING COMPANY, SAN JUAN COUNTY, UTAH. DMEA 4246

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 4246



EXPLANATION

Qal — QUATERNARY ALLUVIUM

Kbd — CRETACEOUS BURRO CANYON FORMATION AND DAKOTA SANDSTONE, UNDIFFERENTIATED

JURASSIC MORRISON FORMATION:

Jmu — Jmu UPPER (BRUSHY BASIN MEMBER)

Jml — Jml LOWER (SALT WASH AND WESTWATER CANYON MEMBERS)

GEOLOGIC CONTACT

Note: CLAIM BOUNDARIES FROM APPLICANTS MAP. GEOLOGIC BASE MAP FROM U.S.G.S. PHOTOGEOLOGIC MAP ANETH-2.

FIGURE 2.--GEOLOGIC MAP SHOWING THE RED HOT GROUP OF CLAIMS, ALTURA MINING COMPANY, SAN JUAN COUNTY, UTAH.

OWNERSHIP AND EXTENT

The Red Hot claims are recorded in the records of the County Recorder of San Juan County, as follows:

Claim	Book	Page	Date Located	Locator
Red Hot 1	151	71	8/15/54	R. Perkins and C. Mahon
" " 2	151	71	"	" " " "
" " 3	151	72	"	" " " "
" " 4	151	72	"	" " " "
" " 5	151	73	"	" " " "
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" " 19	153	89	"	" " " "
" " 20	153	90	"	" " " "
" " 21	153	90	"	" " " "
" " 22	153	91	"	" " " "
" " 23	153	91	"	" " " "
" " 24	153	92	"	" " " "
" " 25	153	92	"	" " " "
" " 26	153	93	"	" " " "
" " 27	153	93	"	" " " "
" " 28	153	94	"	" " " "
" " 29	153	94	"	" " " "
" " 30	153	95	"	" " " "

Claim	Book	Page	Date Located	Locator
Red Hot 31	153	95	8/16/54	R. Perkins and C. Mahon
" " 32	153	96	"	" " " "
" " 33	153	96	"	" " " "
" " 34	153	97	"	" " " "
" " 35	153	97	"	" " " "
" " 36	153	98	"	" " " "

The property was transferred to the Altura Mining Company who also hold 553 other claims in the area.

PRESENT STATUS

Exploration and development

Exploration consists of stripping by bulldozer the top of a small knoll on Red Hot No. 12 claim from which production was made from the Brushy Basin member of the Morrison formation.

Mining and milling equipment and other facilities

There is no mining or milling equipment on the property. Facilities consist of a 2-mile dirt road connecting the property with a county highway.

GEOLOGY

The Red Hot group of claims are located on the east side of Montezuma Canyon in the southeastern part of the Monticello mining district. The Abajo Mountains are about 30 miles northwest of the property and the Comb Ridge monocline lies about

25 miles to the west. The property is in a large area of shallow depression into which the strata dip gently from the north, east, and west. At the property the dip is between 1° and 2° to the south. No evidence of faulting was seen.

The rocks exposed in the vicinity of the property are, in ascending order, of the Morrison formation of Jurassic age and of the Burro Canyon formation and Dakota sandstone of Cretaceous age (fig. 2).

The Morrison formation in this area consists of, in ascending order, the Salt Wash, Westwater Canyon, and Brushy Basin members. The Salt Wash member, of which only part of the uppermost sandstone rim is exposed, is composed of interbedded sandstone and mudstone lenses. The sandstone is commonly light gray to buff colored, cross-stratified, and is composed of sub-rounded, fine to coarse, clear quartz grains. Clay minerals and calcite are the common cementing materials. The mudstone lenses are red, gray, and green. Because only part of the upper sandstone rim is exposed above the floor of the valley, very little mudstone was seen. This rim is composed predominantly of cross-bedded and festooned sandstone with minor red and gray interbedded mudstone lenses. About 65 feet of Salt Wash is exposed near the western boundary of the group of claims.

The Westwater Canyon member of the Morrison formation is composed of greenish-yellow to greenish-gray cliff-forming sandstone and minor amounts of greenish-gray shale. The Westwater Canyon member stands as cliffs, forms caps for low mesas, and commonly forms the uppermost rim in canyons where the Morrison is exposed. The Westwater on the claims is about 135 feet thick.

The Brushy Basin member of the Morrison formation consists of variegated mudstone and shale beds that contain zones of chert and lenses of calcareous and quartzitic sandstone. It forms steep talus covered slopes and covers broad benches held up by the Westwater Canyon sandstone. The Brushy Basin is about 210 feet thick on the claims.

The Burro Canyon formation and the Dakota sandstone (undifferentiated) cap a mesa along the eastern edge of the claims. These formations are composed of conglomerate and coarse sandstone with minor lenses of shale. The beds are lenticular and cross-bedded and comprise an estimated thickness of about 100 feet.

ORE DEPOSITS

Within the Montezuma Canyon area all of the better known ore occurrences are in the Salt Wash sandstone. The occurrences are scattered through four, and locally five, separate ore

horizons. The ore is in the form of scattered thin lenses and pods, and the grade of the ore is, in general, so low that it must be hand sorted in order to meet mill specifications.

Exploration drilling has been done by the Atomic Energy Commission in Montezuma Canyon and its tributaries several miles north of the subject group of claims. Drilling revealed that the ore bodies are small, scattered, and lenticular in shape with a long dimension of from 35 to 75 feet, a width of about 25 feet, and a thickness of from 1 to 6 feet, (unpublished AEC report, Exploration drilling in the Montezuma Canyon area, San Juan County, Utah). The ore rarely was found to be continuous throughout the vertical range of mineralization in the drill holes, with the ore-grade thicknesses being interrupted by barren to weakly mineralized ground.

The Red Hot group of claims has produced about 254 tons of uranium ore that averaged 0.16 percent U_3O_8 and 0.07 percent V_2O_5 from the Brushy Basin member. The production was from a horizon about 100 feet above the Brushy Basin-Westwater contact. The ore-bearing material includes claystone, siltstone, and chert. The mineralization associated with the claystone and siltstone is within these materials and is also in the form of coatings of yellow uranium minerals along fractures. It is very low grade. The highest radioactivity was from the mineralized chert. The entire mineralized area is composed of very thin beds of the

ore-bearing rock which has been mined by shallow stripping of the surface. There are no known reserves.

Occurrences of mineralized material and small ore bodies are not uncommon in the Brushy Basin member; however, none has proved to be of a significant size.

The lenticular nature of the ore bodies, the spottiness of occurrences, the wide stratigraphic range, and the general low tenor of the ore found in the Montezuma Canyon area render the area unsuitable for effective exploration. The subject claims lie about 5 miles south of the lower Monument Canyon group of claims from which the nearest production has come. The Salt Wash outcrops on the Red Hot group of claims are not mineralized. The average drilling depth would be about 250 feet to reach the Salt Wash behind the outcrop and would be essentially blind drilling.

ORE RESERVES

There are no known ore reserves on the property.

PROPOSED EXPLORATION AND COSTS

The applicant proposed an exploration program consisting of drilling holes in two fences at right angles passing through the Red Hot No. 12 claim with hole spacing at about 400 feet and of 30 offset holes to delineate ore found by the fence drilling. The

fences would require 30 holes with a total of 250 feet of core and 7,250 feet of noncore drilling. The 30 offset holes would require 3,000 feet of core drilling and 4,500 feet of noncore drilling. The applicant's estimate of costs follow:

Fence Drilling

Independent contracts

250 feet of core drilling at $3/ft.	$ 750.00	
7,250 feet of noncore drilling at $2/ft.	14,500.00	
Probing - 30 holes at $25 each	750.00	
Assays	100.00	
Total independent contracts		$16,100.00

Offset Drilling

Independent contracts

Total cost (lumped) for 30 holes each 250 feet deep and cored 100 feet with probing and assays	$25,000.00	
Roads to all drill sites	400.00	
Total independent contracts		$25,400.00

Fence and Offset Drilling

Labor and supervision

Supervision & consultants fees 3 months at $1,500/mo.	$ 4,500.00

Operating material and supplies

Gas, oil, & lubrication for jeeps 3 months at $75/mo.	$ 225.00

Operating equipment

None

Rehabilitation and repairs

None

New building, improvements, installations

None

Miscellaneous

None

Total estimated cost for 15,000 feet of drilling	$46,225.00
Estimated cost per foot	$ 3.08

The applicant's estimates for the offset drilling are too high, the bulldozing costs are too low, and no allowance has been made for core boxes, jeep rental, etc. The entire estimate is subject to considerable revision.

CONCLUSIONS AND RECOMMENDATIONS

The Red Hot group of claims are located in Montezuma Canyon in San Juan County, Utah. The ore-bearing sandstone in Montezuma Canyon is in the Salt Wash member of the Jurassic Morrison formation. The members of the Morrison formation exposed on the claims are the Salt Wash, Westwater Canyon, and Brushy Basin. Only part of the uppermost Salt Wash sandstone rim is exposed. No mineralized material is known in this exposed Salt Wash.

About 254 tons of marginal and non-paying uranium-bearing material has been shipped from one of the claims. It came from a horizon in the Brushy Basin shale about 100 feet above the Brushy Basin-Westwater Canyon contact. No known ore bodies in the Brushy Basin have proved to be of significant size.

Ore bodies from the Salt Wash in the Montezuma Canyon area are small, scattered, and low grade. The uranium ore, generally, must be hand sorted in order to meet mill specifications. These conditions render the area unsuitable for effective exploration.

The examining team recommends that the application be denied.

8/15/56

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

August 13, 1956

224 New Customhouse
Denver 2, Colorado

RECEIVED
AUG 15 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 4246 (Uranium) Altura Mining Company (Red Hot claims) San Juan County, Utah

Enclosed are the original and three copies of a joint engineering and geologic Report of Examination on the subject property.

The field examiners believe that the area is unsuitable for effective exploration, and they recommend that the application be denied. We concur in this recommendation since no production from the Brushy Basin has proved to be of a significant size and drilling behind the Salt Wash outcrop would be essentially blind drilling at an average depth of about 250 feet.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
8-17-56
(date)

MINERAL DEPOSITS
IN REPLY REFER TO:
DMEA
RECEIVED
JUL 26 1956
U. S. GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

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TRANSMITTED
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AUG 9 1956
BUREAU OF MINES
Denver, Colorado

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman
J. F. Shaw

From: Howard F. Albee for J. William Hasler

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The group of claims lies in Montezuma Canyon, some five miles south of the southernmost uranium production from the Salt Wash sandstone member of the Morrison formation. The Morrison formation on the claims consist of the Salt Wash, Westwater Canyon, and Brushy Basin members. Only about 65 feet of Salt Wash is exposed. No mineralized material is known in the Salt Wash outcrop on the claims.

About 254 tons of marginal uranium ore has been shipped from the property. The ore was stripped from the surface of the Brushy Basin about 100 feet above the Brushy Basin-Westwater contact. No production from the Brushy Basin has proved to be of a significant size.

Drilling behind the Salt Wash outcrop would average about 250 feet in depth and would be essentially blind drilling.

The lenticular nature and wide stratigraphic range of the ore bodies, the spottiness of occurrences, and the general low tenor of the ore found in the Montezuma Canyon area render the area unsuitable for effective exploration. The examining team, therefore, recommends denial of the application. I concur with the conclusions and recommendations of the examining team.

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8-15-56
(date)

DMEA 4246 7/25/56

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For J. William Hasler,
Geologist

HFA/mlr

Enclosure

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

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REPORT OF EXAMINATION BY FIELD TEAM
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DMEA 4246

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Red Hot Group

San Juan County, Utah

Uranium

Joint Engineering and Geological Report

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Carl Belser, Mining Engineer
Bureau of Mines

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ILLUSTRATIONS

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2. Geologic map showing the Red Hot group of claims, Altura Mining Company, San Juan County, Utah. DMEA 4246	3

RECEIVED
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DMEA 4246

ALTURA MINING COMPANY
RED HOT GROUP
SAN JUAN COUNTY, UTAH

INTRODUCTION AND SUMMARY

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Any exploration behind the Salt Wash outcrop would require drill holes about 250 feet deep which would be essentially blind drilling. The lenticular nature and wide stratigraphic range of the ore bodies, the spottiness of occurrences, and the general low tenor of the ore found in Montezuma Canyon render the area unsuitable for effective exploration. The examining team, therefore, recommends denial of the application.

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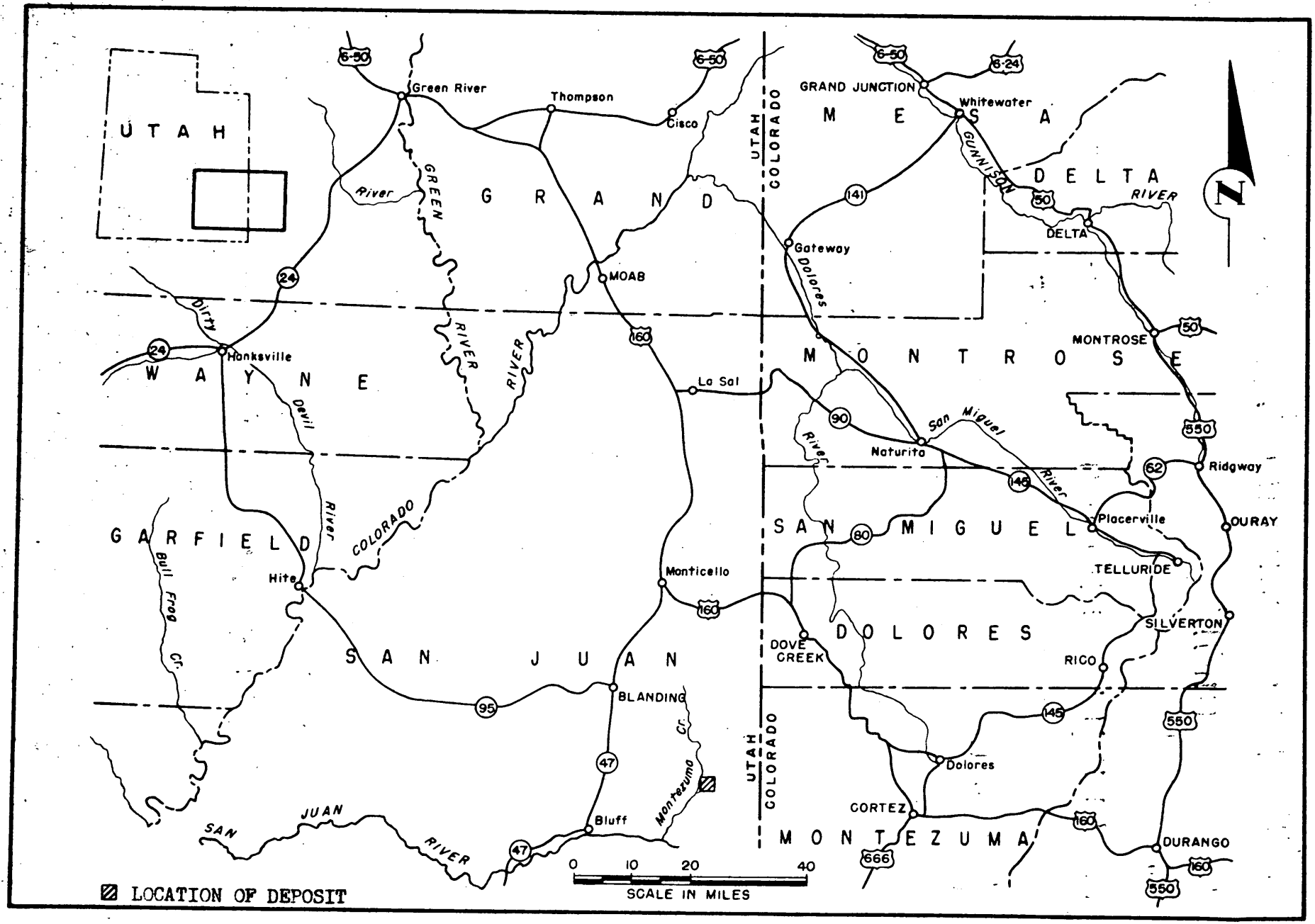
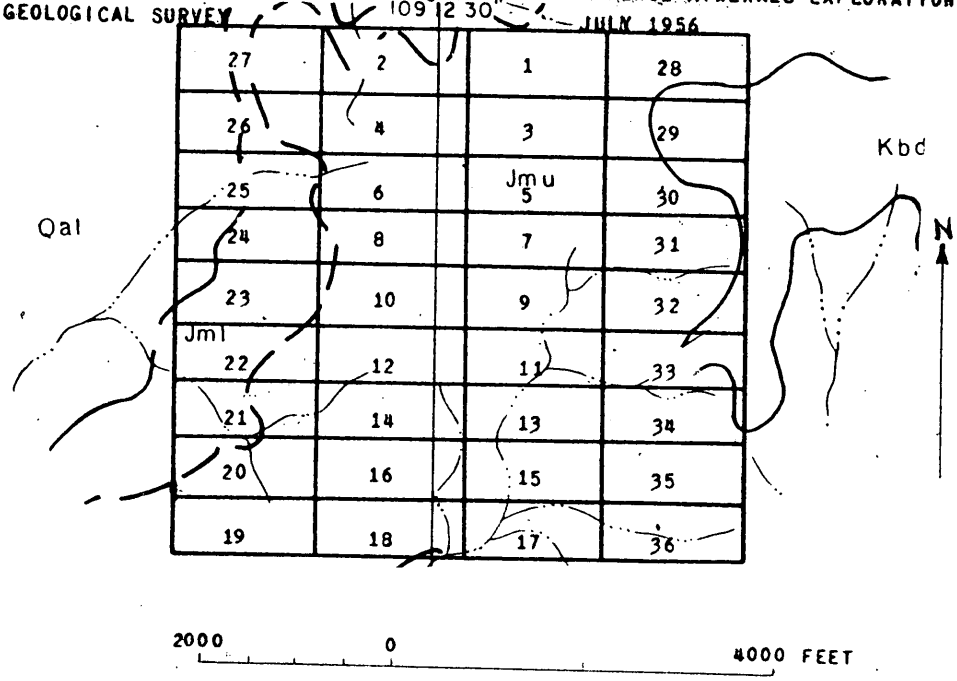


FIGURE 1 - LOCATION MAP, RED HOT GROUP, ALTURA MINING COMPANY, SAN JUAN COUNTY, UTAH. DMEA 4246

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 4246



EXPLANATION

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"	"	13	153	86	8/16/54	" " " "
"	"	14	153	87	"	" " " "
"	"	15	153	87	"	" " " "
"	"	16	153	88	"	" " " "
"	"	17	153	88	"	" " " "
"	"	18	153	89	"	" " " "
"	"	19	153	89	"	" " " "
"	"	20	153	90	"	" " " "
"	"	21	153	90	"	" " " "
"	"	22	153	91	"	" " " "
"	"	23	153	91	"	" " " "
"	"	24	153	92	"	" " " "
"	"	25	153	92	"	" " " "
"	"	26	153	93	"	" " " "
"	"	27	153	93	"	" " " "
"	"	28	153	94	"	" " " "
"	"	29	153	94	"	" " " "
"	"	30	153	95	"	" " " "

Claim	Book	Page	Date Located	Locator
Red Hot 31	153	95	8/16/54	R. Perkins and C. Mahon
" " 32	153	96	"	" " " "
" " 33	153	96	"	" " " "
" " 34	153	97	"	" " " "
" " 35	153	97	"	" " " "
" " 36	153	98	"	" " " "

The property was transferred to the Altura Mining Company who also hold 553 other claims in the area.

PRESENT STATUS

Exploration and development

Exploration consists of stripping by bulldozer the top of a small knoll on Red Hot No. 12 claim from which production was made from the Brushy Basin member of the Morrison formation.

Mining and milling equipment and other facilities

There is no mining or milling equipment on the property. Facilities consist of a 2-mile dirt road connecting the property with a county highway.

GEOLOGY

The Red Hot group of claims are located on the east side of Montezuma Canyon in the southeastern part of the Monticello mining district. The Abajo Mountains are about 30 miles northwest of the property and the Comb Ridge monocline lies about

25 miles to the west. The property is in a large area of shallow depression into which the strata dip gently from the north, east, and west. At the property the dip is between 1° and 2° to the south. No evidence of faulting was seen.

The rocks exposed in the vicinity of the property are, in ascending order, of the Morrison formation of Jurassic age and of the Burro Canyon formation and Dakota sandstone of Cretaceous age (fig. 2).

The Morrison formation in this area consists of, in ascending order, the Salt Wash, Westwater Canyon, and Brushy Basin members. The Salt Wash member, of which only part of the uppermost sandstone rim is exposed, is composed of interbedded sandstone and mudstone lenses. The sandstone is commonly light gray to buff colored, cross-stratified, and is composed of sub-rounded, fine to coarse, clear quartz grains. Clay minerals and calcite are the common cementing materials. The mudstone lenses are red, gray, and green. Because only part of the upper sandstone rim is exposed above the floor of the valley, very little mudstone was seen. This rim is composed predominantly of cross-bedded and festooned sandstone with minor red and gray interbedded mudstone lenses. About 65 feet of Salt Wash is exposed near the western boundary of the group of claims.

The Westwater Canyon member of the Morrison formation is composed of greenish-yellow to greenish-gray cliff-forming sandstone and minor amounts of greenish-gray shale. The Westwater Canyon member stands as cliffs, forms caps for low mesas, and commonly forms the uppermost rim in canyons where the Morrison is exposed. The Westwater on the claims is about 135 feet thick.

The Brushy Basin member of the Morrison formation consists of variegated mudstone and shale beds that contain zones of chert and lenses of calcareous and quartzitic sandstone. It forms steep talus covered slopes and covers broad benches held up by the Westwater Canyon sandstone. The Brushy Basin is about 210 feet thick on the claims.

The Burro Canyon formation and the Dakota sandstone (undifferentiated) cap a mesa along the eastern edge of the claims. These formations are composed of conglomerate and coarse sandstone with minor lenses of shale. The beds are lenticular and cross-bedded and comprise an estimated thickness of about 100 feet.

ORE DEPOSITS

Within the Montezuma Canyon area all of the better known ore occurrences are in the Salt Wash sandstone. The occurrences are scattered through four, and locally five, separate ore

horizons. The ore is in the form of scattered thin lenses and pods, and the grade of the ore is, in general, so low that it must be hand sorted in order to meet mill specifications.

Exploration drilling has been done by the Atomic Energy Commission in Montezuma Canyon and its tributaries several miles north of the subject group of claims. Drilling revealed that the ore bodies are small, scattered, and lenticular in shape with a long dimension of from 35 to 75 feet, a width of about 25 feet, and a thickness of from 1 to 6 feet, (unpublished AEC report, Exploration drilling in the Montezuma Canyon area, San Juan County, Utah). The ore rarely was found to be continuous throughout the vertical range of mineralization in the drill holes, with the ore-grade thicknesses being interrupted by barren to weakly mineralized ground.

The Red Hot group of claims has produced about 254 tons of uranium ore that averaged 0.16 percent U_3O_8 and 0.07 percent V_2O_5 from the Brushy Basin member. The production was from a horizon about 100 feet above the Brushy Basin-Westwater contact. The ore-bearing material includes claystone, siltstone, and chert. The mineralization associated with the claystone and siltstone is within these materials and is also in the form of coatings of yellow uranium minerals along fractures. It is very low grade. The highest radioactivity was from the mineralized chert. The entire mineralized area is composed of very thin beds of the

ore-bearing rock which has been mined by shallow stripping of the surface. There are no known reserves.

Occurrences of mineralized material and small ore bodies are not uncommon in the Brushy Basin member; however, none has proved to be of a significant size.

The lenticular nature of the ore bodies, the spottiness of occurrences, the wide stratigraphic range, and the general low tenor of the ore found in the Montezuma Canyon area render the area unsuitable for effective exploration. The subject claims lie about 5 miles south of the lower Monument Canyon group of claims from which the nearest production has come. The Salt Wash outcrops on the Red Hot group of claims are not mineralized. The average drilling depth would be about 250 feet to reach the Salt Wash behind the outcrop and would be essentially blind drilling.

ORE RESERVES

There are no known ore reserves on the property.

PROPOSED EXPLORATION AND COSTS

The applicant proposed an exploration program consisting of drilling holes in two fences at right angles passing through the Red Hot No. 12 claim with hole spacing at about 400 feet and of 30 offset holes to delineate ore found by the fence drilling. The

fences would require 30 holes with a total of 250 feet of core and 7,250 feet of noncore drilling. The 30 offset holes would require 3,000 feet of core drilling and 4,500 feet of noncore drilling. The applicant's estimate of costs follow:

Fence Drilling

Independent contracts

250 feet of core drilling at $3/ft.	$ 750.00	
7,250 feet of noncore drilling at $2/ft.	14,500.00	
Probing - 30 holes at $25 each	750.00	
Assays	100.00	
Total independent contracts		$16,100.00

Offset Drilling

Independent contracts

Total cost (lumped) for 30 holes each 250 feet deep and cored 100 feet with probing and assays	$25,000.00	
Roads to all drill sites	400.00	
Total independent contracts		$25,400.00

Fence and Offset Drilling

Labor and supervision

Supervision & consultants fees 3 months at $1,500/mo.	$ 4,500.00

Operating material and supplies

Gas, oil, & lubrication for jeeps 3 months at $75/mo.	$ 225.00

Operating equipment

None

Rehabilitation and repairs

None

New building, improvements, installations

None

Miscellaneous

None

Total estimated cost for 15,000 feet of drilling	$46,225.00
Estimated cost per foot	$ 3.08

The applicant's estimates for the offset drilling are too high, the bulldozing costs are too low, and no allowance has been made for core boxes, jeep rental, etc. The entire estimate is subject to considerable revision.

CONCLUSIONS AND RECOMMENDATIONS

The Red Hot group of claims are located in Montezuma Canyon in San Juan County, Utah. The ore-bearing sandstone in Montezuma Canyon is in the Salt Wash member of the Jurassic Morrison formation. The members of the Morrison formation exposed on the claims are the Salt Wash, Westwater Canyon, and Brushy Basin. Only part of the uppermost Salt Wash sandstone rim is exposed. No mineralized material is known in this exposed Salt Wash.

About 254 tons of marginal and non-paying uranium-bearing material has been shipped from one of the claims. It came from a horizon in the Brushy Basin shale about 100 feet above the Brushy Basin-Westwater Canyon contact. No known ore bodies in the Brushy Basin have proved to be of significant size.

Ore bodies from the Salt Wash in the Montezuma Canyon area are small, scattered, and low grade. The uranium ore, generally, must be hand sorted in order to meet mill specifications. These conditions render the area unsuitable for effective exploration.

The examining team recommends that the application be denied.

5/21/56

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

RECEIVED
MAY 21 1956

May 17, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman, Operating Committee, DMEA

From: Field Team, Region III

Subject: DMEA Docket 4246 (Uranium) Altura Mining Company, (Red Hot group of claims), San Juan County, Utah

Enclosed are two copies of a third bid for drilling submitted by the subject Applicant. Will you please include this bid with the two bids forwarded you with our memorandum dated May 15, 1956.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

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

RECEIVED
MAY 21 1956

May 17, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

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DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosures

DMEA
Data Rec'd.
RECEIVED MAY 17 1956
MAY 21 1956
BUREAU OF MINES
Denver, Colorado

D & L DRILLING CO.

815 N. Grant
PHONE 2-2841
Odessa, Texas

General Delivery
Phone 67R4
Blanding, Utah

May 13, 1956

Altura Mining Co.
35 N. Raymond Ave.
Pasadena, California

Attention: Mr. O. D. Sisson

Gentlemen:

Mr. Calvin Perkins requested bid on your proposed drilling program on the RED HOT group claims, San Juan County, Utah.

Our prices are as follows:

Plugging . . . . . $ 2.00 per ft.

Coring . . . . . 3.50 per ft.

Thanks very much.

(Signed) Lee R. Carter

DMEA
Date Rec'd.

RECEIVED

MAY 17 1956

D & L DRILLING CO. MAY 21 1956

BUREAU OF MINES
Denver, Colorado

815 N. Grant
PHONE 2-2841
Odessa, Texas

General Delivery
Phone 6734
Blanding, Utah

May 13, 1956

Altura Mining Co.
35 N. Raymond Ave.
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Our prices are as follows:

Plugging . . . . . $ 2.00 per ft.

Coring . . . . . 3.50 per ft.

Thaks very much.

(Signed) Lee R. Carter

5-18-56

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

RECEIVED
MAY 18 1956

May 15, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman, Operating Committee, DMEA

From: Field Team, Region III

Subject: DMEA Docket 4246 (Uranium) Altura Mining Company (Red Hot group of claims), San Juan County, Utah

Enclosed are two copies of two bids for drilling in connection with the subject application. These bids were submitted by the Applicant who stated that he will forward this office another bid at a later date.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

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

May 15, 1956

RECEIVED
MAY 18 1956

22d Floor Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw (2) (With copies of drilling bids)
J. W. Kasler (With copies of drilling bids)

From: Field Team, Region III

Subject: DMEA Docket 4246 (Uranium) Altura Mining Company (Red Hat group of claims) San Juan County, Utah

Enclosed are two copies of bids for drilling in connection with the subject application. Will you please include them with your copy of the brochure.

The Applicant states that one more drilling bid will be forthcoming, and we will forward you copies.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosure

DMCich

cc: Chair. Op. Comm. (2)
Docket 4246
Kershman
Chron.

RADIO GEOPHYSICAL CO.

San Antonio, Texas

May 7, 1956

RECEIVED
MAY 18 1956
Date Rec'd
MAY 14 1956
BUREAU OF MINES
Denver, Colorado

Mining
R G C Building
Blanding, Utah

Mr. O. D. Sisson
Altura Mining Co.
35 N. Raymond Ave.
Pasadena, California

Dear Mr. Sisson:

At your request we are submitting to you our bid on the drilling program proposal for your Red Hot group of claims in Montezuma Canyon, San Juan County, Utah.

Radio Geophysical Co. will undertake all or any portion of an exploration program at cost plus 15%.

Cost of unit items for any such program will be as follows:

Plug drilling (air)	$ 1.50 per foot
Plug Drilling (water)	2.00 " "
Diamond coring	3.00 per foot
D-7 dozer	15.00 per hour
Gamma ray logging plus 4¢ per ft.	10.00 per hour
Program management	100.00 per day

Management service includes: transit survey of drill holes with surface elevations tied to adjacent claim monuments and BLM public land survey monuments. Under a drilling management program the logging charges are included in the $100 per day with an extra charge of 4¢ per foot of hole logged. Interpretation of logs is included. Core boxes are furnished. Map and log printing and map drafting are chargeable at $5 per hour for office time.

Complete insurance coverage is in effect on all operations.

We request at least fifteen days' notice of intention to use any of the services due to summer activity.

Very truly yours

RADIO GEOPHYSICAL CO.

(Signed) R. J. Noonan
Manager

COPY

Blanding, Utah
May 9, 1956

RECEIVED
MAY 18 1956

Mr. O. D. Sisson
Altura Mining Co.
Pasadena, California

Dear Mr. Sisson:

We are enclosing a bid for the proposed drilling program on the Red Hot group Mining claims, located in San Juan County, Utah.

Following is our schedule:

Core drilling on the hole to be core for the full section approx. 250' in depth.

$4.00 per foot

Core drilling in any additional holes if necessary, as far as may be necessary consisting of approx. 20-40' of core

$3.00 per foot

Dry plug drilling with air compressor

$1.50 per foot

Water drilling, consisting of formations that can not be drilled with air

$2.00 per foot

Logging of holes when drilled, consisting of a radiometric strip log

$25.00 per hole

Washouts, and over 3 hr. standby time, on 8 hr. per day schedule

$15.00 per hour

Statement of liability insurance upon request. Drill sites to be furnished by client.

Very truly yours,

(Signed) Bill F. Young
Del-Wan Drilling Co.
Blanding, Utah

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

RECEIVED
MAY 18 1956

May 15, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman, Operating Committee, DMEA

From: Field Team, Region III

Subject: DMEA Docket 4246 (Uranium) Altura Mining Company (Red Rot group of claims), San Juan County, Utah

Enclosed are two copies of two bids for drilling in connection with the subject application. These bids were submitted by the Applicant who stated that he will forward this office another bid at a later date.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosures

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

RECEIVED
MAY 18 1956

May 15, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw (2) (With copies of drilling bids)
J. W. Emsler (With copies of drilling bids)

From: Field Team, Region III

Subject: DMEA Docket 4046 (Uranium) Altura Mining Company (Red Hot group of claims) San Juan County, Utah

Enclosed are two copies of bids for drilling in connection with the subject application. Will you please include them with your copy of the brochure.

The Applicant states that one more drilling bid will be forthcoming, and we will forward you copies.

DMEA Field Team, Region III

W. M. TRAVER

By W. M. Traver
Executive Officer

Enclosure

WMT:ab

cc: Chair. Op. Comm. (2)
Docket 4046
Harshman
Green.

RADIO GEOPHYSICAL CO.

San Antonio, Texas

May 7, 1956

DMEA
Date Rec'd.
MAY 14 1956
BUREAU OF MINES
Denver, Colorado
RECEIVED
Mining
MAY 18 1956

R G C Building
Blanding, Utah

Mr. O. D. Sisson
Altura Mining Co.
35 N. Raymond Ave.
Pasadena, California

Dear Mr. Sisson:

At your request we are submitting to you our bid on the drilling program proposal for your Red Hot group of claims in Montezuma Canyon, San Juan County, Utah.

Radio Geophysical Co. will undertake all or any portion of an exploration program at cost plus 15%.

Cost of unit items for any such program will be as follows:

Plug drilling (air)	$ 1.50 per foot
Plug Drilling (water)	2.00 " "
Diamond coring	3.00 per foot
D-7 dozer	15.00 per hour
Gamma ray logging plus 4¢ per ft.	10.00 per hour
Program management	100.00 per day

Management service includes: transit survey of drill holes with surface elevations tied to adjacent claim monuments and BLM public land survey monuments. Under a drilling management program the logging charges are included in the $100 per day with an extra charge of 4¢ per foot of hole logged. Interpretation of logs is included. Core boxes are furnished. Map and log printing and map drafting are chargeable at $5 per hour for office time.

Complete insurance coverage is in effect on all operations.

We request at least fifteen days' notice of intention to use any of the services due to summer activity.

Very truly yours

RADIO GEOPHYSICAL CO.

(Signed) R. J. Noonan
Manager

COPY

Blanding, Utah
May 9, 1956

Mr. O. D. Sisson
Altura Mining Co.
Pasadena, California

Dear Mr. Sisson:

We are enclosing a bid for the proposed drilling program on the Red Hot group Mining claims, located in San Juan County, Utah.

Following is our schedule:

Core drilling on the hole to be core for the full section approx. 250' in depth.

$4.00 per foot

Core drilling in any additional holes if necessary, as far as may be necessary consisting of approx. 20-40' of core

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$25.00 per hole

Washouts, and over 3 hr. standby time, on 8 hr. per day schedule

$15.00 per hour

Statement of liability insurance upon request. Drill sites to be furnished by client.

Very truly yours,

(Signed) Bill F. Young
Del-Wan Drilling Co.
Blanding, Utah

5-11-56

RECEIVED
MAY 11 1956

DMEA
Date Rec'd.

MAY 9 1956

BUREAU OF MINES
Denver, Colorado

May 8, 1956

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team, Reg. III

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4246 (Uranium), Alturas Mining Company (Red Hot Group of claims) San Juan County, Utah

The subject application in the amount of $45,000.00 was received in this office on May 8, 1956.

A field examination will be made and suitable report prepared by an engineer from the Denver or Grand Junction office.

John F. Shaw

cc: W. M. Traver (2)
E. N. Marshman
M. E. Salsbury
J. W. Mealer
J. F. Shaw
Sec. Op. Com. (2)

RECEIVED
MAY 11 1956

DMEA
Date Rec'd.
MAY 9 1956
BUREAU OF MINES
Denver, Colorado

May 8, 1956

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team, Reg. III

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4246 (Uranium), Altura Mining Company (Red Hot Group of claims) San Juan County, Utah

The subject application in the amount of $45,000.00 was received in this office on May 8, 1956.

A field examination will be made and suitable report prepared by an engineer from the Denver or Grand Junction office.

JOHN F. SHAW
John F. Shaw

cc: W. M. Traver (2)
E. N. Harshman
M. H. Salsbury
J. W. Hasler
J. F. Shaw
See. Op. Com. (2)

5/10/56

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

May 8, 1956

224 New Customhouse
Denver 2, Colorado

RECEIVED
MAY 10 1956

Memorandum

To: J. F. Shaw (2) (With brochure)
J. W. Hasler

From: Field Team, Region III

Subject: Docket DMEA 4246 (Uranium) Altura Mining Company (Red Hot Group of Claims) San Juan County, Utah

Enclosed is the subject application in the amount of $45,000.00. A field examination and suitable report are required.

The applicant's map, submitted with the application, shows a proposed drill hole on the property boundary. You should not recommend work closer than 100 feet from the property boundary.

Enclosed are a letter from the Chairman, Operating Committee dated May 4, 1956 and memoranda of review of the application by W. P. Williams and John E. Crawford.

Please return the brochure with the Report of Examination.

DMEA Field Team, Region III

W. M. TRAVER,
By W. M. Traver
Executive Officer

Enclosures

WMC:ab

cc: Chair. Op. Comm. (2)
Harshman
Docket
Chron.

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

RECEIVED
MAY 10 1956

May 8, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw (2) (With brochure)
J. W. Hasler

From: Field Team, Region III

Subject: Docket DMEA 4846 (Uranium) Altura Mining Company (Red Hot Group of Claims) San Juan County, Utah

Enclosed is the subject application in the amount of $45,000.00. A field examination and suitable report are required.

The applicant's map, submitted with the application, shows a proposed drill hole on the property boundary. You should not recommend work closer than 100 feet from the property boundary.

Enclosed are a letter from the Chairman, Operating Committee dated May 4, 1956 and memoranda of review of the application by W. P. Williams and John E. Crawford.

Please return the brochure with the Report of Examination.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosures

WMC:ab

cc: Chair. Op. Comm. (2)
Marshman
Docket
Chron.

700

FILE COPY
Surname:
JECrawford
FLKnouse
GCSelfridge

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

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

MAY 4 1956

Re: Docket No. DMEA-4246 (Uranium)
Alturo Mining Company
Red Hot Group of Claims
San Juan County, Utah

Dear Mr. Traver:

The captioned application is referred to your office for a field examination and report on the proposed project. A copy of the application was retained by your office.

Enclosed are copies of memoranda, dated April 24 and May 1, 1956, from Mr. John E. Crawford, USGS, and Mr. W. P. Williams, USGS, respectively, relating to the subject project.

If the Field Team recommends an exploration program, we will require, in addition to the usual information, the following:

1. Nine copies of a map showing mineralized exposures, with sample locations and assay values (shown on Applicant's map and any additional samples taken by examining team), and recommended work, all in relation to the boundaries of the claims;

2. Bids from three contractors if drilling is recommended and is to be done by an independent contractor; and

3. Claim recording data, i.e., recorded name of each claim and book and page number of each recording.

Please note that the Applicant's map submitted with the application shows a proposed drill hole on the property boundary. Your recommended program should not include work which is closer than 100 feet from the property boundary.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GB)

Enclosures:

APPROVED:

/s/ Robert W. Geehan (GB)
Member, Bureau of Mines

N. E. Nelson (GB)
Member Geological Survey

Messrs. JECrawford, Rm. 3641
THKilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

FLKnouse/izm 5-3-56
cc to: Docket
Code 700
Mr. Knouse
Admr.'s Reading File
Operating Committee

700

FILE COPY
Surname:
F Knouse
Ellis
Nelson
Kellner
Selfridge

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

May 4 1956

Mr. O. D. Sisson, President
Altura Mining Company
35 North Raymond Avenue
Pasadena 1, California

Re: Docket No. DMEA-426 (Uranium)
Red Hot Group of Claims
San Juan County, Utah

Dear Mr. Sisson:

The application for assistance in exploring your property, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred for a field examination to:

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

The Regional Office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

C. O. Mittendorf

Administrator

FLKnouse/izm 5-3-56
cc to: Docket
Code 700
Mr. Knouse
Admr.'s Reading File
DMEA Field Team, Region III (2)

5-2-56

IN REPLY REFER TO:

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

RECEIVED
MAY 2 - 1956

May 1, 1956

Memorandum

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

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

Subject: Review of application, DMEA 4246, Altura Mining Company, Red Hot claims, Montezuma Canyon, San Juan County, Utah.

The applicant proposes an exploration drilling project composed of a total of 30 core and plug-bit holes at a total estimated cost of $45,000.00.

The property has yielded about 254 tons of material, most of which was below 0.20 percent U_3O_8. From the applicant's maps this 'ore' came from the shallow surface pits in the Brushy Basin member of the Morrison.

The Montezuma Canyon area is noted for the small size of its uranium deposits. The small pod-like ore bodies are not good targets for exploration drilling. It is my belief, based mostly on the area's poor history, that the subject property does not merit DMEA participation.

Because the applicant has done some work on the property, however, and has shipped some ore it seems advisable to examine the property in the field. I recommend that the application be referred to the Field Team for examination and report.

W. P. Williams

W. P. Williams

IN REPLY REFER TO:

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

RECEIVED
MAY 2 - 1956

May 1, 1956

Memorandum

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

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

Subject: Review of application, DMEA 4046, Altura Mining Company, Red Hot claims, Montezuma Canyon, San Juan County, Utah.

The applicant proposes an exploration drilling project composed of a total of 30 core and plug-bit holes at a total estimated cost of $45,000.00.

The property has yielded about 254 tons of material, most of which was below 0.20 percent U_3O_8. From the applicant's maps this 'ore' came from the shallow surface pits in the Brushy Basin member of the Morrison.

The Montezuma Canyon area is noted for the small size of its uranium deposits. The small pod-like ore bodies are not good targets for exploration drilling. It is my belief, based mostly on the area's poor history, that the subject property does not merit DMEA participation.

Because the applicant has done some work on the property, however, and has shipped some ore it seems advisable to examine the property in the field. I recommend that the application be referred to the Field Team for examination and report.

WPWilliams:iml
G-5/1/56

W. P. Williams

cc: Director's reading, ~~4X2~~ 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641
J. O. Hosted, 3210

4-25-56

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

RECEIVED
APR 25 1956

April 24, 1956

Memorandum

To: Ernest William Ellis, DMEA Docket
Uranium Commodity Committee

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

Subject: Application for Assistance, DMEA Docket 4246, Altura Mining Company, and Red Hot group of 36 claims, San Juan County, Utah.

I have reviewed the attached application, DMEA Docket 4246, Altura Mining Company, San Juan County, Utah, dated March 29, 1956 and received in this office April 19, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The Red Hot group consists of 36 unpatented mining claims in San Juan County, Utah. Exploration work on the subject claims has consisted of radiometric grid surveys, stripping, and trenching operations. About 250 tons of ore averaging 0.17 percent U_3O_8 have been produced from several small open pits on the property.

Inasmuch as ore-grade material has been mined and radiometric prospecting has been conducted on the subject property, a field examination is probably warranted. We recommend that the application be referred to the field for appropriate action and that the Field Team consult with E. R. Gordon, Atomic Energy Commission, Grand Junction, Colorado.

John E Crawford
John E. Crawford

Attachment

4-19-56

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

RECEIVED
APR 19 1956

April 17, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman, Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4246 (Uranium) Altura Mining Company, Red Hot group of 36 claims (Secs. 17 and 18, T. 32 S., R. 25 E., SLM) San Juan County, Utah

Enclosed are four copies of a review of the subject application by members of the Grand Junction office, DMEA.

Although the deposits found to date on this property have not been significant, we recommend that a field examination be made.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

IN REPLY REFER TO:

MINERAL DEPOSITS
DMEA
RECEIVED
APR 16 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 360
Grand Junction, Colorado

April 13, 1956

Memorandum

DMEA
Date Rec'd.
APR 16 1956
BUREAU OF MINES
Denver, Colorado

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman
~~John F. Shaw~~

From: J. William Hasler
M. H. Salsbury

Subject: Appraisal for field examination (Uranium), Altura Mining Co., Red Hot group of 36 claims, (Secs. 17 and 18, T. 38 S., R. 25 E., SLM,) San Juan County, Utah.

The applicant has proposed a drilling program in essentially two stages on the Red Hot group of claims. Total cost of the project, including supervision, would be $46,225. The claims are located in the Montezuma Canyon district, about 15 miles southeast of Blanding, Utah.

Production from deposits in the Montezuma Canyon District has been generally less than 1,000 tons per deposit. The subject property has produced about 250 tons of ore averaging 0.17 percent U_3O_8 from several open pits in the Brushy Basin member of the Jurassic Morrison formation. Other deposits are described as occurring in pods along the principal fracture zones.

Insamuch as the property has produced a small tonnage of ore, a field examination is probably warranted, although the deposits do not appear to be significant. A field examination is therefore recommended.

J. William Hasler
J. William Hasler
U. S. Geological Survey

M. H. Salsbury
M. H. Salsbury
U. S. Bureau of Mines

FMB/mlr

4/19/56

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

April 17, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman, Operating Committee, DMEA

From: Field Team, Region III

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Although the deposits found to date on this property have not been significant, we recommend that a field examination be made.

DMEA Field Team, Region III

W. M. TRAVER

By W. M. Traver
Executive Officer

Enclosures

MINERAL DEPOSITS
IN REPLY REFER TO:
DMEA
RECEIVED
APR 16 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 360
Grand Junction, Colorado

April 13, 1956

DMEA
Date Rec'd.
APR 16 1956
BUREAU OF MINES
Denver, Colorado

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman EWH
John F. Shaw

From: J. William Hasler
M. H. Salsbury

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J. William Hasler
J. William Hasler
U. S. Geological Survey

M. H. Salsbury
M. H. Salsbury
U. S. Bureau of Mines

FMB/mlr

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 360
Grand Junction, Colorado

MINERAL RESOURCES
D.M.E.A.
RECEIVED
APR 16 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

April 13, 1956

Memorandum

DMEA
Date Rec'd.
APR 16 1956
BUREAU OF MINES
Denver, Colorado

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman EWH
~~John F. Shaw~~

From: J. William Hasler
M. H. Salsbury

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J. William Hasler
J. William Hasler
U. S. Geological Survey

M. H. Salsbury
M. H. Salsbury
U. S. Bureau of Mines

FMB/mlr

April 11, 1956
Subject: DMEA-4246
Re: Exploration Assistance

Altura Mining Company
35 North Raymond Avenue
Pasadena, California

Gentlemen:

The receipt of your application dated March 29, 1956, for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4246 and referred to the Rare & Misc. Metals Division.

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

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

April 11, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA - 4246 Altura Mining Company

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

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

RECEIVED
APR 11 1956

April 9, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium), Altura Mining Company, San Juan County, Utah

Enclosed are two copies of the subject application. One copy has been forwarded to the Grand Junction office for their review and recommendations concerning the advisability of a field examination. One copy is being retained in our file.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

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

RECEIVED
APR 1 1 1956

April 9, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. W. Hasler

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium), Altura Mining Company, San Juan County, Utah

Enclosed is the subject application in the amount of $45,000.00.

Will you discuss this application with the Bureau of Mines representative in the Grand Junction office and the AEC and forward this office nine copies of your joint recommendations concerning the advisability of a field examination.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosure

HMC:ab

cc: Sec. Op. Comm. (2)
Subject
Harshman
Shaw (2)
Chron.

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

RECEIVED
APR 1 1 1956

April 9, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

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DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosure

HMC:ab

cc: Sec. Op. Comm. (2)
Subject
Harshman
Shaw (2)
Chron.

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

RECEIVED
APR 11 1956

April 9, 1956

224 New Customhouse
Denver 2, Colorado

Mr. O. D. Sisson, President
Altura Mining Company
35 North Raymond Avenue
Pasadena 1, California

Re: Application for DMEA Aid (Uranium), San Juan County, Utah

Dear Mr. Sisson:

This will acknowledge receipt of your letter dated April 6, 1956 and four copies of the captioned application. Your application has been forwarded to the Washington office, DMEA, for further processing. It will not be necessary to forward additional copies of the 48 pages of Location Notice legal descriptions.

Very truly yours,

W. M. TRAVER

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

HMC:ab

cc: Sec. Op. Comm. (2)
Subject
Harshman
Shaw (2)
Hasler
Chron.

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

April 9, 1956

224 New Customhouse
Denver 2, Colorado

RECEIVED
APR 1 1 1956

Mr. O. D. Sisson, President
Altura Mining Company
35 North Raymond Avenue
Pasadena 1, California

Re: Application for DMEA Aid (Uranium), San Juan County, Utah

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Very truly yours,

W. M. TRAVER

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

HMC:ab

cc: Sec. Op. Comm. (2)
Subject
Harshman
Shaw (2)
Hasler
Chron.

TELEPHONE
AN 1-8437

PLEASE REPLY TO
48 No. RAYMOND AVENUE
PASADENA 1, CALIFORNIA

ALTURA MINING COMPANY

Uranium Property Development

SALT LAKE CITY, UTAH • CARSON CITY, NEVADA • PASADENA, CALIFORNIA

RECEIVED
APR 11 1956

April 6, 1956

DMEA
Rec'd.
APR 9 1956
BUREAU OF MINES
Denver, Colorado

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

Dear Mr. Traver:

In reply to your letter of April 3, 1956, we are following out your suggestion and returning the attached page of recording data which now specifies the County and State of recording.

On Map 2 we now show the location and as stated in the "Estimated Costs" the depth on all these holes will approximate 250', with the provision that the first hole be cored all the way and the additional 29 holes be plugged.

Immediately upon receipt of your letter we applied for bids on drilling, and hope to have them in your hands within ten days' time.

We also enclose the other three copies of our application amended as you suggested. Please notify us if additional copies of the 48 pages of Location Notice legal descriptions are needed, and we will provide same.

Very truly yours,

O. D. Sisson

O. D. Sisson

ODS:nsv
Encl.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd.
APR 9 1956

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

RECEIVED
APR 11 1956

BUREAU OF MINES
Denver, Colorado

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

Not to be filled in by applicant

Docket No. DMEA-4246
Metal or Mineral Uranium
Date Received 4-11-56
Estimated Cost $45,000.00
Participation (Government %) $22,225.00

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: ALTURA MINING COMPANY, a Nevada Corporation, licensed to do business in Utah.
35 North Raymond Avenue, Pasadena, California
O. D. Sisson, President 1013 San Rafael St., San Leandro, California
Jack Cooper, Vice-Pres. 1220 So. Olive, Los Angeles, Calif.
Roscoe G. Neiger, Sec'y 500 No. Second, Alhambra, Calif.

(*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 See attached

(*b*) State any mine name by which the property is known. none

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owner

(*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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper. See attached

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 March 29, 1956

ALTURA MINING COMPANY
(Applicant)

By O. D. Sisson, Pres.

Roscoe G. Neiger, Sec'y.

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

RECEIVED
APR 1 [illegible]

3. Applicant's property rights. - 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.

The Company owns the RED HOT group of claims located in Sections 17 and 18, T. 38 S R 25 E SLBM. The claims number 36 and have been surveyed and the monuments are up. Sufficient work has been done on the claims to satisfy the assessment requirements for 1955-56.

The Company also has an additional group or groups of claims under contract, totaling 553. The legal description of the claims and the recording dates are given on a separate attached page. where?

GROUP NAME	NUMBER CLAIMS	LOCATORS	DATE RECORDED	BOOK NO.	PAGE NO.
BASIN	36	C. Perkins	9/15/54	187	333-351
BIG BOY	90	R. Perkins	9/15/54	187	234-279
BIG CAT	36	R. Perkins	9/15/54	187	216-234
BLUE DAY	26	R. Perkins	8/27/54	163	158-170
BLUE JAY	42	R. Perkins	8/24/54	159 171 187	255-262 12-21 423-428
BUG	18	C. Mahon	9/15/54	187	324-333
MUDDY	8	Mahon & R. Perkins	8/27/54	173	189-193
PIKE	16	Mahon & R. Perkins	8/27/54	173	183-189 302-304
POND	18	C. Mahon	~~[illegible]~~ 9/15/54	187	293-302
ROAN	40	C. Mahon	9/15/54	187	304-324
SALLY	84	C. Perkins	9/15/54	187	351-393
SAND	15	C. Perkins & R. Perkins	8/27/54	163	176-183
SUN	36	R. Perkins	9/3/54	169 171	494-500 1-12
WEED	28	C. Mahon	9/15/54	187	279-293
RED HOT	36	R. Perkins & C. Mahon	8/16/54 8/17/54	151 153	71-76 86-98
JANIE	60	Calvin Perkins	9/15/54	187	393-423

(All of the above claims filed in official records of County Recorder in San Juan County, State of Utah)

SCHEDULE 4.

4. PHYSICAL DESCRIPTION.

a. Existing exploration and mining operations consist of stripping and trenching. Some of the original hand dug trenches shown on MAP NO. 5, have been destroyed by subsequent bulldozing operations as can be seen by reference to MAP NO. 6, TOPOG MAP OF RED HOT NO. 12 MINE AREA.

A road has been built from the county road down Montezuma Canyon to the mining area on Red Hot No. 12. This road is indicated on MAP NO. 3.

Exploration work has consisted of detailed radiometric surveys made with a Model 299 Nucliometer Counter, on 10 foot center grids in the higher reading sections of a 100 foot radiometric grid. The results of the 100 foot radiometric work is shown on MAP NO. 4 and the detail work on MAP NO. 7.

Considerable care was taken in the making of the radiometric surveys, the instrument being checked for calibration and background several times a day and whever very high readings were found.

MAP NO. 7 shows direct readings in mille roetgen units per hour taken with a probe used directly on the ground. The readings below o.10 MR/H are plotted in curves of 0.01 MR/H while these above 0.10 are plotted on curves of 0.1 difference in order to eliminate confusion in the map. The lower scale readings were taken to determine extension of known low grade ore bodies in the Brushy Basin shales.

Other geologic work consisted in checking Atomic Energy Commission Photogeologic Map formational and member contacts on the ground. The results of this detailed mapping are shown on MAP NO. 3. The geological data shown on MAP NO. 2, is taken directly from the U. .G.S. Photogeologic Maps Quadrangles Verdure 14, 15 and 16 and Aneth 1, 2 and 3. Checks on this geology against that of the Union Mines Development Corp. were also made. Measured sections of the various formations and members exposed in the area were made with transit and stadia board.

All past production from the Brushy Basin deposits has been made from open pit stripping operations using a TD 9 International Drott front end loader moving ore directly from ore piles to truck. Sampling of the ore before shipment was made by radiometric measurement only.

WILLIAM L. DE CARBONEL
MINING ENGINEER AND GEOLOGIST
529 CATALINA STREET
LAGUNA BEACH, CALIFORNIA
PHONE HYATT 4-5551

4. PHYSICAL DESCRIPTION (continued)

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

The past production of this property has been marginal and sub-marginal from the Brushy Basin Member of the Morrison formation, which is not usually considered productive in the Colorado Plateau. Mineralized zones are found in pods around favorable sites of deposition along fracture zones, due to the leaching of the overlying formations.

PRODUCTION DATA License No. P-2118

Date	Lot No.	Dry tons	% U_3O_8	Lbs. U_3O_8	% V_2O_5	Lbs. V_2O_5	$CaCo_3$	Value per T.	Total Value
12/2/54	12194	6.896	.63	86.89	.05	6.90	1.0	57.50	$ 398.66
8/5/55	13148	69.882	.19	265.55	.06	83.86	1.8	14.44	1,219.08
8/24/55	13204	35.25	.17	119.43	.07	49.18	1.9	11.56	517.06
11/14/55	13523	81.274	.10	162.65	.03	48.76	1.5	4.00	561.57
12/1/55	13575	61.02	.13	158.66	.10	122.04	1.6	6.76	616.86

4. PHYSICAL DESCRIPTION (Continued)

(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 and 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.

GEOLOGY:

The general geology of the area in the vicinity of the RED HOT group of claims is shown on MAPS NO. 2 and 3, an isocount map of RED HOT Nos. 10 and 12 is included as MAP NO. 4 and the detailed isocount map of the mineralized zone mined on RED HOT No. 12 is shown in MAP NO. 7. Generalized stratigraphic columns in the Blanding area and of the RED HOT area are given in FIGURES 1 and 2.

Production of uranium ores, to date, in the Monticello and Blanding areas has come from the sedimentary rocks of the Salt Wash member of the Jurassic Morrison formation and from the Shinle and Shinarump formations of Triassic age. One mine to the south of the RED HOT area, the International Hanwick, has been producing from the Brushy Basin member of the Morrison. The present observable mineralization on the RED HOT Group is in the Brushy Basin

The present study has been made to attempt to determine the reason for the abnormal deposition in the Brushy Basin and further drill exploration is the underlying formations is recommended as a result of these studies. The basis for this further exploration will be developed in the following paragraphs.

STRATIGRAPHY:

The oldest formation exposed in the general area is the Jurassic Bluff sandstone member of the San Rafael Group. Overlying this are the various members of the Morrison formation which are in turn overlain by the Burro Canyon and Dakota sandstones of Cretaceous age. The Morrison formation is of most economic importance to this report.

The Bluff sandstone does not show up within ten miles of the property, but was listed above as being the member below the important Salt Wash member of the Morrison and will be described.. This sandstone consists of white, gray, buff and brown massive to thin bedded, with considerable cross-bedding, varying from 15 to 250 feet in thickness. It is considered to be in part equivalent to the Summerville formation, the uppermost member of the Jurassic San Rafael Group. It is made up of endurated eolian and fluvial materials. The material is easily identified in well cores and the surface forming resistant bluffs and cliffs with vertical fractures. The town of Bluff is the type locality for this formation.

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The Morrison formation, of Upper Jurassic age, is usually divided into four member, on the basis of lithology, which are in descending order; the Brushy Basin shale, Westwater sandstone, Recapture shale, and Salt Wash sandstone.

It may be generally stated that the contacts between the members show a considerable amount of interfingering. In the RED HOT area the Recapture shale and Salt Wash sandstone are considered as one zone and are not separated due to the interfingering. It is quite possible that the Recapture shale does not exist. The Brushy Basin shale is a quiet water deposit while the lower members are essentially fluviatile.

The Brushy Basin consists of alternating thin bedded variegated shales with occasional sandstone lentils. The uppermost portion of the member consist of a bentonitic ash without apparent bedding.. A considerable amount of bentonitic material is found throughout the entire section. The material is usually soft, although occasional harder beds tend to form topographic banks with steep slopes below. In general the formation is characterized by flat or gently sloping forms. Colors vary from white, buff, brown, green, gray to dark red. Some fracture patterns are retained in the harder layers, which is of importance in so far as mineralization is concerned. The softer layers also tend to wash out from below the harder ones, drainaige is established through the fracture patterns and sink holes are developed along drainage lines. This later feature is believed to be of importance insofar as the underlying mineralization is concerned.

The Westwater sandsotone meber consists of coarse grained, light gray to green gray sandstones with from medium to massive bedding/ There are interbedded with red and green shales. . The uppermost massive sandstone lenses in this area form steep vertical to sub-vertical cliffs and wide terraces. The cliffs all show prominent vertical jointing in very consistent patterns. These fractures also act as lines for breakthrough of the sink holes in the overlying Brushy Basin. During the rains water will often come out of caves at the base of the formation.

The Salt Wash member of the Morrison, is a typical fluviatile deposit, consisting of fine to medium grained sandstones, light gray to brown in color, interbedded with red brown mudstones. Cross bedding is common. There are clay galls, and some granular conglomeritic lenses. This member also tends to erode to ledges, cliffs and ridges. Most of the mineralization to the southwest of Blanding is in this formation.

The top of mesas in this area is the Cretaceous Burro Canyon formation. This consists of white to buff sandstones and conglomerates containing well rounded pebbles of quartz, chert and quartizitic material. Some petrified wood is found. The basal two or three feet of this for-

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mation contain abundant fragments of tuff in well rounded fragments in a matrix of silica sand. The Burro Canyon erodes slowly and often slumps down due to the slumping of the softer underlying Brushy Basin. This slumping effect often gives pseudo strike and dip when viewed over a short distance. This is most apparent on the small mesa to the west of the opening on RED HOT 12. The formation is also vertically fractured and breaks in large blocks covering in part, the upper part of the Brushy Basin.

STRUCTURE.

Structurally the area lies in the Blanding Basin, the smallest of the Colorado Plateau basins. The boundaries of this basin are ill defined except along the Monument upwarp. It merges almost imperceptibly with the Paradox belt, the Four Corners platform, the Defiance uplift and the Zuni saddle. The dominant fold and joint trends within the basin are westerly to northwesterly and they stand in marked discontinuity with the trends of the Monument uplift. None of the folds are pronounced, and the area is characteristically one of very low dips. The Blanding basin is apparently a residual or by-product structure, one not resulting from it's own mechanics, but instead, resulting from specific deformations in the immediately surrounding areas. It is this resulting deformation due to stresses in the surrounding areas which gives rise to the complex fracture trends and systems in the area. The importance of these fracture patterns lies in the formation of channels for solutions. Naturally, these fracture zones increase rapidly due to weathering action and have provided additional channels for surface waters and have greatly expedited the leaching of minerals from the upper formations. The fractures are not noticeable in the softer plastic shales, but every hard layer shows well developed patterns. The topography of the area, is affected by this pattern in the Montezuma Creek area as can be seen in the drainage [illegible].

A diagram has been prepared showing the relationship between structures, fracture systems, topography and the radiometric highs in the locality. It is immediately apparent that there is a close relationship between these various features. The radiometric highs in the Brushy Basin member are related to the structure, and fracture system of the Uncompahgre, Hovenweep anticline. . The topography and drainage of Montezuma and the branches of that creek are also to some extent determined by this fracture system.

It is evident that the combination of structure, including the regional and local phenomena have set up a drainage pattern along which solutions have travelled carrying uranium mineralization. In the RED HOT group, the drainage continues downward through the Brushy Basin and Westwater Canyon members of the Morrison and it is reasonable to expect that precipitation of the mineral load has taken place here as it has in other parts of the area. The area has

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been neglected, insofar as Salt Wash, exploration is concerned, due to the lack of outcrops of this formation in this lower part of the Montezuma Creek drainage. Considerable exploration and production has come from the formation in the upper part of the drainage and to the south and east.

It is pertinent to note that the water table at the Perkins Ranch well is at about 75 feet, which would put it near the base of the Salt Wash. Other wells in section 7, T. 38 S., R. 25 E., are down to the Entrada sandstone at 600-670 feet from which a strong flow of artesian water is secured. This would indicate that the water table at the base or near the base of the Salt Wash would be the site for redeposition of the downward leached mineralization.

The entire proposal for drilling of the RED HOT group is based upon the belief that the ore bearing solutions are downward percolating, that a favorable zone for precipitation does exist in the Salt Wash member, and that the ground water table is near the base of the Salt Wash.

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

The RED HOT group and adjacent claims are located on the Perkins Ranch on Montezuma Creek. A gravelled county road leads from Blanding to the mine, a distance of 21.1 miles and 2.2 miles of dirt road lead from this road to the mine over the Salt Wash and Westwater rims. The road has been used to haul loads as high as 11 tons while mining the Brushy Basin material. Other part of the area to be drilled can easily be made accessible from this level by rapid bulldozer operation.

It is 21.1 miles from Blanding to the ore purchasing depot at Monticello.

Supplies and residence may be obtained at Blanding or Monticello. A small house is available for surpervisory employees at the Perkins Ranch.

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

A certain amount of manpower is available in Blanding, drilling equipment and drillers are available in Blanding as are other supplies and equipment. The prices are somewhat higher than normal due to distances from railhead. Spare parts are not too difficult to obtain.

Water is available throughout the year from artesian wells on the ranch.

No power is available.

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5. The exploration project.-

(a) The exploration is to be for uranium minerals.

(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, with the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

The proposed work would be done by drilling two fences along lines as laid out on MAP NO. 3, which shows the contacts of the various formations on the RED HOT group. The holes would first be laid out on 400 foot centers covering the Brushy Basin outcrop, this would use approximately 30 holes, the balance of the 60 holes could be used to drill intermediate locations. It would be planned to only core the Salt Wash.

(c) The work will start within 30 days and be completed within 6 months from the date of the 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.

Mr. O.D. Lisson, the President of the corporation has been engaged in the mineral industry for many years, his operating experience and background is included in a separate attachment. /where?

The writer of this application, William L. de Carbonel, is a graduate of the Mining College of the University of California, 1929. Since that time, except for a period in the armed forces, he has followed the mining industry, both in the United States and abroad. He has worked for the U.S. Bureau of Mines, in Rolla, Mo., and was attached to the DMEA in Joplin, Mo., under Mr. Gallagher. He is personally known to Mr. E.W. Ellis of the DMEA. He has had two years experience in uranium, having visited most of the producing and prospective areas in the U.S. as a consultant and in charge of exploration in uranium. He has had charge of exploration in foreign countries of oil, manganese, gold, lead-silver and copper properties and in the operation of these properties.

6. Estimate of costs.- Furnish a detailed estimate of the costs of the proposed work under the following headings.
(a) Independent contracts.
(b) Labor, supervision, consultants.
(c) Operating materials and supplies
(d) Operating equipment
(e) Rehabilitation and repairs.
(f) Buildings, improvements, installations
(g) Miscellaneous
(h) Contingencies.

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(a) Independent contracts.-

Bulldozer operation per hour D-6		$10.00
Diamond drilling with crew, operato to furnish water, move in equipment and out		
Plug drilling per foot		2.00
Core drilling per foot		3.00
Hole probing with recorder per hole		25.00
Trucking per ton mile		.10
Assays at $3.50 per assay		3.50
It is proposed to drill the first hole to the base of the Salt Wash and core for section	250'x$3.00	$ 750.00
Additional 29 holes on fencesx250 to be plugged at $2.00 per foot	7250'x2.00	14,500.00
Probe and log 30 holes	30x25.00	750.00
Assays		100.00
Total for preliminary portion of work on fences (Independ contracts only)		$16,100.00
The balance of $25,000 would be spent on drilling holes between or offset to the fence drilling, an estimate can only be made of this on the basis of 150' of plug drilling and 100' of coring, plus the probe cost, at a total of		25,000.00
Estimate on road to drill rig sites		400.00
Total drilling program		$41,500.00

(b) Labor, supervision and consultants.

All labor is included above under independent contracts.
Supervison and consultants fees for checking and logging holes, radioretric surveys and reports 3 months at $1,5000 month $4,500.00

(c) Operating materials and supplies
The Company owns it's own pickup and TD-9 loader so that operating materials and supplies would only include gas, oil and lubricants at $75.00 per month 3 mos. $225.00

(d) Operating equipment

Company owns International TD-9 and Willys jeep pickup, camp equipment as well as Geiger counter, transit, tape, rods.

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

RECEIVED
APR 11 1956

April 9, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium), Altura Mining Company, San Juan County, Utah

Enclosed are two copies of the subject application. One copy has been forwarded to the Grand Junction office for their review and recommendations concerning the advisability of a field examination. One copy is being retained in our file.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd. APR 9 1956
Form Approved.
Budget Bureau No. 42-R1035.2.

RECEIVED
APR 11 1956
BUREAU OF MINES
Denver, Colorado

Not to be filled in by applicant

Docket No. DMEA-4246
Metal or Mineral Uranium
Date Received 4-11-56
Estimated Cost $45,000.00
Participation (Government %)

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

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: ALTURA MINING COMPANY, a Nevada Corporation, licensed to do business in Utah.
35 North Raymond Avenue, Pasadena, California
O. D. Sisson, President 1013 San Rafael St., San Leandro, California
Jack Cooper, Vice-Pres. 1220 So. Olive, Los Angeles, Calif.
Roscoe G. Neiger, Sec'y 500 No. Second, Alhambra, Calif.

(*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 See attached

(*b*) State any mine name by which the property is known. none

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owner

(*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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper. See attached

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 March 29, 1956

ALTURA MINING COMPANY
(Applicant)

By Otto Sisson
O. D. Sisson, Pres.

Roscoe G. Neiger Sec.
Roscoe G. Neiger, Sec'y.

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

RECEIVED

APR 1 1 1956

3. Applicant's property rights. - 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.

The Company owns the RED HOT group of claims located in Sections 17 and 18, T. 38 S R 25 E SLBM. The claims number 36 and have been surveyed and the monuments are up. Sufficient work has been done on the claims to satisfy the assessment requirements for 1955-56.

The Company also has an additional group or groups of claims under contract, totaling 553. The legal description of the claims and the recording dates are given on a separate attached page.

GROUP NAME	NUMBER CLAIMS	LOCATORS	DATE RECORDED	BOOK NO.	PAGE NO.
BASIN	36	C. Perkins	9/15/54	187	333-351
BIG BOY	90	R. Perkins	9/15/54	187	234-279
BIG CAT	36	R. Perkins	9/15/54	187	216-234
BLUE DAY	26	R. Perkins	8/27/54	163	158-170
BLUE JAY	42	R. Perkins	8/24/54	159 171 187	255-262 12-21 423-428
BUG	18	C. Mahon	9/15/54	187	324-333
MUDDY	8	Mahon & R. Perkins	8/27/54	173	189-193
PIKE	16	Mahon & R. Perkins	8/27/54	173	183-189 302-304
POND	18	C. Mahon	~~[illegible]~~ 9/15/54	187	293-302
ROAN	40	C. Mahon	9/15/54	187	304-324
SALLY	84	C. Perkins	9/15/54	187	351-393
SAND	15	C. Perkins & R. Perkins	8/27/54	163	176-183
SUN	36	R. Perkins	9/3/54	169 171	494-500 1-12
WEED	28	C. Mahon	9/15/54	187	279-293
RED HOT	36	R. Perkins & C. Mahon	8/16/54 8/17/54	151 153	71-76 86-98
JANIE	60	Calvin Perkins	9/15/54	187	393-423

(All of the above claims filed in official records of County Recorder in San Juan County, State of Utah)

SCHEDULE 4.

4. PHYSICAL DESCRIPTION.

a. Existing exploration and mining operations consist of stripping and trenching. Some of the original hand dug trenches shown On MAP NO. 5, have been destroyed by subsequent bulldozing operations as can be seen by reference to MAP NO. 6, TOPOGRAPH OF RED HOT NO. 12 MINE AREA.

A road has been built from the county road down Montezuma Canyon to the mining area on Red Hot No. 12. This road is indicated on MAP NO. 3.

Exploration work has consisted of detailed radiometric surveys made with a Model 299 Nucliometer Counter, on 10 foot center grids in the higher reading sections of a 100 foot radiometric grid. The results of the 100 foot radiometric work is shown on MAP NO. 4 and the detail work on MAP NO. 7.

Considerable care was taken in the making of the radiometric surveys, the instrument being checked for calibration and background several times a day and whever very high readings were found.

MAP NO. 7 shows direct readings in mille roetgen units per hour taken with a probe used directly on the ground. The readings below o.10 MR/H are plotted in curves of 0.01 MR/H while these above 0.10 are plotted on curves of 0.1 difference in order to eliminate confusion in the map. The lower scale readings were taken to determine extension of known low grade ore bodies in the Brushy Basin shales.

Other geologic work consisted in checking Atomic Energy Commission Photogeologic Map formational and member contacts on the ground. The results of this detailed mapping are shown on MAP NO. 3. The geological data shown on MAP NO. 2, is taken directly from the U.S.G.S. Photogeologic Maps Quadrangles Verdure 14, 15 and 16 and Aneth 1, 2 and 3. Checks on this geology against that of the Union Mines Development Corp. were also made. Measured sections of the various formations and members exposed in the area were made with transit and stadia board.

All past production from the Brushy Basin deposits has been made from open pit stripping operations using a TD 9 International Drott front end loader moving ore directly from ore piles to truck. Sampling of the ore before shipment was made by radiometric measurement only.

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4. PHYSICAL DESCRIPTION (continued)

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

The past production of this property has been marginal and sub-marginal from the Brushy Basin Member of the Morrison formation, which is not usually considered productive in the Colorado Plateau. Mineralized zones are found in pods around favorable sites of deposition along fracture zones, due to the leaching of the overlying formations.

PRODUCTION DATA License No. P-2118

Date	Lot No.	Dry tons	% U_3O_8	Lbs. U_3O_8	% V_2O_5	Lbs. V_2O_5	$CaCo_3$	Value per T.	Total Value
12/2/54	12194	6.896	.63	86.89	.05	6.90	1.0	57.50	$ 398.66
8/5/55	13148	69.882	.19	265.55	.06	83.86	1.8	14.44	1,219.08
8/24/55	13204	35.25	.17	119.43	.07	49.18	1.9	11.56	517.06
11/14/55	13523	81.274	.10	162.85	.03	48.76	1.5	4.00	561.57
12/1/55	13575	61.02	.13	158.66	.10	122.04	1.6	6.76	616.86

254.0

4. PHYSICAL DESCRIPTION (Continued)

(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 and 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 your require its return to you.

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The general geology of the area in the vicinity of the RED HOT group of claims is shown on MAPS NO. 2 and 3, an isocount map of RED HOT Nos. 10 and 12 is included as MAP NO. 4 and the detailed isocount map of the mineralized zone mined on RED HOT No. 12 is shown in MAP NO. 7. Generalized stratigraphic columns in the Blanding area and of the RED HOT area are given in FIGURES 1 and 2.

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The present study has been made to attempt to determine the reason for the abnormal deposition in the Brushy Basin and further drill exploration is the underlying formations is recommended as a result of these studies. The basis for this further exploration will be developed in the following paragraphs.

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The oldest formation exposed in the general area is the Jurassic Bluff sandstone member of the San Rafael Group. Overlying this are the various members of the Morrison formation which are in turn overlain by the Burro Canyon and Dakota sandstones of Cretaceous age. The Morrison formation is of most economic importance to this report.

The Bluff sandstone does not show up within ten miles of the property, but was listed above as being the member below the important Salt Wash member of the Morrison and will be described.. This sandstone consists of white, gray, buff; and brown massive to thin bedded, with considerable cross-bedding, varying from 15 to 250 feet in thickness. It is considered to be in part equivalent to the Summerville formation, the uppermost member of the Jurassic San Rafael Group. It is made up of endurated eolian and fluvial materials. The material is easily identified in well cores and the surface forming resistant bluffs and cliffs with vertical fractures. The CARBONE Bluff is the type locality for this formation.

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LAGUNA BEACH, CALIFORNIA
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The Morrison formation, of Upper Jurassic age, is usually divided into four member, on the basis of lithology, which are in descending order; the Brushy Basin shale, Westwater sandstone, Recapture shale, and Salt Wash sandstone.

It may be generally stated that the contacts betweeen the members show a considerable amount of interfingering. In the RED HOT area the Recapture shale and Salt Wash sandstone are considered as one zone and are not separated due to the interfingering. It is quite possible that the Recapture shale does not exist. The Brushy Basin shale is a quiet water deposit while the lower members are essentially fluviatile.

The Brushy Basin consists of alternating thin bedded variegated shales with occasional sandstone lentils. The uppermost portion of the member consist of a bentonitic ash without apparent bedding.. A considerable amount of bentonitic material is found throughout the entire section. The material is usually soft, although occasional harder beds tend to form topographic banks with steep slopes below. In general the formation is characterized by flat or gently sloping forms. Colors vary from white, buff, brown, green, gray to dark red. Some fracture patterns are retained in the harder layers, which is of importance in so far as mineralization is concerned. The softer layers also tend to wash out from below the harder ones, drainaige is established through the fracture patterns and sink holes are developed along drainage lines. This later feature is believed to be of importance insofar as the underlying mineralization is concerned.

The Westwater sandsotone meber consists of coarse grained, light gray to green gray sandstones with from medium to ma sive bedding/ There are interbedded with red and green shales. . The uppermost massive sandstone lenses in this area form steep vertical to sub-vertical cliffs and wide terraces. The cliffs all show prominent vertical jointing in very consistent patterns. These fractures also act as lines for breakthrough of the sink holes in the overlying Brushy Basin. During the rains water will often come out of caves at the base of the formation.

The Salt Wash member of the Morrison, is a typical f fluiatile deposit,consisting of fine to medium grained sandstones, light gray to brown in color, interbedded with red brown mudstones. Cross bedding is common. There are clay galls, and some granular conglomeritic lenses. This member also tends to erode to ledges, cliffs and ridges. Most of the mineralization to the southwest of Blanding is in this formation.

The top of mesas in this area is the Cretaceous Burro Canyon formation. This consists of white to buff sandstones and conglomerates containing well rounded pebbles of quartz, chert and quartizitic material. Some petrified wood is also found.TThe basal two or three feet of this for-

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ation contain abundant fragments of tuff in well rounded fragments in a matrix of silica sand. The Burro Canyon erodes slowly and often slumps down due to the slumping of the softer underlying Brushy Basin. This slumping effect often gives pseudo strike and dip when viewed over a short distance. This is most apperent on the small mesa to the west of the opening on RED HOT 12. The formation is also vertically fractured and breaks in large blocks covering in part, the upper part of the Brushy Basin.

STRUCTURE.

Structurally the area lies in the Blanding Basin, the smallest of the Colorado Plateau basins. The boundaries of this basin are ill defined except along the Monument upwarp. It merges almost imperceptibly with the Paradox belt, the Four Corners platform, the Defiance uplift and the Tyende saddle. The dominant fold and joint trends within the basin are westerly to northwesterly and they stand in marked discontinuity with the trends of the Monument uplift. None of the folds are pronounded, and the area is characteristically one of very low dips. The Blanding basin is apparently a residual or by-product structure, one not resulting from it's own mechanics, but instead, resulting from specific deformations in the immediately surrounding areas. It is this resulting deformation due to stresses in the surrounding areas which gives rise to the complex fracture trends and systems in the area. The importance of these fracture patterns lies in the formation of channels for solutions . Naturally , these fracture zones increase rapidly due to weathering action and have provided additional channels for surface waters and have greatly expedited the leaching of minerals from the upper formations. The fractures are not noticeable in the softer plastic shales, but every hard layer shows well developed patterns. The topography of the area, is affected by this pattern in the Montezuma Creek area as can be seen in the drainage pattern.

A diagram has been prepared showing the relationship between structures, fracture systems, topography and the radiometric highs in the locality. It is immediately apparent that there is a close relationship between these various features. The radiometric highs in the Brushy Basin Member are related to the structure, and fracture system of the Uncompahgre, Howenweep anticline. . The topography and drainage of Montezuma and the branches of that creek are also to some extent determined by this fracture system.

It is evident that the combination of structure, including the regional and local phenomena have set up a drainage pattern along which solutions have travelled carrying uranium mineralization. In the RED HOT grougp, the drainage continues downward through the Brushy Basin and Westwater Canyon members of the Morrison and it is reasonable to expect that precipitation of the mineral load has taken place here as it has in other parts of the area. The area has

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been neglected, insofar as Salt Wash, exploration is co. cerned, due to the lack of outcrops of this formation in t. lower part of the Montezuma Creek drainage. Considerable exploration and production has come from the formation in the upper part of the drainage and to the south and east.

It is pertinent to note that the water table at the Perkins Ranch well is at about 75 feet, which would put it near the base of the Salt Wash. Other wells in section 7, T. 38 S., R. 25 E., are down to the Entrada sandstone at 600-670 feet from which a strong flow of artesian water is secured. This would indicate that the water table at the base or near the base of the Salt Wash would be the site for redeposition of the downward leached mineralization.

The entire proposal for drilling of the RED HOT group is based upon the belief that the ore bearing solutions are downward percolating, that a favorable zone for precipitation does exist in the Salt Wash member, and that the ground water table is near the base of the Salt Wash.

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

The RED HOT group and adjacent claims are located on the Perkins Ranch on Montezuma Creek. A gravelled county road leads from Blanding to the mine, a distance of 21.1 miles and 2.2 miles of dirt road lead from this road to the mine over the Salt Wash and Westwater rims. The road has been used to haul loads as high as 11 tons while mining the Brushy Basin material. Other part of the area to be drilled can easily be made accessible from this level by rapid bulldozer operation.

It is 21.1 miles from Blanding to the ore purchasing depot at Monticello.

Supplies and residence may be obtained at Blanding or Monticello. A small house is available for surpervisory employees at the Perkins Ranch.

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

A certain amount of manpower is available in Blanding, drilling equipment and drillers are available in Blanding as are other supplies and equipment. The prices are somewhat higher than normal due to distances from railhead. Spare parts are not too difficult to obtain.

Water is available throughout the year from artesian wells on the ranch.

No power is available.

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5. The exploration project.-

(a) The exploration is to be for uranium minerals.

(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, with the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

The proposed work would be done by drilling two fences along lines as laid out on MAP NO. 3, which shows the contacts of the various formations on the RED HOT group. The holes would first be laid out on 400 foot centers covering the Brushy Basin outcrop, this would use approximately 30 holes, the balance of the 60 holes could be used to drill intermediate locations. It would be planned to only core the Salt Wash.

(c) The work will start within 30 days and be completed within 6 months from the date of the 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.

Mr. O.D. Sisson, the President of the corporation has been engaged in the mineral industry for many years, his operating experience and background is included in a separate attachment.

The writer of this application, William L. de Carbonel, is a graduate of the Mining College of the University of California, 1929. Since that time, except for a period in the armed forces, he has followed the mining industry, both in the United States and abroad. He has worked for the U.S. Bureau of Mines, in Rolla, Mo., and was attached to the DMEA in Joplin, Mo., under Mr. Gallagher. He is personally known to Mr. E.W. Ellis of the DMEA. He has had two years experience in uranium, having visited most of the producing and prospective areas in the U.S. as a consultant and in charge of exploration in uranium. He has had charge of exploration in foreign countries of oil, manganese, gold, lead-silver and copper properties and in the operation of these properties.

6. Estimate of costs.- Furnish a detailed estimate of the costs of the proposed work under the following headings.
(a) Independent contracts.
(b) Labor, supervision, consultants.
(c) Operating materials and supplies
(d) Operating equipment
(e) Rehabilitation and repairs.
(f) New buildings, improvements, installations
(g) Miscellaneous
(h) Contingencies.

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Diamond drilling with crew, operato
to furnish water, move in equipment and out

Plug drilling per foot		2.00
Core drilling per foot		3.00
Hole probing with recorder per hole		25.00
Trucking per ton mile		.10
Assays at $3.50 per assay		3.50
It is proposed to drill the first hole to the base of the Salt Wash and core for section	250'x$3.00	$ 750.00
Additional 29 holes on fencesx250 to be plugged at $2.00 per foot	7250'x2.00	14,500.00
Probe and log 30 holes	30x25.00	750.00
Assays		100.00
Total for preliminary portion of work on fences (Independ contracts only)		$16,100.00

The balance of $25,000 would be spent on drilling holes between or offset to the fence drilling, an estimate can only be made of this on the basis of 150' of plug drilling and 100' of coring, plus the probe cost, at a total of 25,000.00

Estimate on road to drill rig sites 400.00

Total drilling program $41,500.00

(b) Labor, supervision and consultants.

All labor is included above under independent contracts.
Supervison and consultants fees for checking and logging holes, radiometric surveys and reports 3 months at $1,5000 month $4,500.00

(c) Operating materials and supplies
The Company owns it's own pickup and TD-9 loader so that operating materials and supplies would only include gas, oil and lubricants at $75.00 per month 3 mos. $225.00

(d) Operating equipment

Company owns International TD-9 and Willys jeep pickup, camp equipment as well as Geiger counter, transit, tape, rods.

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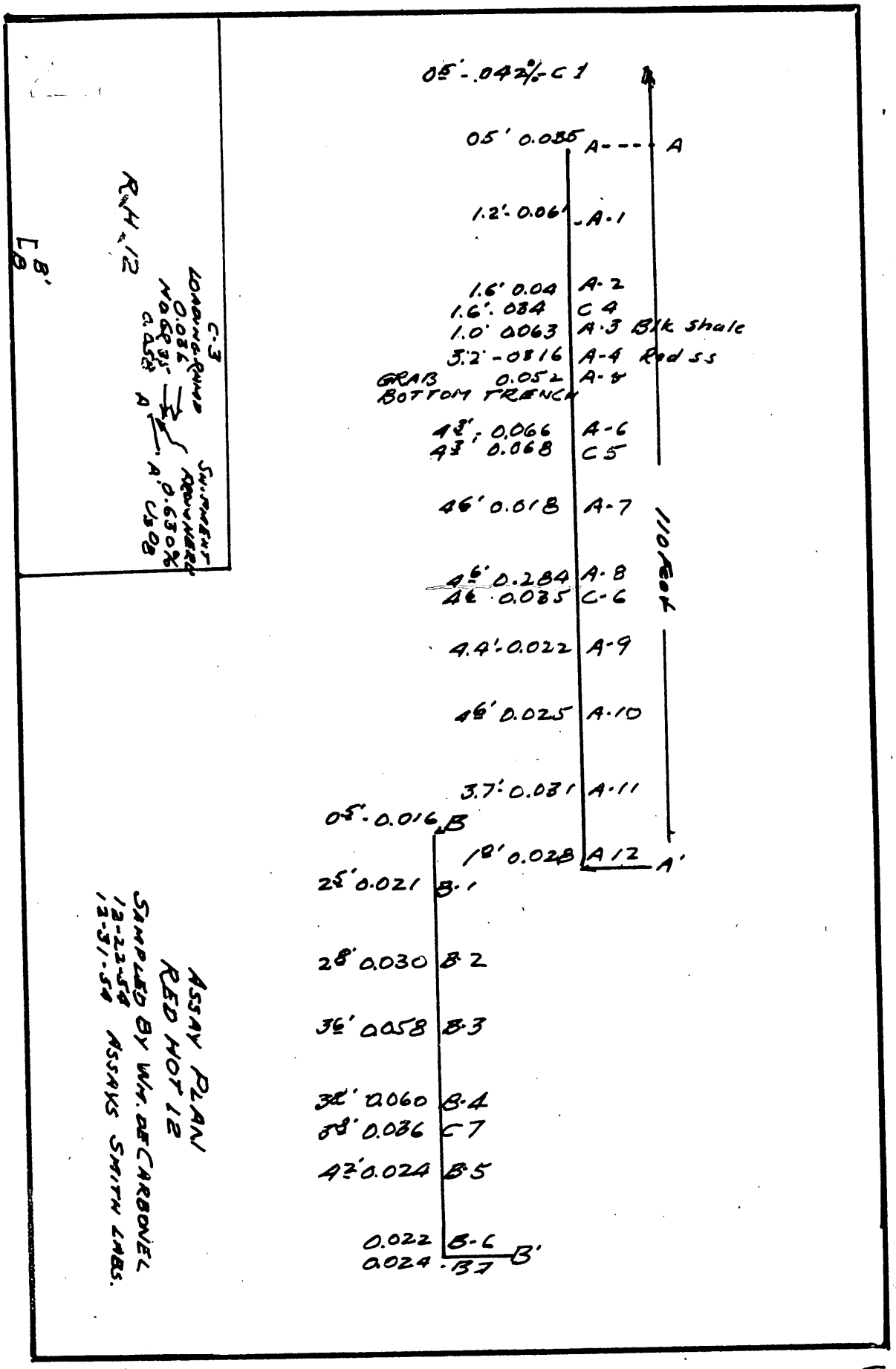
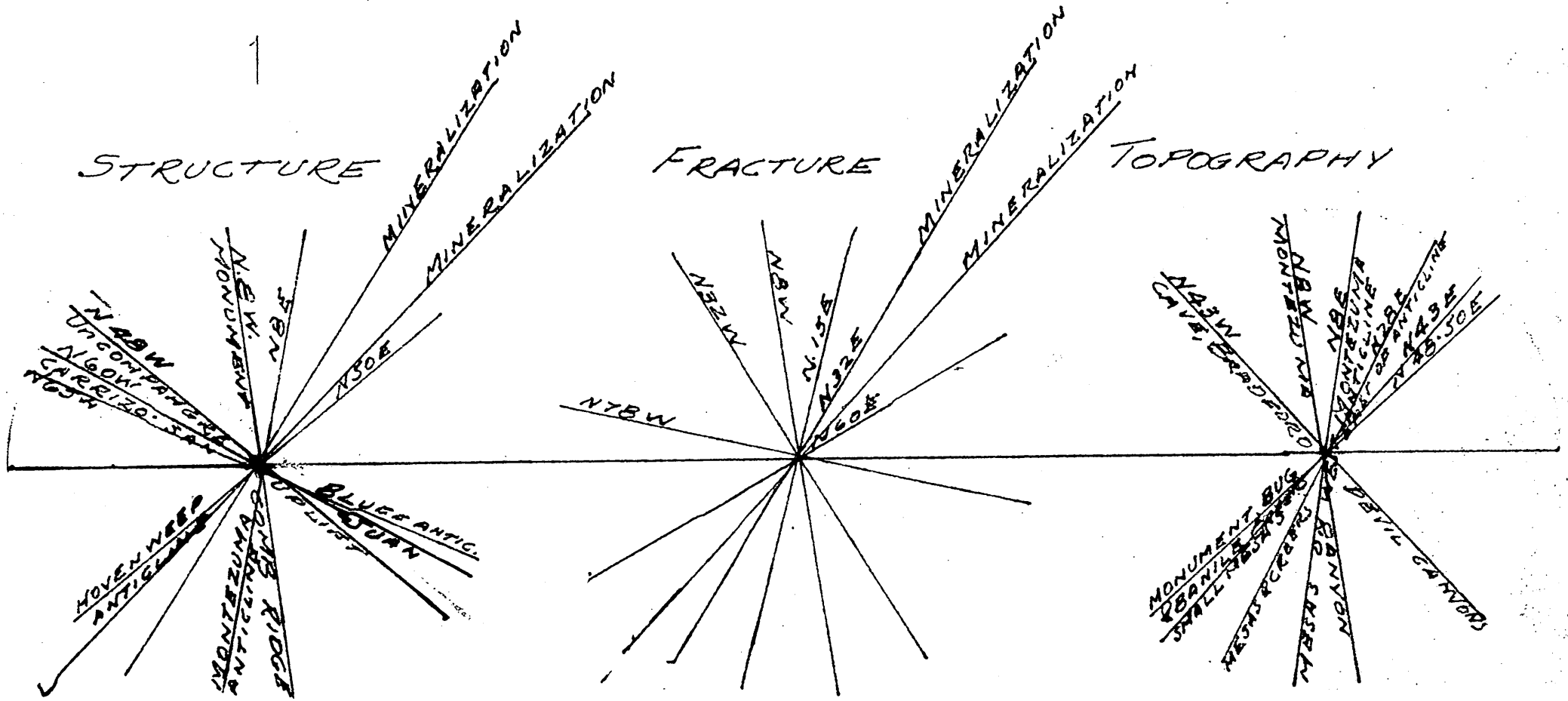

05'-.042%-C1
05' 0.035 A---- A
1.2'-0.061 A-1
1.6' 0.04 A-2
1.6'-.034 C4
1.0' 0.063 A-3 Blk. Shale
3.2'-0.016 A-4 Red SS
GRAB 0.052 A-5
BOTTOM TRENCH
4.8'-0.066 A-6
4.3' 0.068 C5
4.6' 0.018 A-7
4.6' 0.284 A-8
4.6 0.035 C-6
4.4'-0.022 A-9
4.8' 0.025 A-10
3.7'-0.031 A-11
05'-0.016 B
1.8' 0.028 A 12 A'
110 Feet
2.5' 0.021 B-1
2.8' 0.030 B 2
3.6' 0.058 B-3
3.6' 0.060 B-4
8.8' 0.036 C7
4.2' 0.024 B-5
0.022 B-6
0.024 B7 B'
C-3
LOADING RAMP
0.032
NO GRADE
0.25%
A
A'
SAN. PAVEMENT
BROWNFIELD
0.630%
C508
RM. 12
B'
B
ASSAY PLAN
RED HOT 12
SAMPLED BY WM. DECARBONEL
12-22-54
12-31-54 ASSAYS SMITH LABS.

MAP No. 5

RELATION OF NATURAL FEATURES

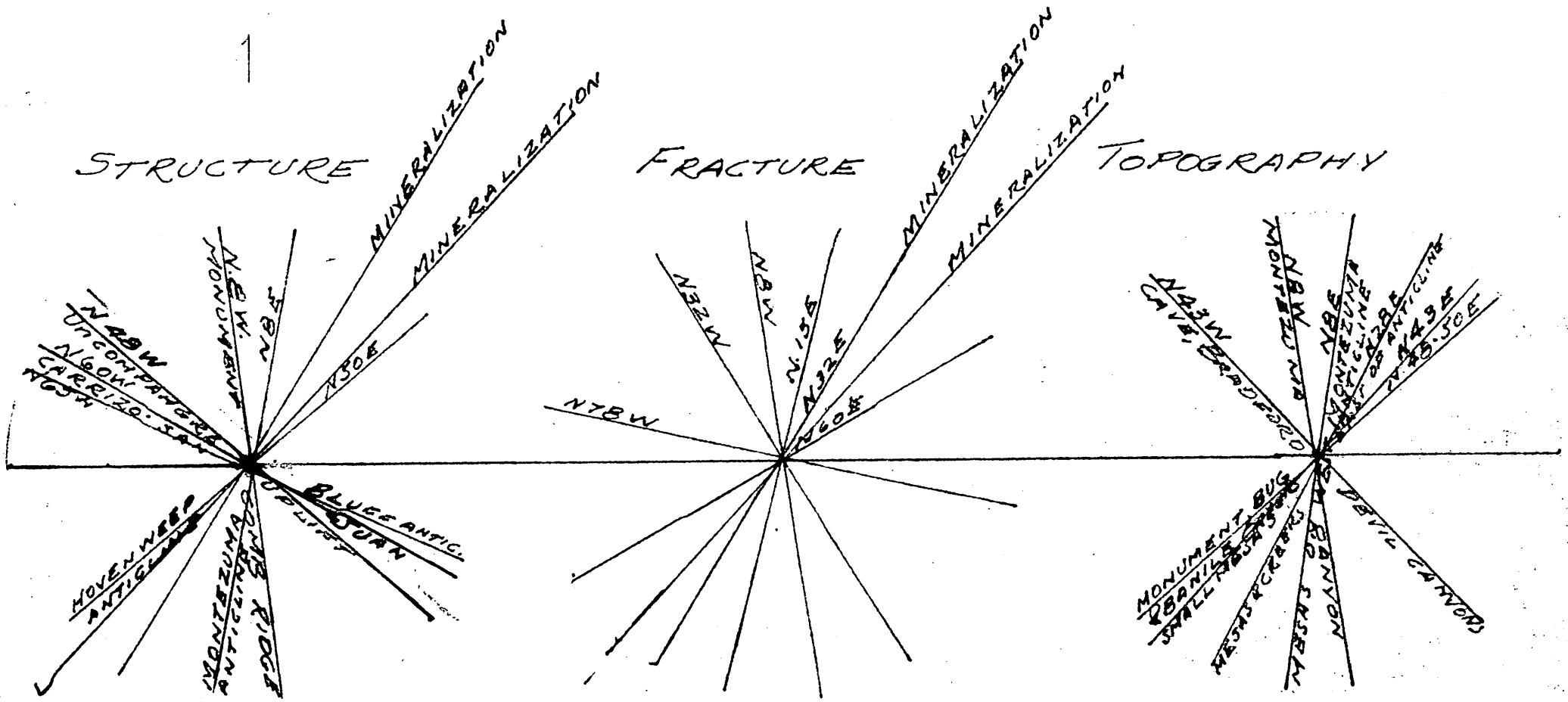


The mineralization in the Brushy Basin follows N.32 E. fracture system apparently this system is related to Uncompahgre Uplift structure.

William L. de Courtenay

RELATION OF NATURAL FEATURES

1



The mineralization in the Brushy Basin follows N.32 E. fracture system apparently this system is related to Uncompahgre Uplift structure.

William L. de Courtenay

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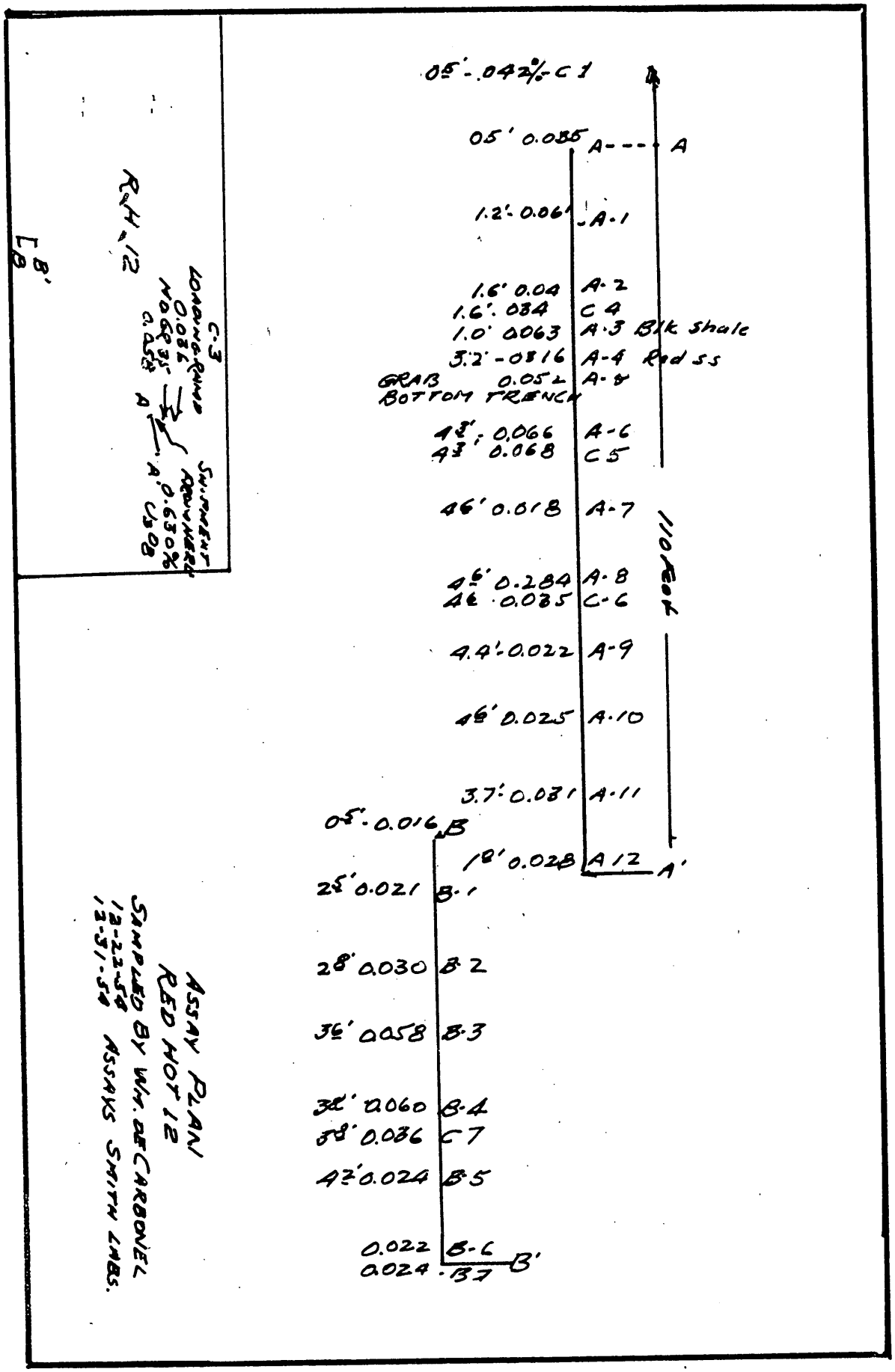
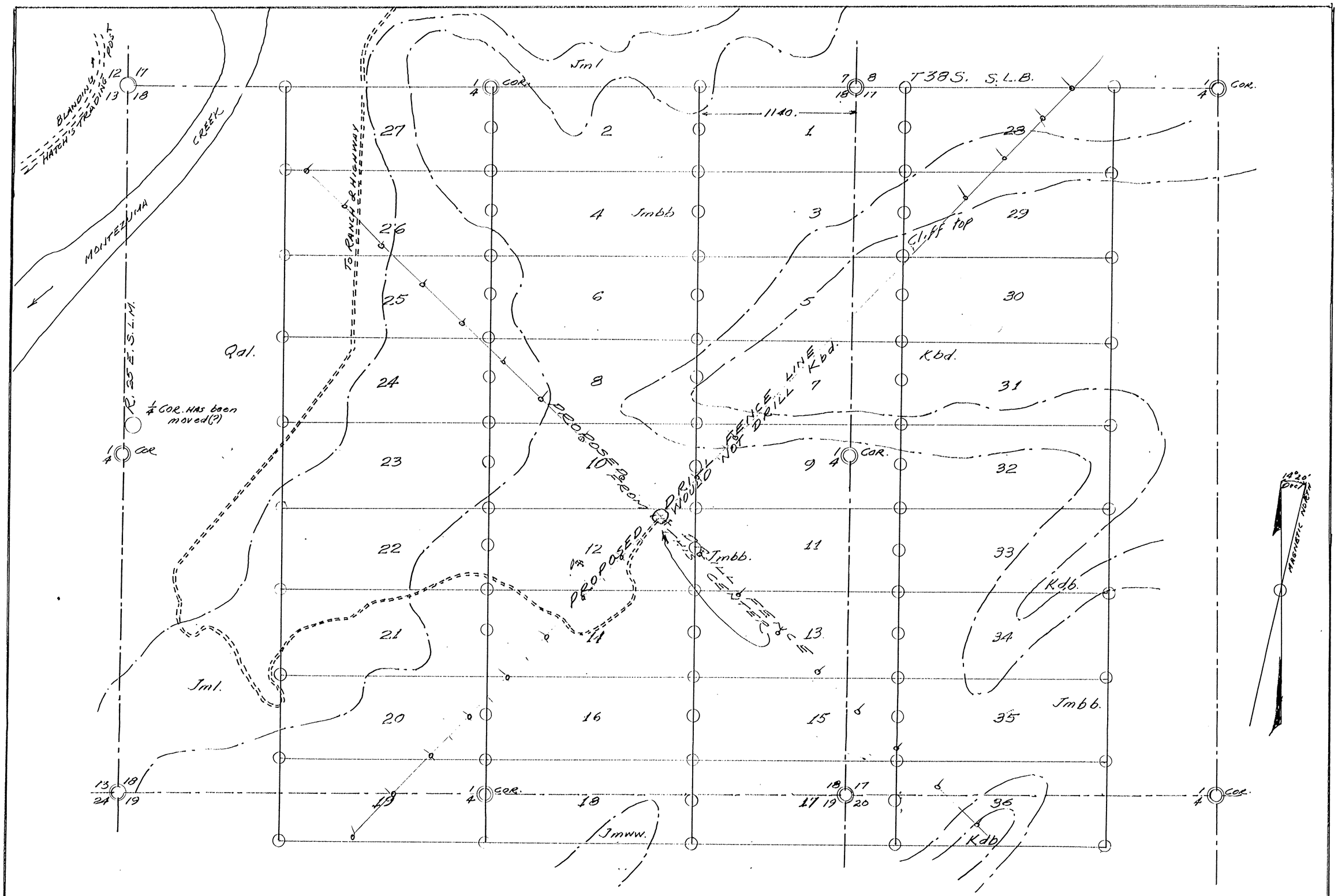


MAP No. 5



LEGEND

- Known G.L.O. Corners
- Section Lines
- Claim Boundaries
- Claim Monuments
- Roads
- Formation and Member Contacts
- Working Places

- Qal — Alluvium & Soil Mantle
- Kdb — Dakota Sandstone
- Unconformity
- Jm. — Jmbb — Brushy Basin Shale
- Jm. — Jmww, Jmsw — Jml — Westwater Sandstone, Salt Wash Sandstone

ALTURA MINING COMPANY

Claim and Geological Map
Red Hot Group Mining Claims
San Juan County, Utah

Scale 1" = 400' Mar. 1956

Wade Carbonel

MAP NO. 3

ALTURA MINING COMPANY

GENERAL CLAIM & GEOLOGIC MAP

PERKINS PROPERTIES

SAN JUAN COUNTY, UTAH

SCALE 1:24,000 FEB. 1956

QUATERNARY

Qal — Alluvium. Valley fill and terrace gravel

CRETACEOUS

Km — Mancos shale. Present in this area as a thin mantle above the Dakota sandstone.

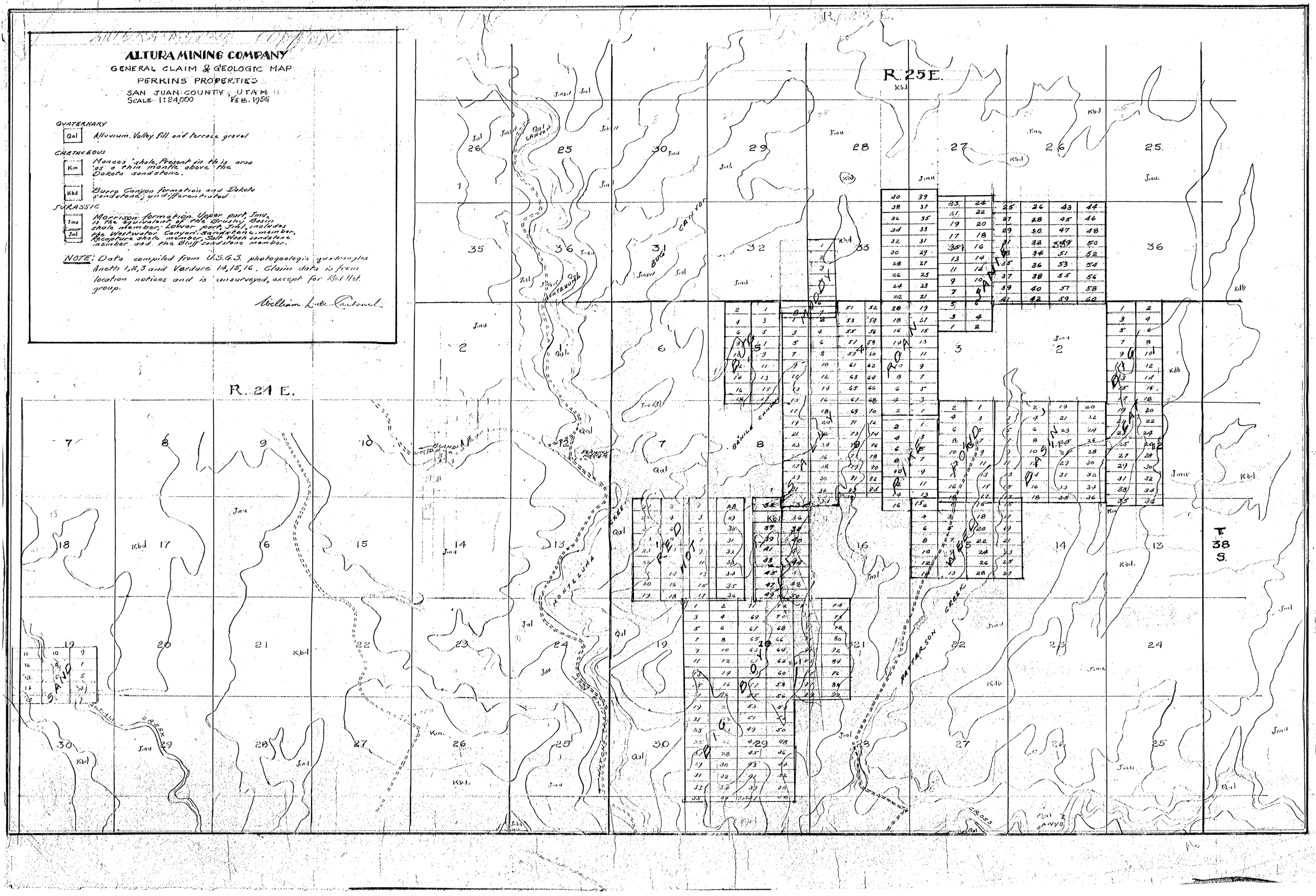
Kbd — Burro Canyon formation and Dakota sandstone, undifferentiated.

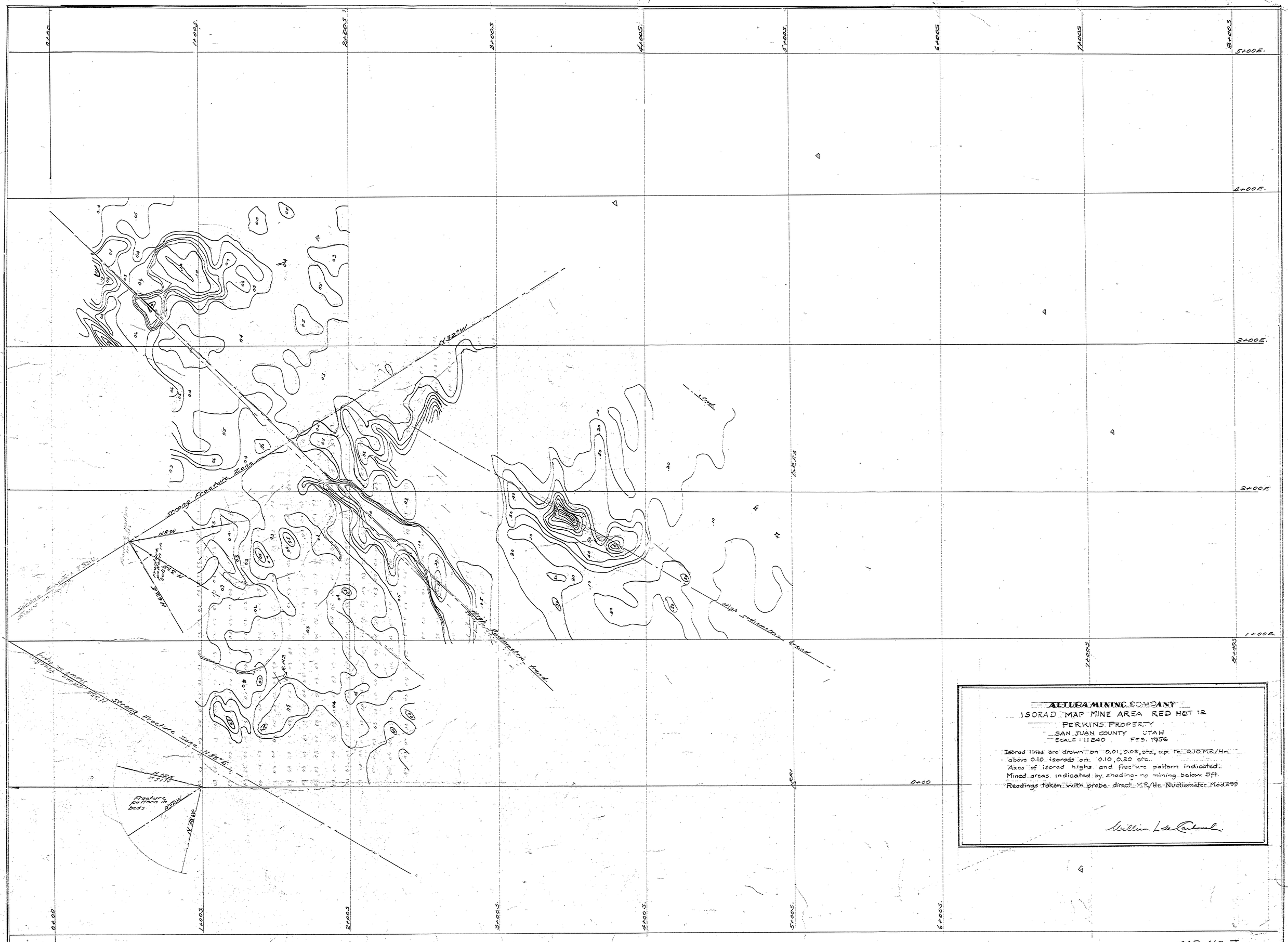
JURASSIC

Jmu — Morrison formation. Upper part, Jmu, is the equivalent of the Brushy Basin shale member. Lower part, Jml, includes the Westwater Canyon sandstone member, Recapture shale member, Salt Wash sandstone member, and the Bluff sandstone member.

NOTE: Data compiled from U.S.G.S. photogeologic quadrangles Aneth 1,2,3 and Vardure 14,15,16. Claim data is from location notices and is unsurveyed, except for Kel Hat group.

William Lee Carbonel





ALTURA MINING COMPANY

ISORAD MAP MINE AREA RED HOT 12

PERKINS PROPERTY

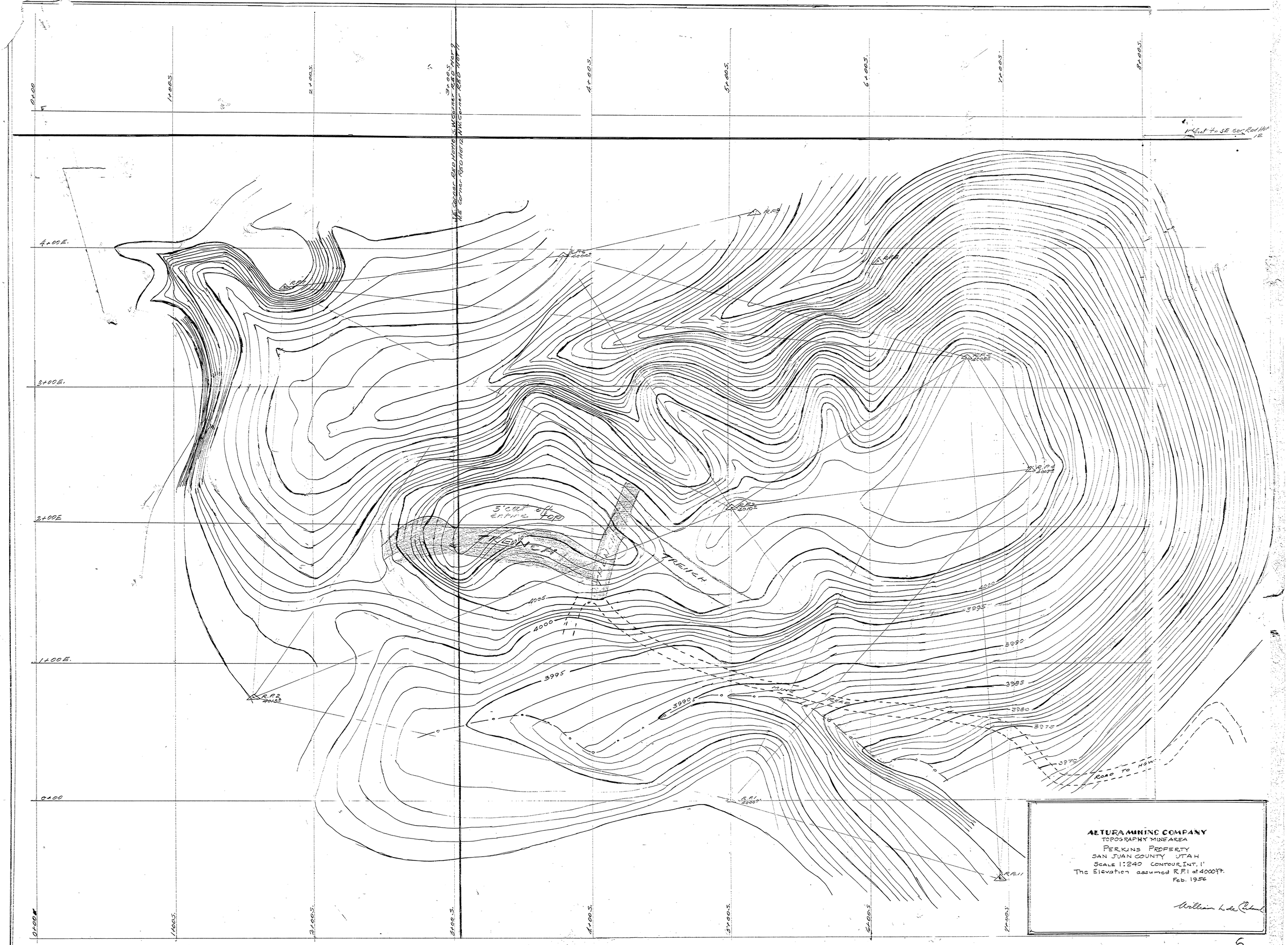
SAN JUAN COUNTY UTAH

SCALE : 1:240 FEB. 1956

Isorad lines are drawn on 0.01, 0.02, etc., up to 0.10 MR/Hr.
above 0.10 isorads on: 0.10, 0.20 etc..
Axes of isorad highs and fracture pattern indicated.
Mined areas indicated by shading- no mining below 5ft.
Readings taken with probe direct MR/Hr. Nuclometer Mod.299

William L. de Carlowe

MAP NO. 7


0+00
1+00S.
2+00S.
3+00S.
4+00S.
5+00S.
6+00S.
7+00S.
8+00S.
1+00 feet to SE Cor Red Hor 12
NE Corner Red Horn 9
NW Corner Red Horn 11
4+00E.
3+00E.
2+00E
1+00E.
0+00
R.P.
R.P.1 4000'
R.P.2 4015'
R.P.3 4000'
R.P.4 4000'
R.P.5 4010'
R.P.6 4000'
R.P.7 4000'
R.P.8 4000'
R.P.9
R.P.11
5' cut off entrance top
TRENCH
4005
4000
3995
3990
3985
3980
3975
3970
MINE ROAD
ROAD TO HGW
ALTURA MINING COMPANY
TOPOGRAPHY MINE AREA
PERKINS PROPERTY
SAN JUAN COUNTY UTAH
SCALE 1:240 CONTOUR INT. 1'
The Elevation assumed R.P.1 at 4000'ft.
Feb. 1956
William L. de Rubeis