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

Department of the Interior
Defense Materials Administration
RECEIVED
JUL 10 1953

July 8, 1953

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4640

From: H. D. Keiser, Bureau of Mines Member
Uranium Commodity Committee

Subject: Final Report, DMEA Docket 3020, Garner & Royer, Zebra, Yellow Jack, and Hattie Claims, San Miguel County, Colorado

I have reviewed the subject report and discussed it with Arthur P. Butler, Geological Survey Member, and Joseph O. Hosted, representative of the Atomic Energy Commission.

It is recommended that the report be approved, and that the Field Team's denial of an exploration loan also be approved.

The subject report has been forwarded to the Chief, Minerals Division, Bureau of Mines, in accord with the routing slip attached thereto.

H. D. Keiser

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

OF THE INTERIOR
Bureau Mines, Washington
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Signed

H. D. Keiser

STANDARD FORM NO. 64

Office Memorandum UNITED STATES GOVERNMENT

RECEIVED

JUL 8 1953

TO : E. Wm Ellis, DMEA Member
Uranium Commodity Committee

DATE: July 7, 1953

FROM : Arthur P. Butler, Jr., USGS Member, Uranium Commodity Committee

SUBJECT: Final Field Team report, DMEA docket 3020 (uranium) Millard Garner and D. J. Royer, applicants, Norwood, Colo.; Zebra, Yellow Jack, and Hattie claims, Secs. 15 and 16, T. 43 N., R. 16 W., San Miguel County Colorado.

Review and Comment

The Field Team Report concerning exploration on the property identified above has been reviewed and discussed with H. D. Keiser, Bureau of Mines member, Uranium Commodity Committee.

As a result of an examination, the geologist and engineer members of the field team found that the ore bodies on the claims are generally scattered and small, ranging in size from a few to ten tons, and are all in the lower part of the Salt Wash member, which throughout the Colorado Plateau generally does not contain large bodies of uranium ore. They concluded that it is improbable that exploration would result in the discovery of any significant deposits of ore grade material.

Recommendations

I concur in the recommendation of the Field Team that Government assistance for exploration be denied.

Arthur P. Butler, Jr.

Copy to E. Wm. Ellis (2)

IN REPLY REFER TO:

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

July 7, 1953

E. Wm Ellis, DMEA Member
Uranium Commodity Committee
Arthur I. Butler, Jr., USGS Member, Uranium Commodity Committee

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

E. Wm Ellis, DMEA Member
Uranium Commodity Committee
Arthur P. Butler, Jr., USGS Member, Uranium Commodity Committee

July 7, 1953

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Recommendations

I concur in the recommendation of the Field Team that Government assistance for exploration be denied.

Copy to E. Wm. Ellis (2)

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

224 New Customhouse
Denver 2, Colorado

June 22, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200.

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 3020 (Uranium), Garner & Reyer, Zebra, Yellow Jacket and Hattie Claims, San Miguel County, Colorado.

Enclosed are four copies of the final report on the subject docket, a copy of the letter of denial to the applicants and two copies of Form 3b.

W. H. King
W. H. King

E. N. Hauchman
for A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
6-29-53
(date)

C O P Y

224 New Customhouse
Denver 2, Colorado

June 22, 1953.

Mr. Millard Garner
Mr. D. J. Royer
Norwood, Colorado

Re: Docket DMEA-3020

Gentlemen:

Reference is made to your application for Government aid on the Zebra, Hattie, and Yellow Jacket claims.

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

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of uranium by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

/s/ W. H. KING
W. H. King
Field Team, Region IV

/s/ E. N. HARSHMAN
for A. H. Koschmann
Field Team, Region IV

HMC:cwm

cc: Administrator, DMEA
WMTraver
ERGordon
RFFischer
CETowle
AHKoschmann (2)
Subject
Chron.

Reviewed by
DMEA OPERATING COMMITTEE
6-29-53
(date)

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

200 New Customhouse
Denver 2, Colo.

June 10, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3020, Zebra, Hattie, and Yellow Jacket claims, Gypsum Valley district, San Miguel County, Colorado.

Enclosed are 11 copies of the geologic report by C. F. Withington, of the U. S. Geological Survey, covering the above docket.

It has been recommended that the loan be denied.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (11)

Reviewed by
DMEA OPERATING COMMITTEE
6-29-53
(date)

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

June 9, 1953

Memorandum

To: A. H. Koschmann
Field Team, Region IV

From: R. P. Fischer
Colorado Plateau District office

Subject: DMEA 3020, Zebra, Hattie, and Yellow Jacket claims, Gypsum Valley district, San Miguel County, Colorado

Transmitted herewith are eleven copies of a geologic report on the Zebra, Hattie, and Yellow Jacket claims, owned by D. J. Royer and Millard Garner. These claims are in the Gypsum Valley district, San Miguel County, Colo. The applicants have applied for assistance in exploring for uranium deposits by drilling about 80 wagon-drill holes. The application requests $5,455.00 for drilling and construction of access roads.

The attached report was prepared by C. F. Withington, and is based on a field examination made jointly on May 28 with S. W. Hazen, Jr., and R. R. McLellan of the Bureau of Mines.

The mineralized material on these claims occurs in five scattered deposits in the lowest sandstone bed of the Salt Wash member No figures are available for the production from these claims. The applicants have estimated that 200 tons of ore have been mined from these claims, although examination of the workings indicates that the production has likely been a lot less.

Because the known deposits are small and are scattered along about 6,000 feet of outcrop, and because the lowest sandstone bed of the Salt Wash member generally contains no large deposits of uranium-bearing material, the deposits in the area covered by the application will probably be too small and too scattered to justify exploration. The report recommends that the application be denied.

I concur with this recommendation.

R P Fischer

R. P. Fischer
Acting District Supervisor

Reviewed by
DMEA OPERATING COMMITTEE
6-29-53
(date)

Enclosures

UNITED STATES DEPARTMENT OF THE INTERIOR

DOUGLAS MCKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM

REGION IV

DMEA 3020 (Uranium)

Zebra, Hattie, and Yellow Jacket claims,

Gypsum Valley district, San Miguel County, Colorado

C. F. Withington, Geologist
U. S. Geological Survey

June 1953

Reviewed by
DMEA OPERATING COMMITTEE
6-29-53
(date)

DMEA 3020 (Uranium)

Zebra, Hattie, and Yellow Jacket claims,
Gypsum Valley district, San Miguel County, Colorado

INTRODUCTION AND SUMMARY

D. J. Royer and Millard Garner, owners of the Zebra, Hattie, and Yellow Jacket claims, have applied (Docket 3020) to the Defense Minerals Exploration Administration for a loan to be used for the exploration of uranium on the Zebra, Zebra No. 1, Hattie, and Yellow Jacket claims, secs. 15 and 16, T. 43 N., R. 16 W., New Mexico principal meridian, Gypsum Valley district, San Miguel County, Colo. (fig. 1).

The applicants plan to do 72 hours of bulldozer work to build access roads, and 4,125 feet of wagon drilling. The drilling is planned in three phases: Phase 1 consists of drilling close-spaced holes in the vicinity of the mine. Phases 2 and 3 are contingent on the success of phase 1. The total cost of exploration is estimated to be $5,455.00.

An examination of these claims was made in the company of S. W. Hazen, Jr., and R. R. McLellan of the Bureau of Mines on May 28, 1953.

As the result of the examination, it is recommended that the loan be denied as it is doubtful that enough ore could be developed to justify the applicants' proposal.

GEOLOGY

The exposed rocks on the Zebra, Hattie, and Yellow Jacket claims consist of the Salt Wash member of the Jurassic Morrison formation. Only the lower part of the Salt Wash member is present on the claims. The remainder of the formation has been removed by erosion. The lower part of the Salt Wash member consists of a massive brown, light brown, and red-brown sandstone bed 35 to 50 feet thick.

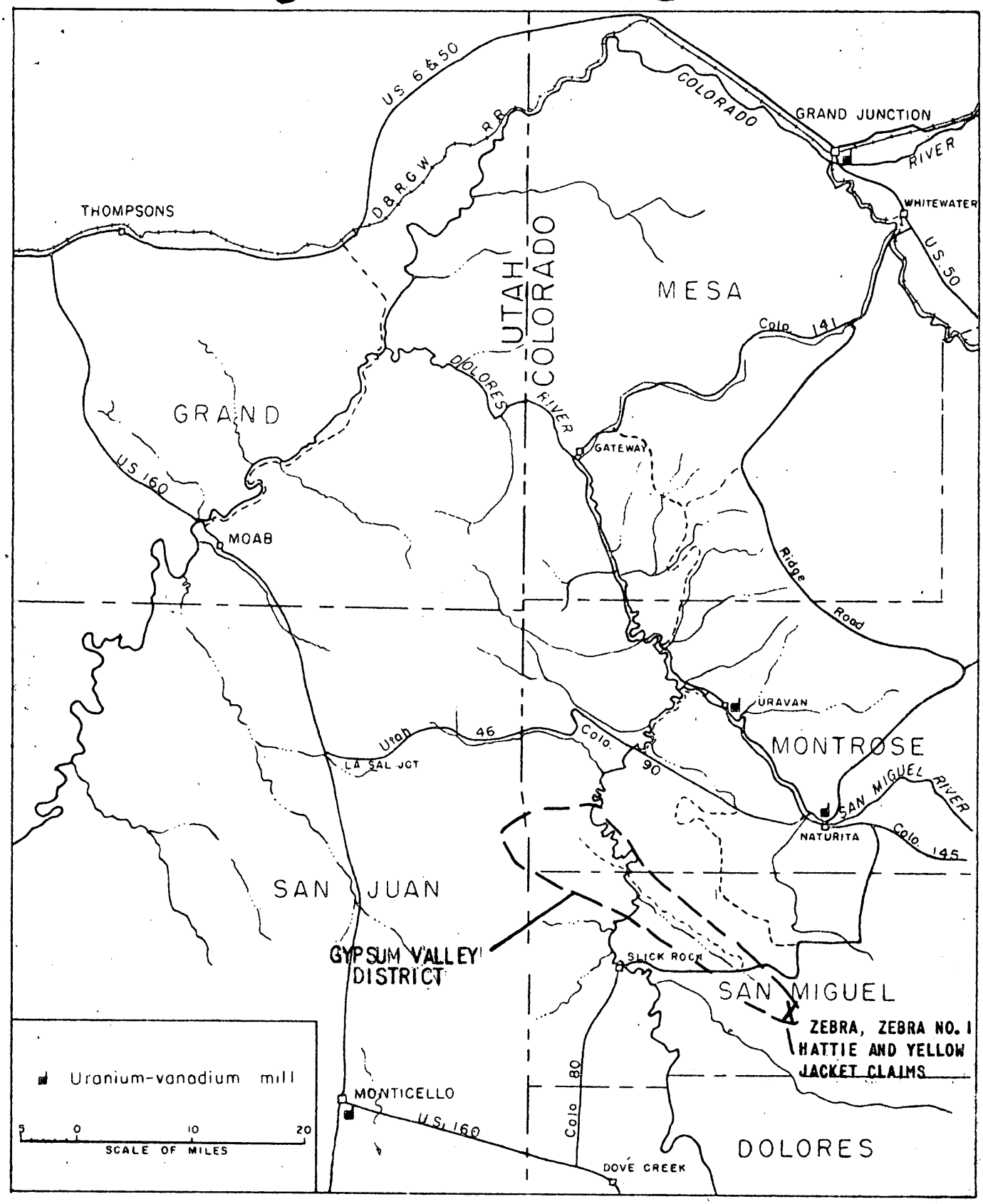

Figure 1. INDEX MAP OF PART OF THE COLORADO PLATEAU SHOWING THE APPROXIMATE LOCATION OF THE ZEBRA, ZEBRA NO. 1, HATTIE AND YELLOW JACKET CLAIMS, KLONDIKE RIDGE AREA, GYPSUM VALLEY DISTRICT, SAN MIGUEL COUNTY, COLORADO

Within the sandstone bed are several gray-green and red-brown mudstone lenses. Underlying the sandstone is 50 to 70 feet of mudstone. The mudstone is generally red-brown, but directly under the sandstone bed it is locally gray-green. The sandstone bed is well exposed for more than 6,000 feet along the outcrop on the western and southern edges of the claims and the adjoining ground (fig. 2). Although the sandstone is classed as favorable for ore, according to criteria developed by the U. S. Geological Survey _/, the mineralized material occurs only as

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_/ Weir, D. B., Geologic guides to prospecting for carnotite deposits on Colorado Plateau: U. S. Geol. Survey Bull. 988-B, 1952.

---

small widely scattered deposits throughout the sandstone.

ORE DEPOSITS

Uranium deposits are exposed only on the Zebra and Yellow Jacket claims (fig. 2). They consist of thin tabular bodies. No fossil logs were noted, but some carbonaceous material is present in the deposits. The ore bodies range from 2 feet to 10 feet wide, 5 to 15 feet long, and 1 foot thick. No rolls were noted. No figures for production are available from these claims. The applicant estimates that about 200 tons of ore, averaging 0.30 percent U_3O_8 and 2.25 percent V_2O_5 have been shipped from these claims. However, considering the small size of the workings, and the probability that the ore mined was not more than about 1 foot thick, it appears likely that the estimated figures for tonnage are high.

Only five small deposits, ranging from a few tons to about 10 tons each, have been found in more than a mile of outcrop. Three of these deposits are on the Zebra claim and two are on the Yellow Jacket claim. These small and scattered deposits are typical of the deposits in the lower part of the Salt Wash member, which throughout the Colorado Plateau generally does not contain large bodies of uranium ore. The possibility is remote of there being a deposit larger than those exposed in the outcrop in the unexplored area behind the workings. What deposits are present will be widely scattered.

The applicants have postulated a trend of deposits between the working on the Zebra and Yellow Jacket claims. No geologic evidence was found, however, to substantiate this trend.

ORE RESERVES

There are no indicated or inferred ore reserves on these claims. Some mineralized material was noted in the workings of the Zebra and Yellow Jacket claims, but that exposed is not of mineable grade or thickness. No indications of mineralized material were observed elsewhere along the outcrop on these claims.

PROPOSED EXPLORATION

The applicants have proposed three phases of exploration, amounting to 4,125 feet of wagon drilling. Phase 1 would consist of wagon-drill holes spaced around the mine workings. These holes would be drilled on 25-foot centers 25 feet from the mine workings. The applicants have suggested that this phase would require 25 or 30 holes, averaging 50 feet deep, for a maximum total of 1,500 feet.

Phase 2 would be done only if phase 1 proved successful. This drilling would include holes spaced on 100-foot centers between the workings on the Zebra and Yellow Jacket claims. It would include 25 holes, averaging 50 feet deep, for a total of 1,250 feet. No drilling would be done between the Hattie and the Yellow Jacket claims, as this land is in the public domain (fig. 2).

The third phase would include holes to extend any deposits found by drilling in phases 1 and 2. This is estimated to require 1,375 feet of wagon drilling.

About 3,000 feet of access road would have to be built to the area above the Yellow Jacket prospects. This is estimated to require 72 hours of bulldozer work. The results of the field examination have indicated that an additional 3,000 feet of access road to the area above the Zebra workings would also have to be built. This would require an additional 16 hours of bulldozer work.

CONCLUSIONS AND RECOMMENDATIONS

The uranium deposits of the Zebra and Yellow Jacket claims are in small tabular masses in the lowest sandstone bed of the Salt Wash member of the Jurassic Morrison formation. The sandstone is exposed in an outcrop of over 6,000 feet in lateral extent. A trend between the deposits on the Zebra and Yellow Jacket claims is postulated by the applicants. From the examination of the workings, no geologic evidence was found to confirm this trend. The applicants report an estimated 200 tons of ore have been mined from the area, averaging 0.30 percent U_3O_8 and 2.25 percent V_2O_5. The estimated tonnage is probably high. No indicated or inferred reserves are present in the mine workings.

Although the lowest sandstone of the Salt Wash member contains criteria favorable for ore, throughout the Colorado Plateau this sandstone generally does not contain large bodies of uranium ore. Only five small prospects have been found in more than a mile of outcrop. There probably will be no deposit larger than those exposed on the rim in the area suggested for exploration by the applicants. It is doubtful that enough ore could be developed to justify the proposed exploration. It is recommended that the Zebra, Hattie, and Yellow Jacket claims not be explored, and that the application be denied.

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

224 New Customhouse
Denver 2, Colorado

June 22, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 3020, (Uranium), Garner & Royer, Zebra, Yellow Jacket and Hattie Claims, San Miguel County, Colorado.

Enclosed are four copies of the final report on the subject docket, a copy of the letter of denial to the applicants and two copies of Form 3b.

W. H. King
W. H. King

E. N. Hasshman
for A. H. Koschmann

Enclosures

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

224 New Customhouse
Denver 2, Colorado

June 22, 1953.

Mr. Millard Gerner
Mr. D. J. Royer
Norwood, Colorado

Re: Docket DMEA-3020

Gentlemen:

Reference is made to your application for Government aid on the Zebra, Hattie, and Yellow Jacket claims.

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

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of uranium by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

W. H. King

W. H. King
Field Team, Region IV

E. N. Hawkman
for A. H. Koschmann
Field Team, Region IV

HMC:cwm

cc: Administrator, DMEA
WMTraver
ERGordon
RPFischer
CETowle
AHKoschmann (2)
Subject
Chron.

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

200 New Customhouse
Denver 2, Colo.

June 10, 1953

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To: DMEA Field Team, Region IV

From: A. H. Koschmann

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Enclosed are 11 copies of the geologic report by C. F. Withington, of the U. S. Geological Survey, covering the above docket.

It has been recommended that the loan be denied.

A. H. Koschmann
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Supervising Geologist
Colorado-Wyoming

Enclosures (11)

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GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

June 9, 1953

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Because the known deposits are small and are scattered along about 6,000 feet of outcrop, and because the lowest sandstone bed of the Salt Wash member generally contains no large deposits of uranium-bearing material, the deposits in the area covered by the application will probably be too small and too scattered to justify exploration. The report recommends that the application be denied.

I concur with this recommendation.

R P Fischer

R. P. Fischer
Acting District Supervisor

Enclosures

UNITED STATES DEPARTMENT OF THE INTERIOR

DOUGLAS MCKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM

REGION IV

DMEA 3020 (Uranium)

Zebra, Hattie, and Yellow Jacket claims,

Gypsum Valley district, San Miguel County, Colorado

C. F. Withington, Geologist
U. S. Geological Survey

June 1953

DMEA 3020 (Uranium)

Zebra, Hattie, and Yellow Jacket claims,
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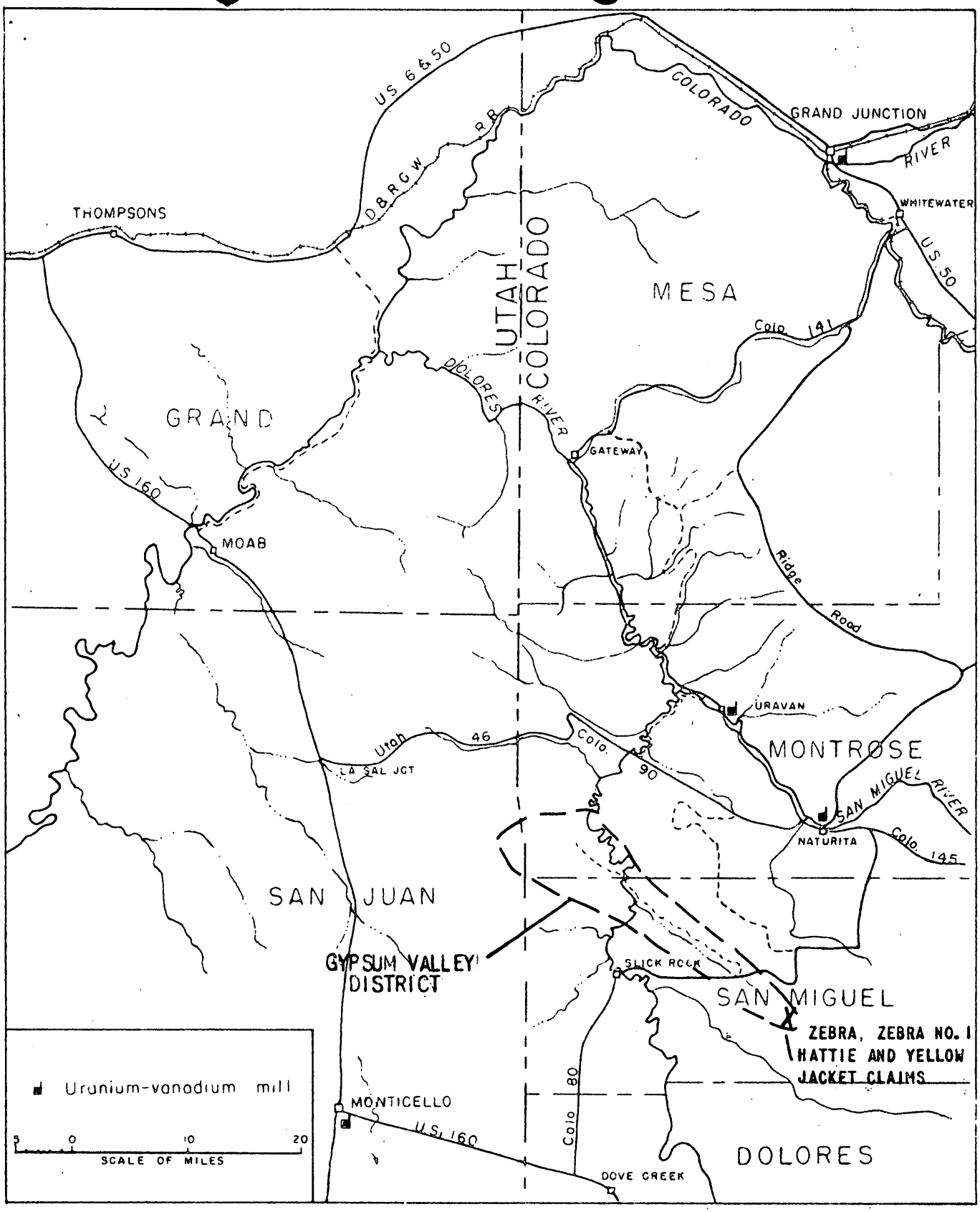

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Phase 2 would be done only if phase 1 proved successful. This drilling would include holes spaced on 100-foot centers between the workings on the Zebra and Yellow Jacket claims. It would include 25 holes, averaging 50 feet deep, for a total of 1,250 feet. No drilling would be done between the Hattie and the Yellow Jacket claims, as this land is in the public domain (fig. 2).

The third phase would include holes to extend any deposits found by drilling in phases 1 and 2. This is estimated to require 1,375 feet of wagon drilling.

About 3,000 feet of access road would have to be built to the area above the Yellow Jacket prospects. This is estimated to require 72 hours of bulldozer work. The results of the field examination have indicated that an additional 3,000 feet of access road to the area above the Zebra workings would also have to be built. This would require an additional 16 hours of bulldozer work.

CONCLUSIONS AND RECOMMENDATIONS

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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.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 5 1953

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 - 3020
Metal or Mineral
Date Received 5/5/53
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: Millard Garner and D. J. Rogers (Partnership)
Norwood, Colorado

(*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 sheet)

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

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

(*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. (See attached sheet)

(*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*) [redacted]e the mineral or minerals for which you wi[redacted] explore Uranium and vanadium

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

(*c*) The work will start within 30 days and be completed within 2 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?

☐ Money ☐ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated April 13, 1953

DUCKER J. ROYER AND HILLARD SAMER
(Applicant)

By D J Royer

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

D. J. ROYER - M. CARNER
Norwood, Colorado

1. NAME OF PARTNERSHIP

Milford Carner
El Rancho Costa Plenty
Norwood, Colorado

Dwight J. Royer
Norwood, Colorado

The above two persons operate there clinics under a partnership.

Mr. Royer is authorized to sign the agreement.

3. APPLICABLE PROPERTY RIGHTS

a. The following claims would be included in this exploration project:

Zebra
Zebra No. 1
Hattie
Yellow Jacket

These unpatented mining claims lie in Sections 15 and 16, T 43 N, R 16 W, N.M.P.M., San Miguel County, Colorado.

b. Mine known by claim name.

c. Owner

d. Not applicable

e. None

f.

NAME	PAGE	BOOK	FILED
Zebra	46	174	1938
Zebra No. 1	46	174	1938
Hattie	162	216	1952
Yellow Jacket	55	174	1939

D. J. BOYER - H. GARDEN
Norwood, Colorado

4. PHYSICAL DESCRIPTION

a. No operations or exploration work are being carried out at the present time. Figure 1 and 2 show the workings which are on the property. All workings are open and in good condition for starting production provided additional reserves are found. The main workings on the Zebra have an access road which is in need of minor repairs.

b. Production - No figures are available on past production, however, it is estimated that about 200 tons of 0.30 U_3O_8 and 2.25 V_2O_5 have been shipped from the claims.

Reserves - No reserves are available for economic mining.

c. Geology - The attached maps give some of the most characteristic features of the deposits. The ore occurs in thin tabular bodies that roughly parallel to the bedding. The deposits occasionally have rolls that increase the thickness of the ore. The ore is found in the lowest main sandstone of the Saltwash Member of the Morrison Formation and are typical of these type deposits.

Samples taken at the mine workings (Figure 2) assayed as follows:

Sample No.	V_2O_5	U_3O_8	Size of cut	Description
1	4.53	0.07	6 in.	Low grade U_3O_8 in back of north tunnel
2	3.08	0.97	Grab	Along fracture zone in tunnel opposite ore bin
3	2.51	0.23	12 in.	Cut taken at portal of north tunnel

d. Access roads - The claims covered in this report are approximately 33 miles from Naturita, Colorado of which 26 miles is over all-

(4 d. continued)

weather graveled Colorado State Highway 90 and 7 miles is over truck trail. This truck trail is good in fair weather but poor during short periods of rain and thaws.

Shipping - Ore would be shipped to either the Vanadium Corporation Mill at Naturita, 36 miles; or the U. S. Vanadium Mill at Uravan, a distance of 50 miles.

Supplies and Residence Points - Small supplies for mining such as powder, fuse, timber and hand tools are purchased at Naturita or Uravan. Larger equipment is purchased in Grand Junction. Residence points for this project would be on the claim site or at the residence of Millard Garner near Cedar which is about 12 miles from the claims. The applicant would furnish living facilities for this project.

e. Adequate manpower, materials, supplies, equipment and water are readily available for a project of this size and for the mining of the ore if found.

5. a. Minerals to be found - Uranium and vanadium

b. Proposed work - The proposed work may be broken in three phases: (1.) Close spaced drilling (2.) Wide spaced drilling (3.) Blocking out drilling.

(1) Close spaced drilling would consist of 25 wagon drill holes averaging 50 feet deep spaced around the outcrops and mine workings at 25 feet intervals and at 25 feet distance from the mine or outcrop. This would include the two prospects which show ore on the Yellow Jacket. And, would include 30 holes or a total of 1500 feet.

(2) Wide spaced wagon drilling would be done only if the first phase proved successful. This wide spaced drilling would include holes spaced at 100 foot intervals along lines from the workings on the Zebra to the outcrops on the Yellow Jacket and should include at least 25 holes averaging 50 foot in depth or a total of 1250 feet. The spotting of these holes may be determined better after the initial drilling. The apparent trend is in a south-easterly direction as shown.

(3) Blocking out drilling - Provided the first two stages are successful, at least 50% of the total of these two stages should be allowed for blocking out footage. This would amount to 1375 feet of wagon drilling.

Total footage for the contract would be 4125 feet of wagon drilling. The only additional work besides the contract wagon drilling would be the bulldozer work required to make drill sites and approximately

(5 continued)

1000 yards of access road to the Yellow Jacket outcrops. This work would require approximately nine 8-hour shifts of bulldozer work. One field supervisor and combination sampler would be employed to log holes, cut samples and guide the drilling. Mr. Garner, one of the applicants would probably act in this capacity. An engineer will be hired (part time) to survey holes and give overall guidance. All other work will be done on contract basis.

c. The work could be started within 30 days and could be completed within 2 months from the date of the exploration contract.

d. Experience of applicant

Mr. Millard Garner

1 year - Rico Argentine Mines. Yellow Jacket Mine
15 years - Owner and operator of ranch
3 years - Uranium mining various mines on Colorado Plateau
5 years - Part owner and sawyer - Sawmill

Mr. Dwight J. Royer

Presently owns and operates saw mill in the Norwood Area

6. ESTIMATE OF COST

a. Independent Contracts

Wagon drilling

4125 feet @ 0.80/ft.	$3300.00

Bulldozer work

72 hours @ $10.00/hr.	$ 720.00

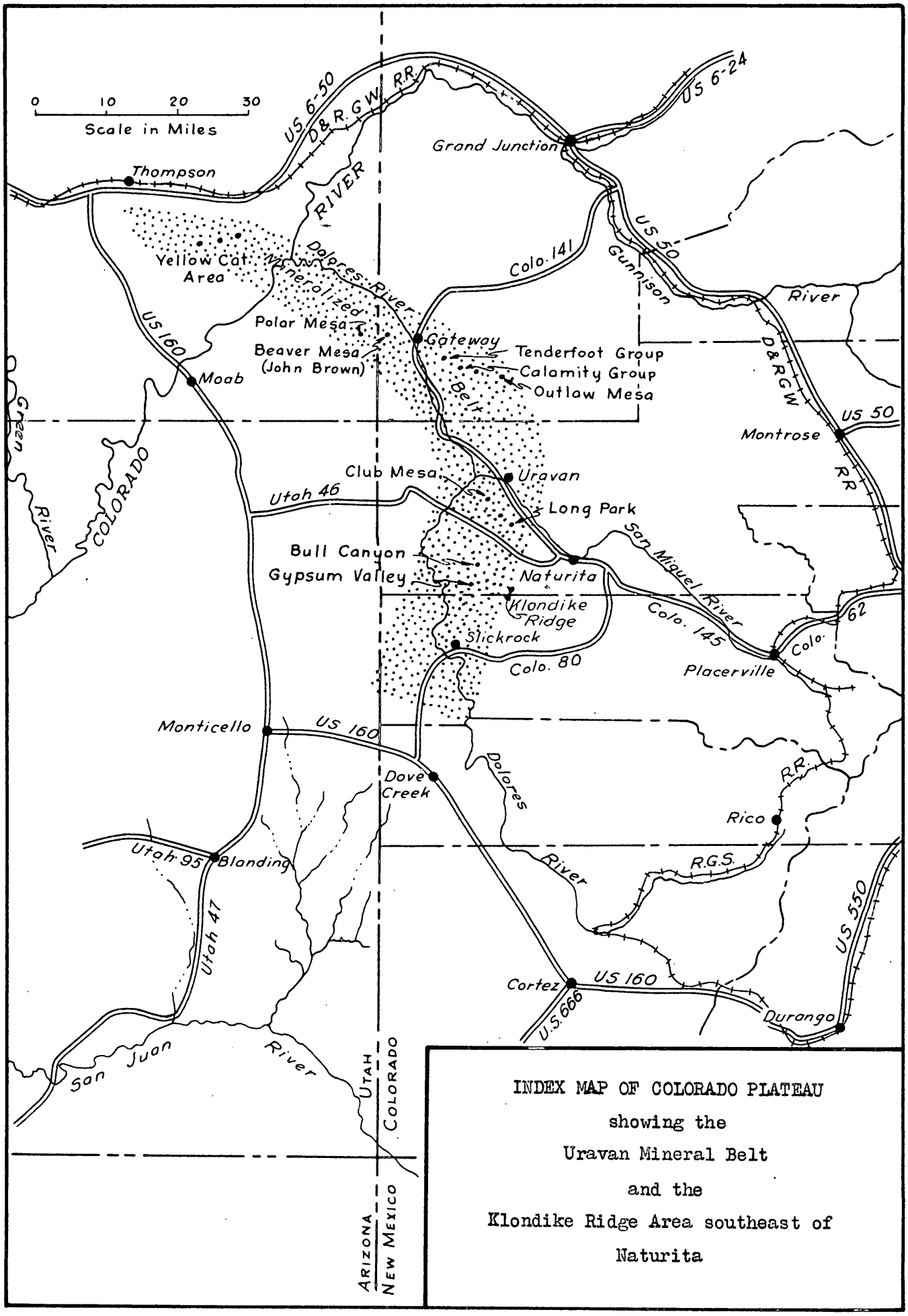
b. Labor, supervision, engineering

Supervisor-sampler $450.00/mo. 2 months	$ 900.00
Engineer 10 days @ $40.00/day	400.00

c. Operating supplies	None
d. Rehabilitation and repairs	None
f. Improvements, etc.	None

g. Miscellaneous

Sample analysis, 20 ea. @ $5.00	100.00
Drafting	15.00
Map reproduction	20.00
TOTAL	$5455.00
Cost per foot	1.32



INDEX MAP OF COLORADO PLATEAU
showing the
Uravan Mineral Belt
and the
Klondike Ridge Area southeast of
Naturita

DMEA-3020

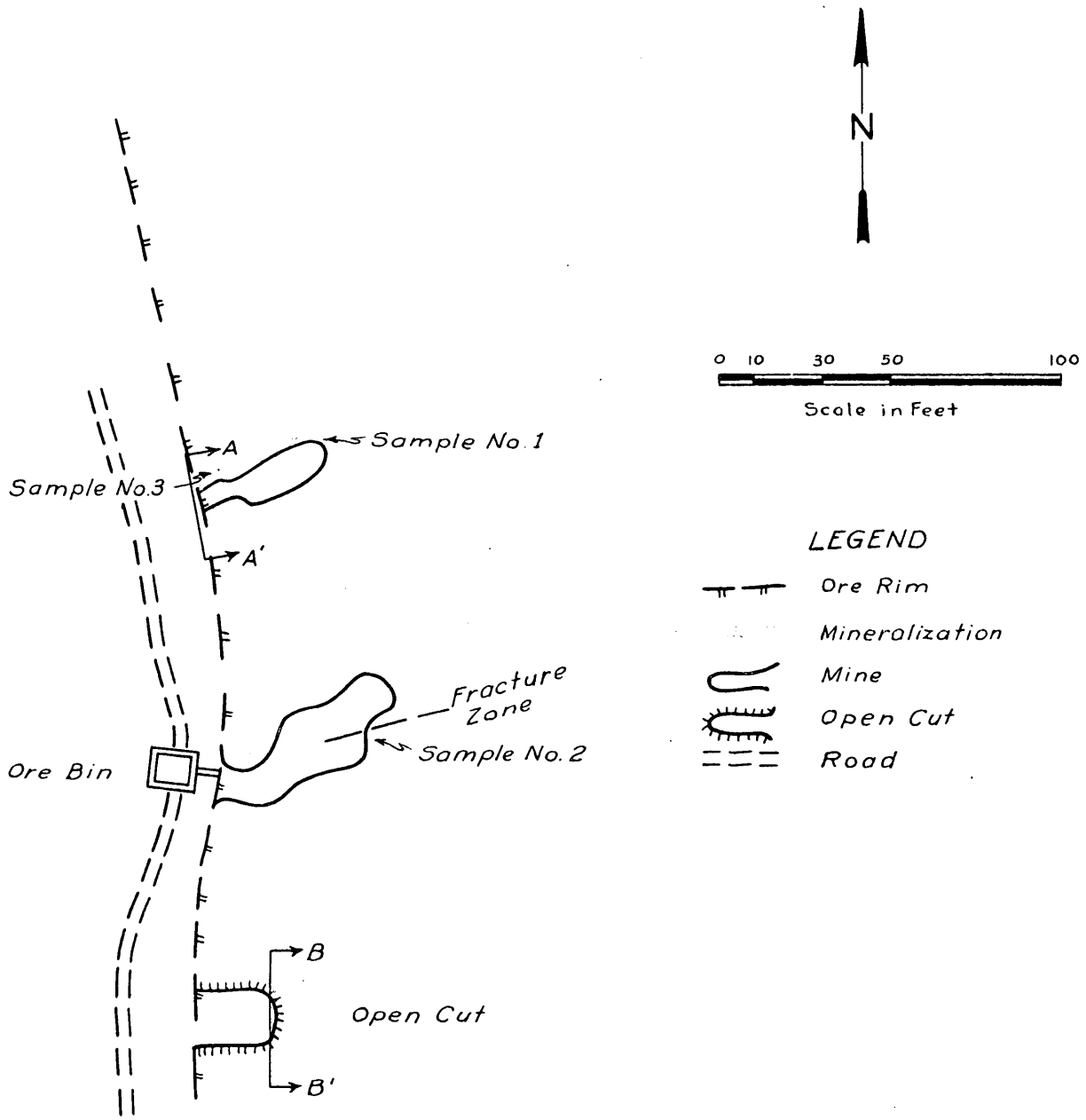
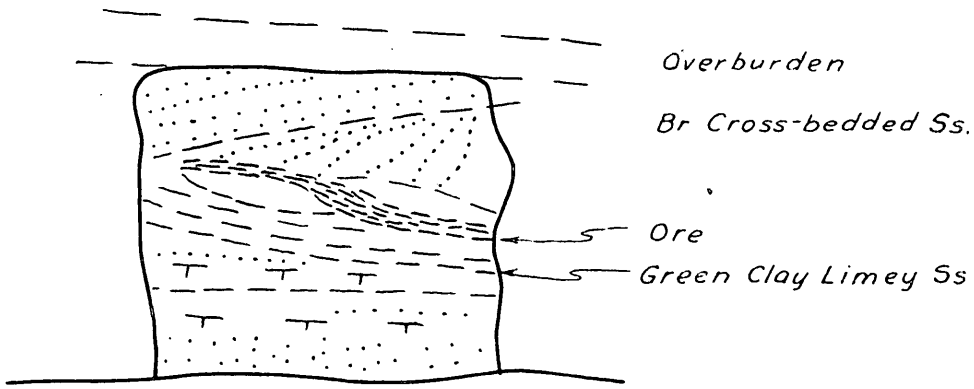
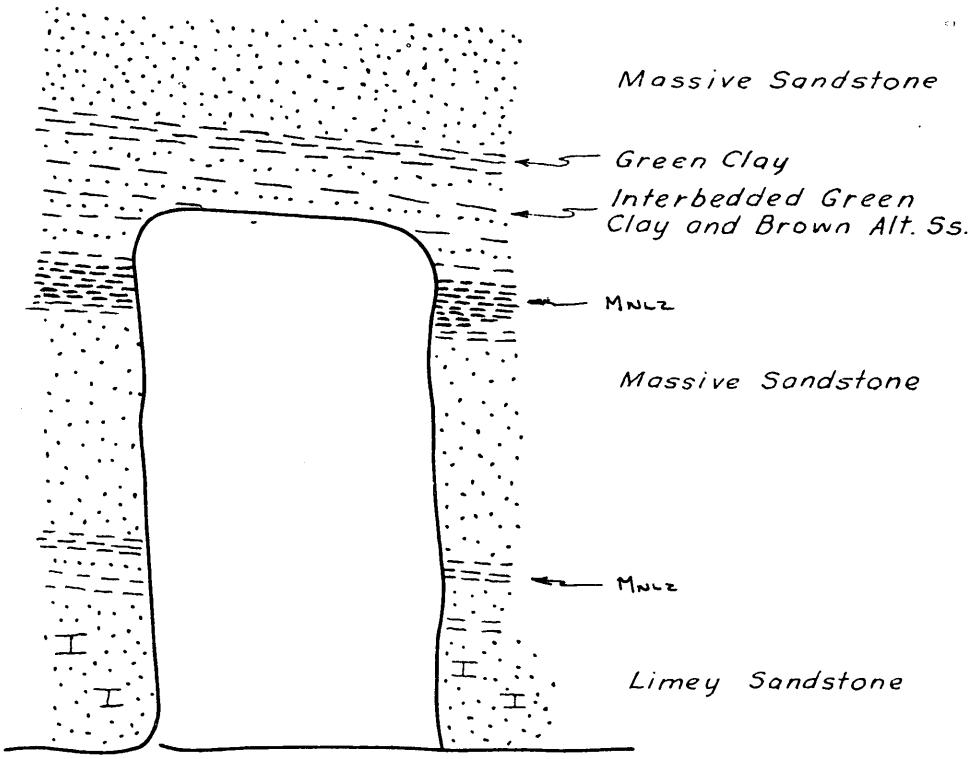


FIGURE No. 2
WORKINGS ON THE ZEBRA CLAIM

DMEA-3020



SECTION B-B'



SECTION A-A'

FIGURE 3
SECTION THROUGH MINERALIZED ZONES - ZEBRA CLAIM

DMEA-3020

1. Mr. Ailes
Bur. Mines

2. Mr. E. Wm. Ellis
Room 4640
Interior

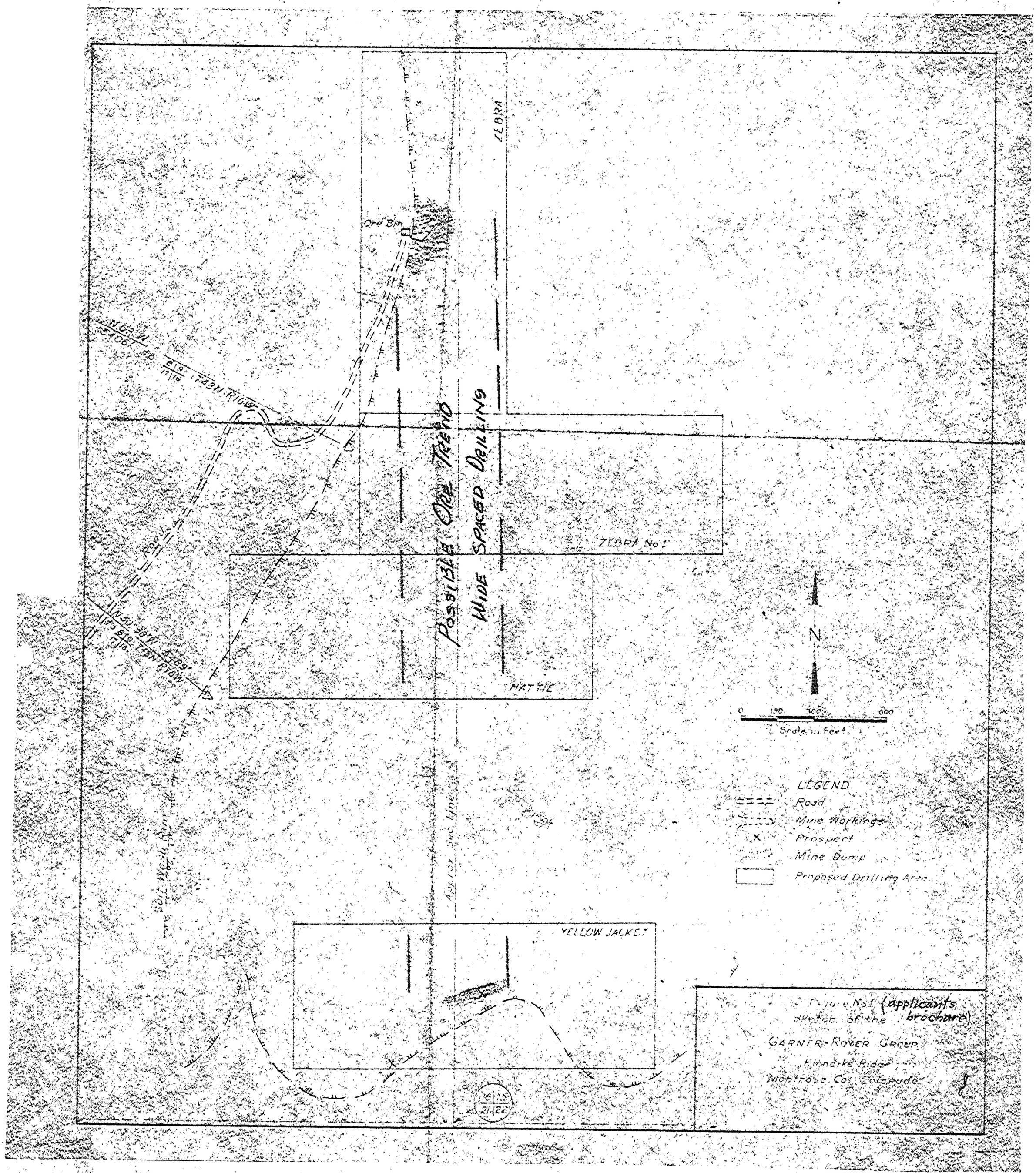


Figure 2. SKETCH MAP OF THE ZEBRA, ZEBRA NO. 1, HATTIE, AND YELLOW JACKET CLAIMS, GYPSUM VALLEY DISTRICT, SAN MIGUEL COUNTY, COLORADO

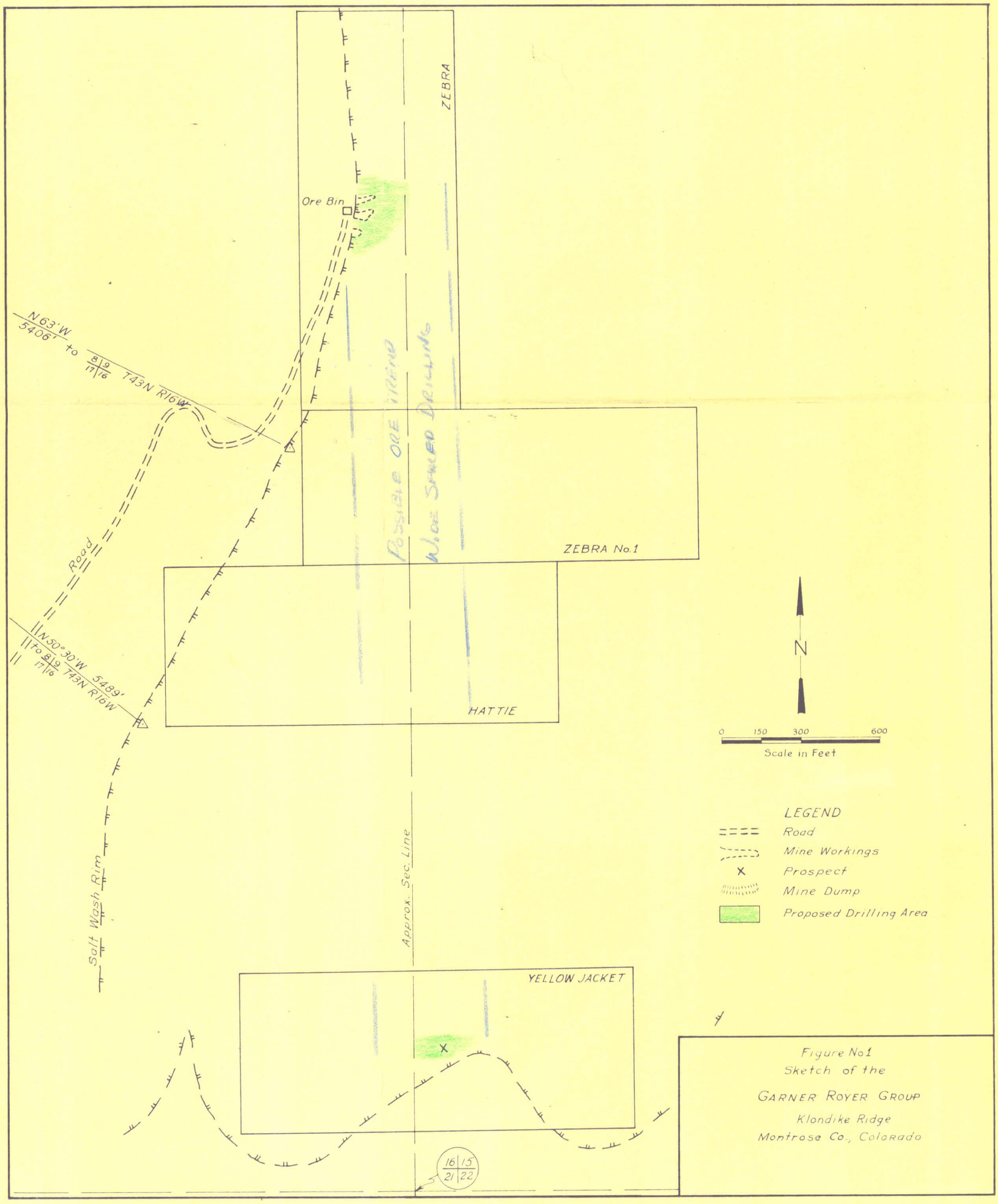


Figure No1
Sketch of the
GARNER ROYER GROUP
Klondike Ridge
Montrose Co., Colorado

DMEA-3020

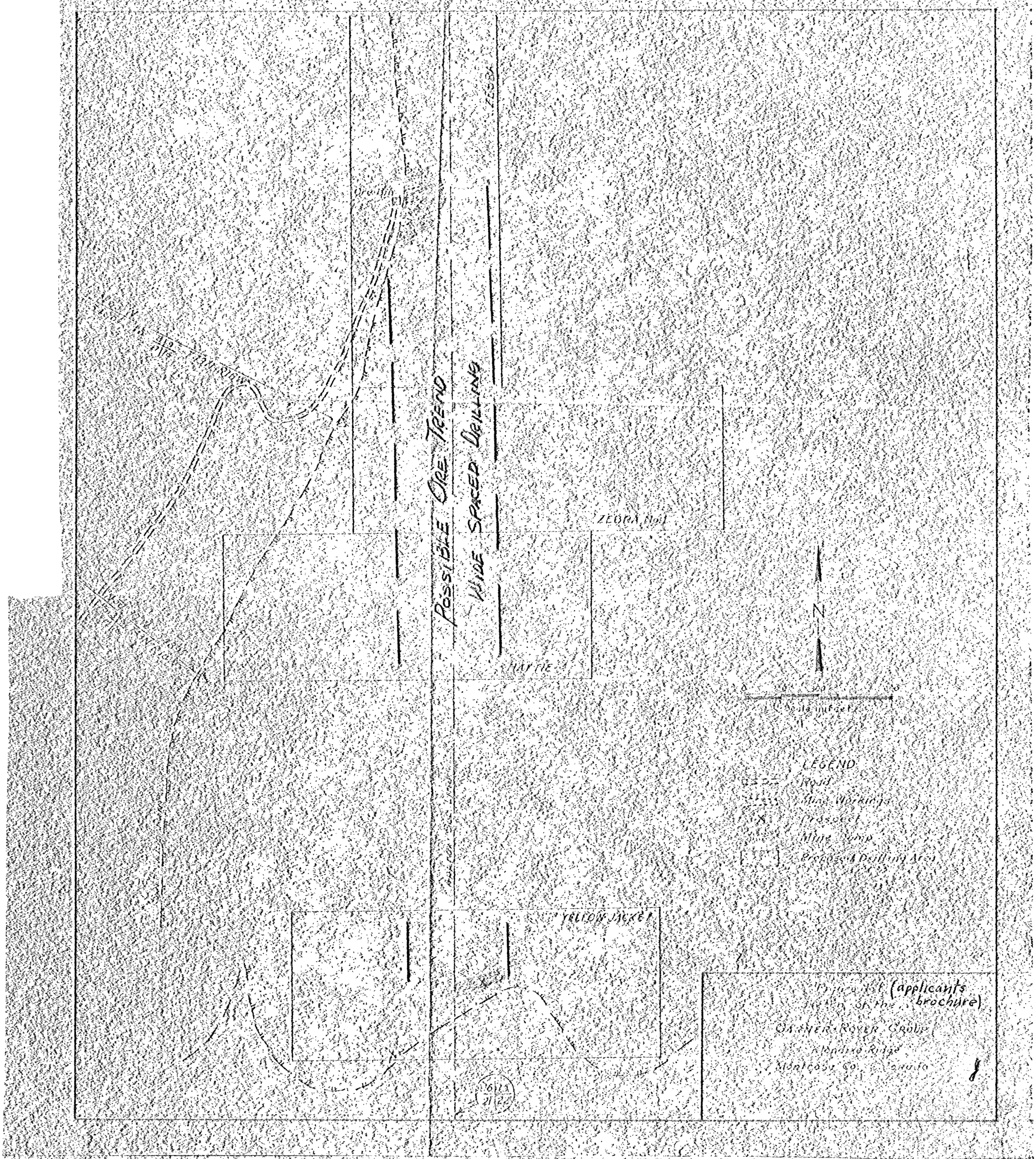


Figure 2. SKETCH MAP OF THE ZEBRA, ZEBRA NO. 1, HATTIE, AND YELLOW JACKET CLAIMS, GYPSUM VALLEY DISTRICT, SAN MIGUEL COUNTY, COLORADO