6-303
(March 1947)

cc: W. M. Traver, Jr.
Wm. H. King

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Salt Lake City, Utah

Mining Division No. 5
Date Rec'd.
JUL 8 - 1953
BUREAU OF MINES
Denver, Colorado

Report to Mr. Scott W. Hazen, Jr.

Chemical Laboratory Report

Date received July 1, 1953 Proj. 509 Date reported July 6, 1953

Serial No.	DESCRIPTION	Lot No.		Se									
	Garner and Boyer Zebra, Hattie, and Yellow Jack Claims (uranium) Klondike Valley, San Miguel County, Colorado DMEA 3020												
14779		SWH-25		<0.02									

U. S. GOVERNMENT PRINTING OFFICE 16—33553-3

Signed A. E. Peterson

8/28/53

To: ~~King~~ W.H.K.

For: Shaw

Memo from Traver enclosing 11 copies McLellan's memo report on DMEA 3020, Zebra, Hattie, and Yellow Jacket claims, D.J.Royer and Millard Garner, San Miguel County, Colo.

Mining Division
Date Rec'd.
AUG 28 1953
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of R. R. McLellan's memorandum report recommending denial of the application of D. J. Royer and Millard Garner (DMEA 3020) for a loan of $5,455.00 to do 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling on the Zebra, Hattie, and Yellow Jacket claims located in San Miguel County, Colorado.

McLellan bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. M. Traver

W. M. Traver

enclosures

cc 10
DMEA 3020
DMEA Chron.

WMT/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: R. R. McLellan

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

An investigation of the subject uranium-vanadium property was made by a Region IV examining team to check the information in an application for Government exploration assistance. Denial of the application is recommended.

The applicants, D. J. Royer and Millard Garner, of Norwood, Colorado, proposed 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling in 80 holes at a cost of $5,455.00--Government participation 90 percent, or $4,909.50.

The claims are located in secs. 15 and 16, T. 43 N., R. 16 W., New Mexico principal meridian, Gypsum Valley District, San Miguel County, Colorado (fig. 1).

There are five small exposures of uranium-vanadium ore along more than 6,000 feet of grim outcrop of the lowest beds of the Salt Wash member of the Morrison formation. The upper beds have been removed by erosion. A small amount of work has been done on the ore exposures with a production of less than 200 tons of ore, judging from the mine

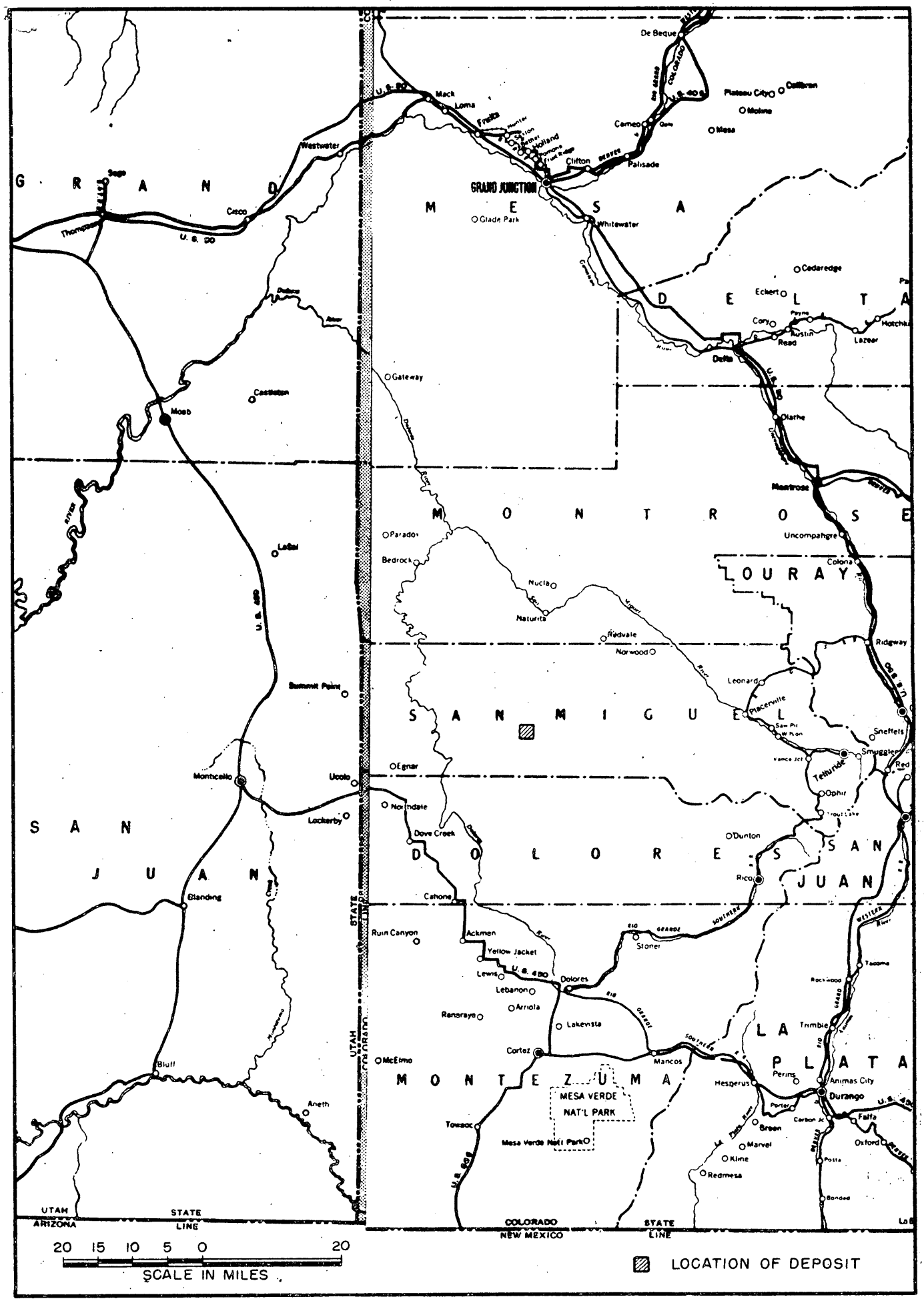


FIGURE 1. - LOCATION MAP, GARNER AND ROYER (ZEBRA, YELLOW JACKET, AND HATTIE CLAIMS) SAN MIGUEL COUNTY, COLORADO. (DMEA 3020)

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3930 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan

R. R. McLellan
Mining Engineer

cc: 10
DMEA 3020
DMEA Chron.

MHS/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of R. R. McLellan's memorandum report recommending denial of the application of D. J. Royer and Millard Garner (DMEA 3020) for a loan of $5,455.00 to do 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling on the Zebra, Hattie, and Yellow Jacket claims located in San Miguel County, Colorado.

McLellan bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. M. Traver

W. M. Traver

enclosures

cc 10
DMEA 3020
DMEA Chron.

WMT/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: R. R. McLellan

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

An investigation of the subject uranium-vanadium property was made by a Region IV examining team to check the information in an application for Government exploration assistance. Denial of the application is recommended.

The applicants, D. J. Royer and Millard Garner, of Norwood, Colorado, proposed 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling in 80 holes at a cost of $5,455.00--Government participation 90 percent, or $4,909.50.

The claims are located in secs. 15 and 16, T. 43 N., R. 16 W., New Mexico principal meridian, Gypsum Valley District, San Miguel County, Colorado (fig. 1).

There are five small exposures of uranium-vanadium ore along more than 6,000 feet of grim outcrop of the lowest beds of the Salt Wash member of the Morrison formation. The upper beds have been removed by erosion. A small amount of work has been done on the ore exposures with a production of less than 200 tons of ore, judging from the mine

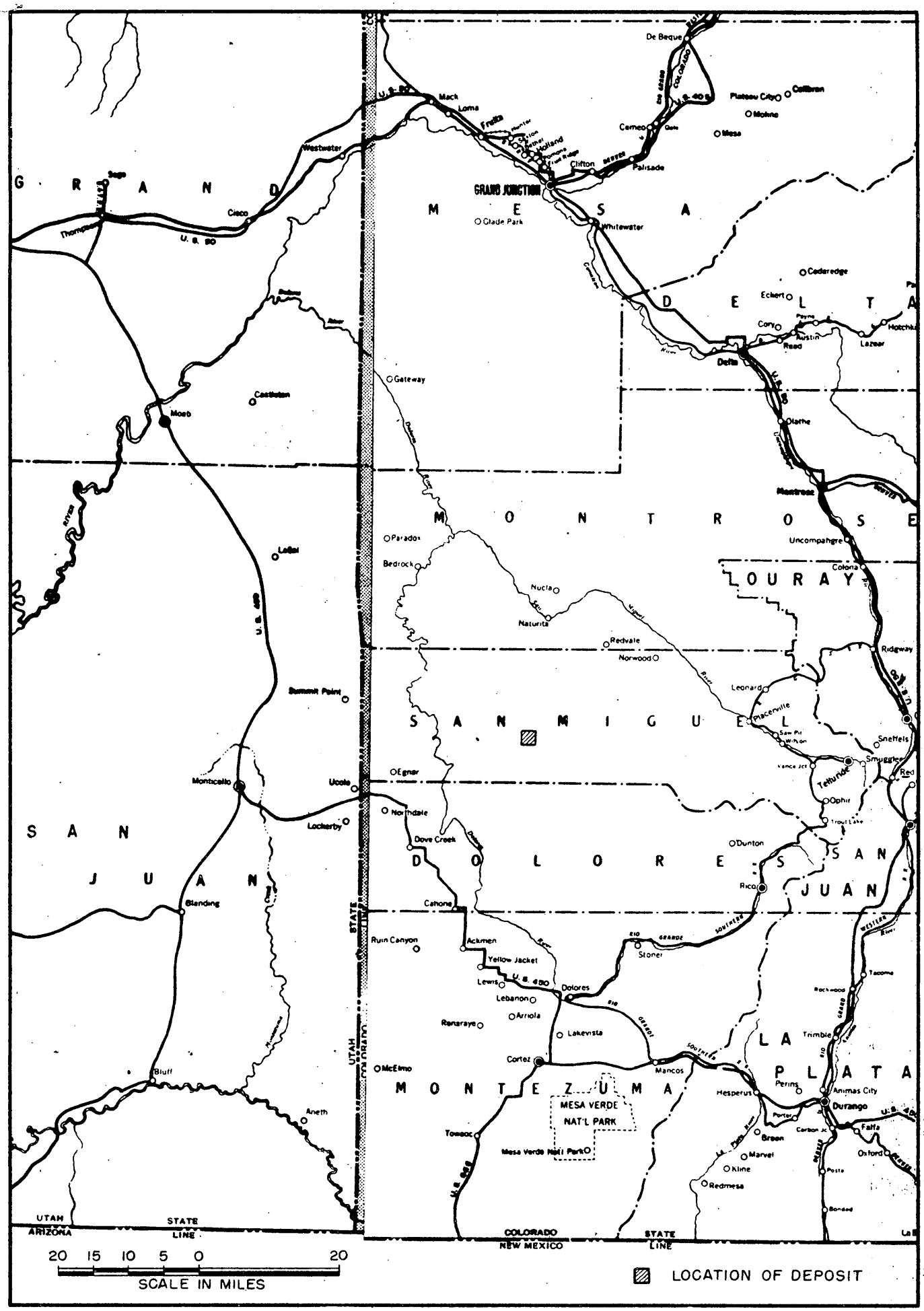


FIGURE 1. - LOCATION MAP, GARNER AND ROYER (ZEBRA, YELLOW JACKET, AND HATTIE CLAIMS) SAN MIGUEL COUNTY, COLORADO. (DMEA 3020)

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3930 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan
R. R. McLellan
Mining Engineer

cc: 10
DMEA 3020
DMEA Chron.

MHS/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of R. R. McLellan's memorandum report recommending denial of the application of D. J. Royer and Millard Garner (DMEA 3020) for a loan of $5,455.00 to do 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling on the Zebra, Hattie, and Yellow Jacket claims located in San Miguel County, Colorado.

McLellan bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. M. Traver

W. M. Traver

enclosures

cc IO
DMEA 3020
DMEA Chron.

WMT/pem

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: R. R. McLellan

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

An investigation of the subject uranium-vanadium property was made by a Region IV examining team to check the information in an application for Government exploration assistance. Denial of the application is recommended.

The applicants, D. J. Royer and Millard Garner, of Norwood, Colorado, proposed 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling in 80 holes at a cost of $5,455.00--Government participation 90 percent, or $4,909.50.

The claims are located in secs. 15 and 16, T. 43 N., R. 16 W., New Mexico principal meridian, Gypsum Valley District, San Miguel County, Colorado (fig. 1).

There are five small exposures of uranium-vanadium ore along more than 6,000 feet of grim outcrop of the lowest beds of the Salt Wash member of the Morrison formation. The upper beds have been removed by erosion. A small amount of work has been done on the ore exposures with a production of less than 200 tons of ore, judging from the mine

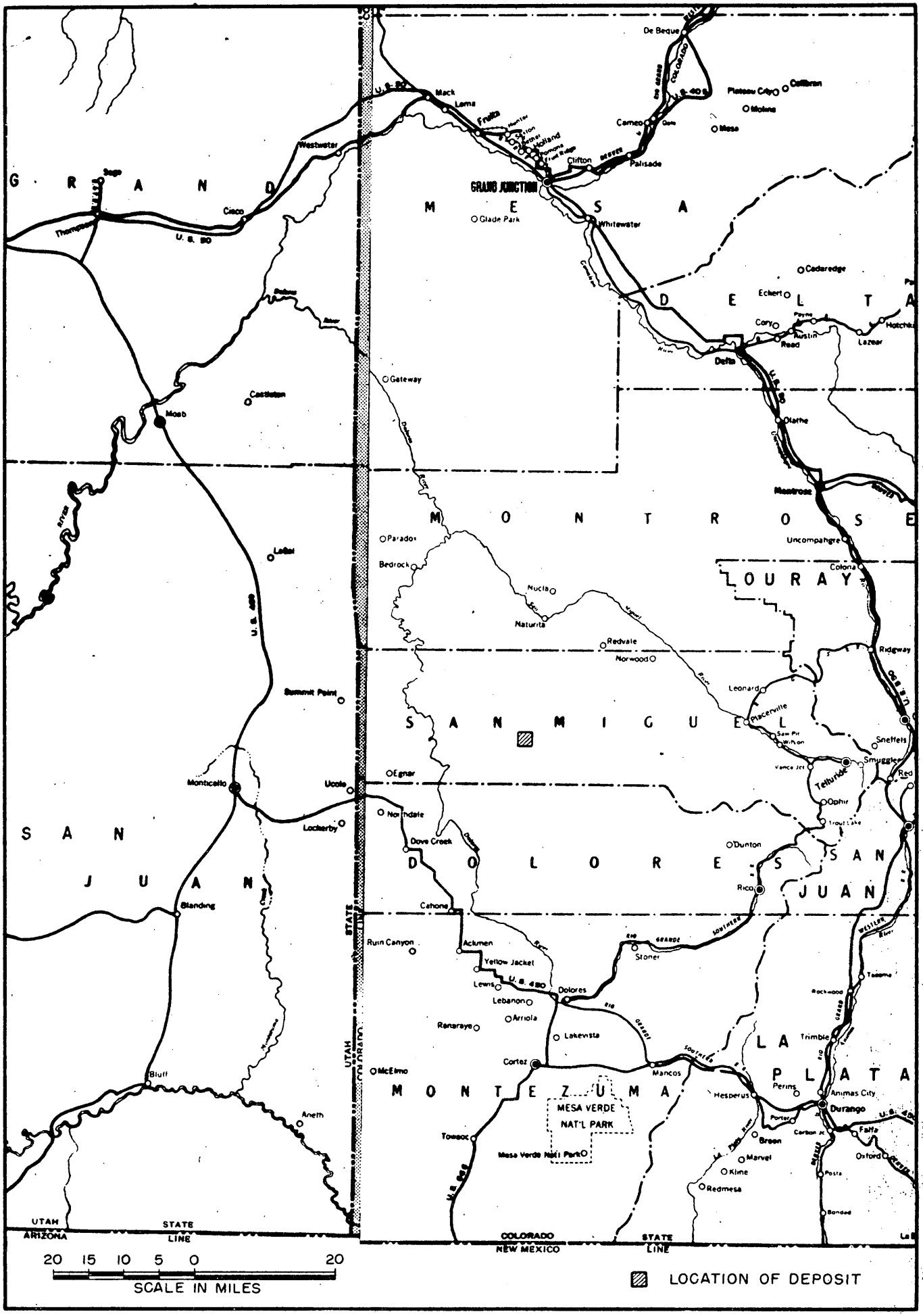


FIGURE 1. - LOCATION MAP, GARNER AND ROYER (ZEBRA, YELLOW JACKET, AND HATTIE CLAIMS) SAN MIGUEL COUNTY, COLORADO. (DMEA 3020)

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3930 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan
R. R. McLellan
Mining Engineer

cc: 10
DMEA 3020
DMEA Chron.

MHE/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of R. R. McLellan's memorandum report recommending denial of the application of D. J. Royer and Millard Garner (DMEA 3020) for a loan of $5,455.30 to do 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling on the Zebra, Hattie, and Yellow Jacket claims located in San Miguel County, Colorado.

McLellan bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. M. Traver

W. M. Traver

enclosures

cc 10
DMEA 3020
DMEA Chron.

WMT/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: R. R. McLellan

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

An investigation of the subject uranium-vanadium property was made by a Region IV examining team to check the information in an application for Government exploration assistance. Denial of the application is recommended.

The applicants, D. J. Royer and Millard Garner, of Norwood, Colorado, proposed 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling in 83 holes at a cost of $5,455.00--Government participation 90 percent, or $4,909.50.

The claims are located in secs. 15 and 16, T. 43 N., R. 16 W., New Mexico principal meridian, Gypsum Valley District, San Miguel County, Colorado (fig. 1).

There are five small exposures of uranium-vanadium ore along more than 6,000 feet of grim outcrop of the lowest beds of the Salt Wash member of the Morrison formation. The upper beds have been removed by erosion. A small amount of work has been done on the ore exposures with a production of less than 200 tons of ore, judging from the mine

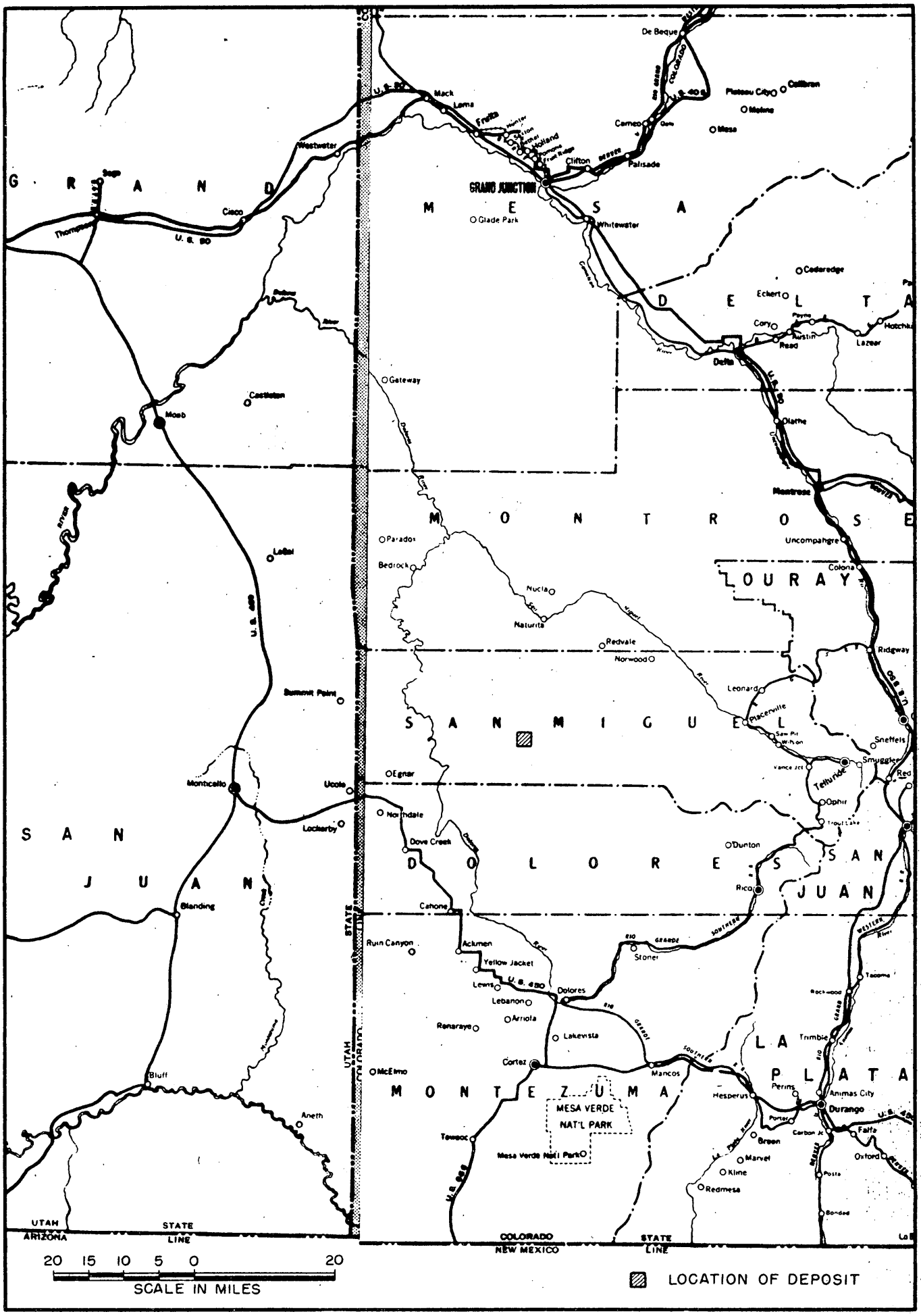


FIGURE 1. - LOCATION MAP, GARNER AND ROYER (ZEBRA, YELLOW JACKET, AND HATTIE CLAIMS) SAN MIGUEL COUNTY, COLORADO. (DMEA 3020)

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3930 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan
R. R. McLellan
Mining Engineer

cc: 10
DMEA 3020
DMEA Chron.

MRK/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of R. R. McLellan's memorandum report recommending denial of the application of D. J. Royer and Millard Garner (DMEA 3020) for a loan of $5,455.00 to do 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling on the Zebra, Hattie, and Yellow Jacket claims located in San Miguel County, Colorado.

McLellan bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. M. Traver

W. M. Traver

enclosures

cc 10
DMEA 3020
DMEA Chron.

WMT/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: R. R. McLellan

Subject: DMEA 320 (Uranium) Lebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

An investigation of the subject uranium-vanadium property was made by a Region IV examining team to check the information in an application for Government exploration assistance. Denial of the application is recommended.

The applicants, D. J. Royer and Millard Garner, of Norwood, Colorado, proposed 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling in 60 holes at a cost of $5,455.00--Government participation 90 percent, or $4,909.50.

The claims are located in secs. 15 and 16, T. 43 N., R. 16 W., New Mexico principal meridian, Gypsum Valley District, San Miguel County, Colorado (fig. 1).

There are five small exposures of uranium-vanadium ore along more than 6,000 feet of grid outcrop of the lowest beds of the Salt Wash member of the Morrison formation. The upper beds have been removed by erosion. A small amount of work has been done on the ore exposures with a production of less than 200 tons of ore, judging from the mine

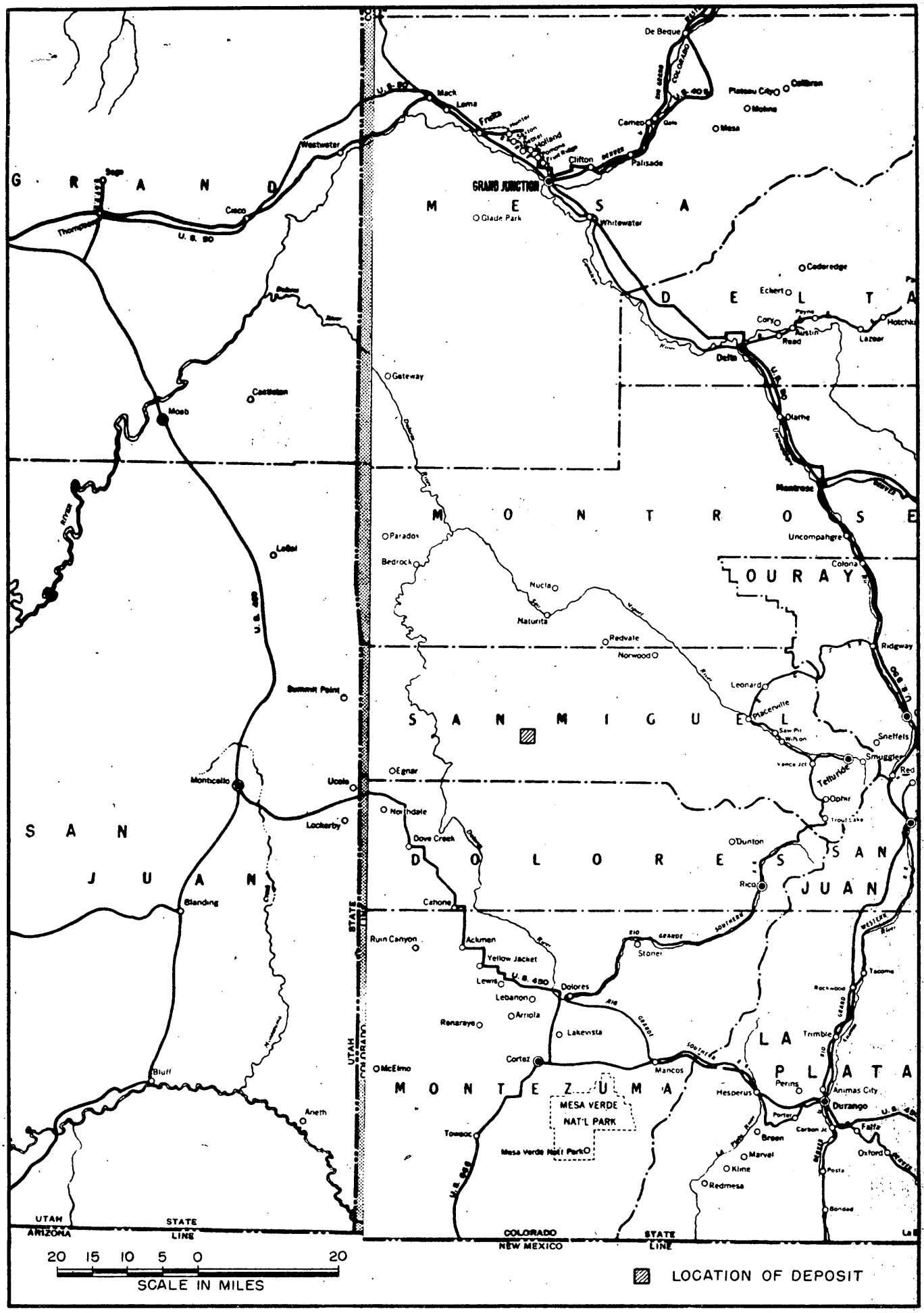


FIGURE 1. - LOCATION MAP, GARNER AND ROYER (ZEBRA, YELLOW JACKET, AND HATTIE CLAIMS) SAN MIGUEL COUNTY, COLORADO. (DMEA 3020)

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3930 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan
R. R. McLellan
Mining Engineer

cc: JO
DMEA 3020
DMEA Chron.

MRM/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of R. H. Melelian's memorandum report recommending denial of the application of D. J. Royer and Millard Garner (DMEA 3020) for a loan of $5,455.00 to do 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling on the Zebra, Hattie, and Yellow Jacket claims located in San Miguel County, Colorado.

Melelian bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. M. Traver

W. M. Traver

enclosures

cc (1)
DMEA 3020
DMEA Chron.

WMT/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: R. S. McLellan

Subject: DMEA 3/2) (Uranium) Laura, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

An investigation of the subject uranium-vanadium property was made by a Region IV examining team to check the information in an application for Government exploration assistance. Denial of the application is recommended.

The applicants, D. J. Royer and Millard Garner, of Norwood, Colorado, proposed 72 hours of bulldozing for access roads and 4,12) feet of wagon drilling in 8) holes at a cost of $5,455.)--Government participation 30 percent, or $4,3)).50.

The claims are located in secs. 15 and 16, T. 43 N., R. 10 W., New Mexico principal meridian, Gypsum Valley District, San Miguel County, Colorado (fig. 1).

There are five small exposures of uranium-vanadium ore along more than 6,)) feet of grim outcrop of the lowest beds of the Salt Wash member of the Morrison formation. The upper beds have been removed by erosion. A small amount of work has been done on the ore exposures with a production of less than 2)) tons of ore, judging from the mine

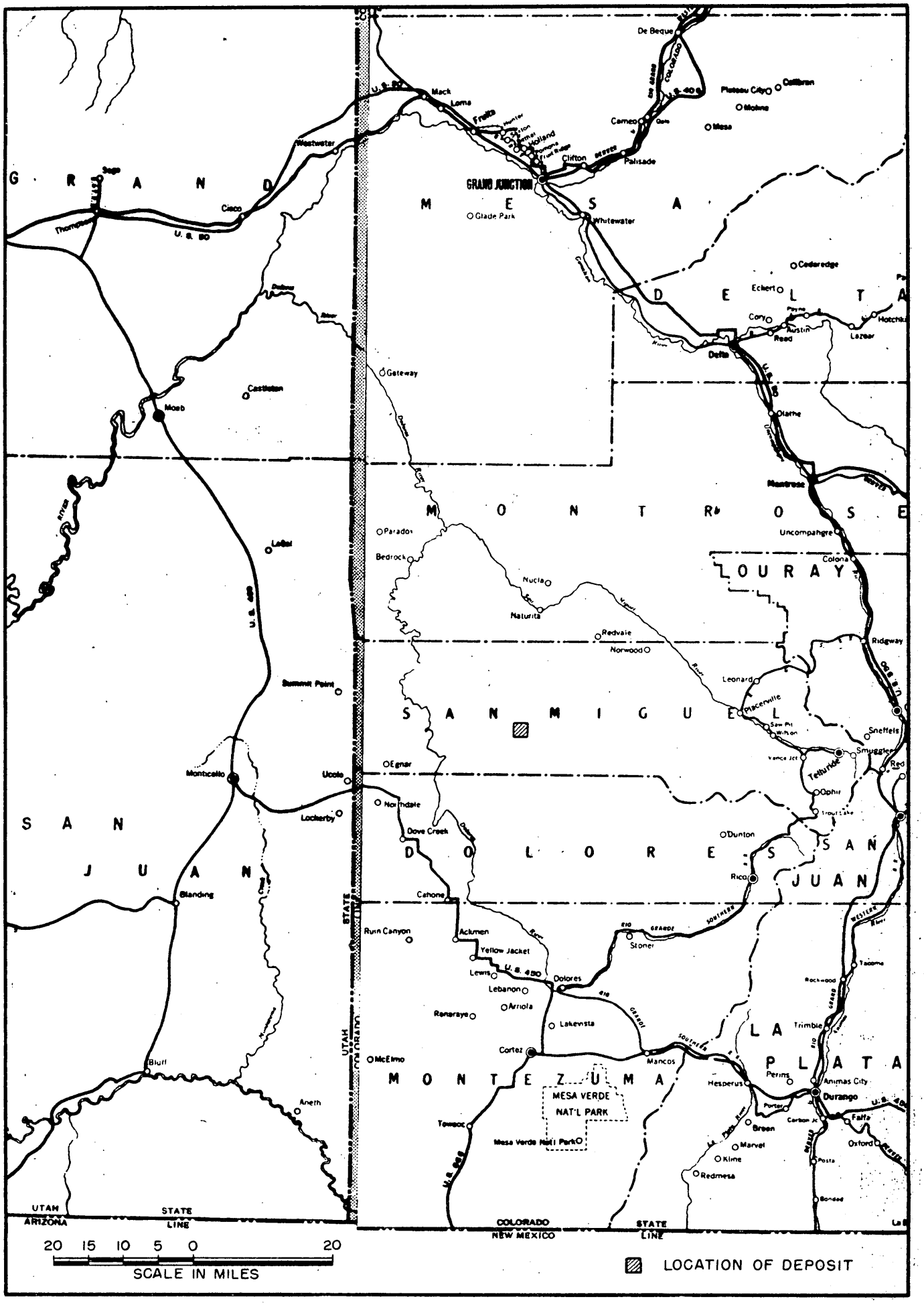


FIGURE 1. - LOCATION MAP, GARNER AND ROYER (ZEBRA, YELLOW JACKET, AND HATTIE CLAIMS) SAN MIGUEL COUNTY, COLORADO. (DMEA 3020)

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3930 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan
R. R. McLellan
Mining Engineer

cc: 10
DMEA 3020
DMEA Chron.

RRM/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3020 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of W. F. Malellan's memorandum report recommending denial of the application of D. J. Royer and Millard Garner (DMEA 3020) for a loan of $5,455.00 to do 72 hours of bulldozing for access roads and 4,125 feet of wagon drilling on the Zebra, Hattie, and Yellow Jacket claims located in San Miguel County, Colorado.

Malellan bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. M. Traver

W. M. Traver

enclosures

cc: AO
DMEA 3020
DMEA Chron.

WMT/pmm

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: H. R. McLellan

Subject: DMSA 3.20 (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

An investigation of the subject uranium-vanadium property was made by a Region IV remaining team to check the information in an application for Government exploration assistance. Denial of the application is recommended.

The applicants, D. J. Royer and Millard Garner, of Norwood, Colorado, proposed 72 hours of bulldozing for access roads and 4,200 feet of wagon drilling in 30 holes at a cost of $5,455.00--Government participation 50 percent, or $4,000.50.

The claims are located in secs. 15 and 16, T. 43 N., R. 16 W., New Mexico principal meridian, Gypsum Valley District, San Miguel County, Colorado (Fig. 1).

There are five small exposures of uranium-vanadium ore along more than 6,000 feet of grim outcrop of the lowest beds of the Salt Wash member of the Morrison formation. The upper beds have been removed by erosion. A small amount of work has been done on the ore exposures with a production of less than 200 tons of ore, judging from the mine

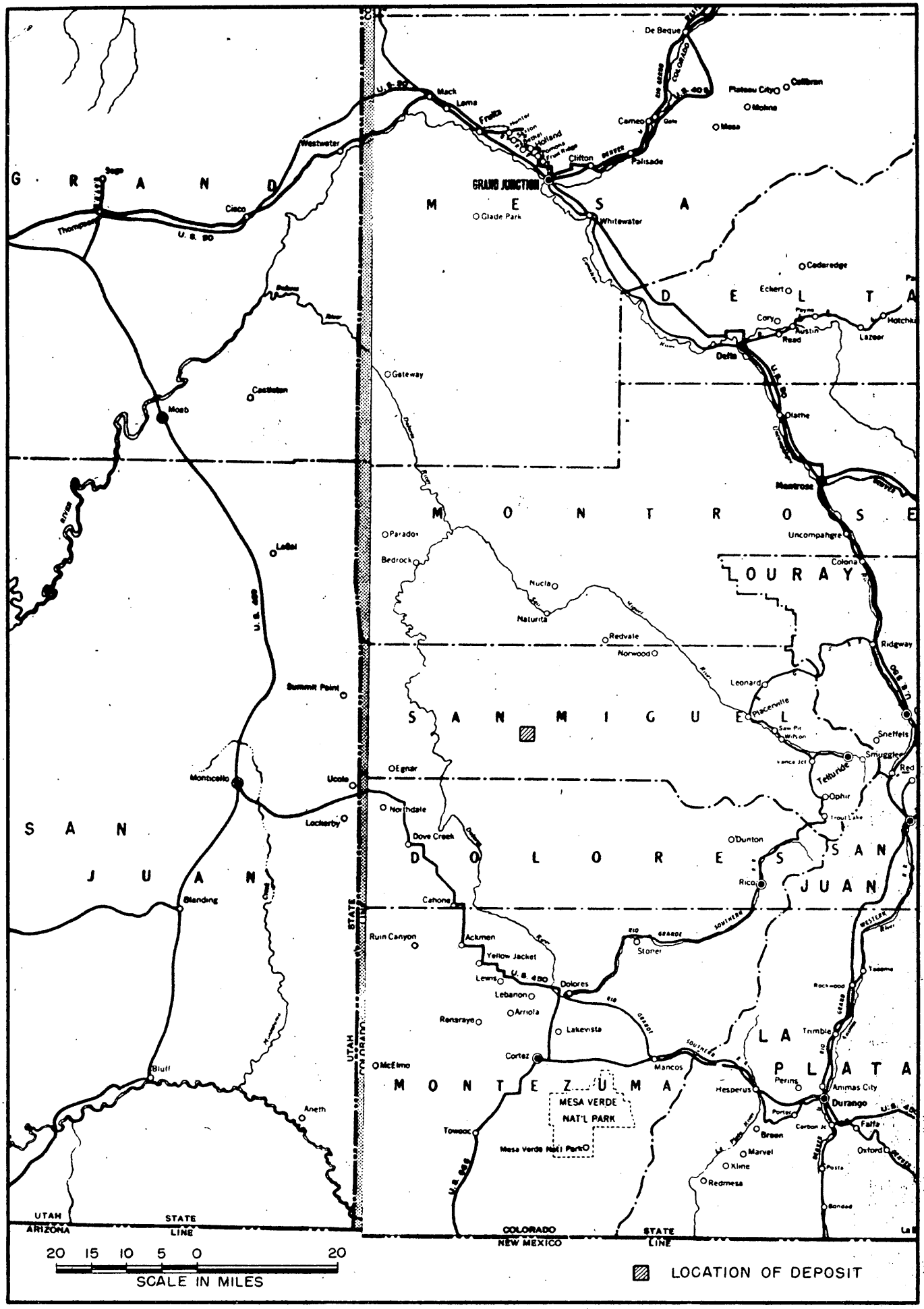


FIGURE 1. - LOCATION MAP, GARNER AND ROYER (ZEBRA, YELLOW JACKET, AND HATTIE CLAIMS) SAN MIGUEL COUNTY, COLORADO. (DMEA 3020)

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3930 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan
R. R. McLellan
Mining Engineer

cc: AO
DMEA 3020
DMEA Chron.

MMM/pan

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMRA 3020 (Uranium) Leave, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of A. R. Malalian's memorandum report recommending denial of the application of D. J. Royer and Millard Garner (DMRA 3020) for a loan of $5,455.00 to do 72 hours of bulldozing for access roads and 4,125 feet of vacuum drilling on the Leave, Hattie, and Yellow Jacket claims located in San Miguel County, Colorado.

Malalian bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Leave and Yellow Jacket claims cannot be confirmed, and the probability of finding more deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. M. Traver

W. M. Traver

Enclosures

cc: AC
DMRA 3020
DMRA Chron.

WMT/pmm

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: R. A. McLaughlin

Subject: DMMA 3 (2) (Uranium) Aura, Mattie, and Yellow Jacket claims, D. J. Sayer and Millard Garner, applicants, San Miguel County, Colorado

An investigation of the subject uranium-vanadium property was made by a Region IV examining team to check the information in an application for Government exploration assistance. Denial of the application is recommended.

The applicants, D. J. Sayer and Millard Garner, of Norwood, Colorado, proposed [illegible] hours of bulldozing for access roads and 5,400 feet of wagon drilling in 30 holes at a cost of $5,400.00--Government participation 75 percent, or $4,050.00.

The claims are located in secs. 15 and 16, T. 43 N., R. 11 W., New Mexico principal meridian, Cayenne Valley District, San Miguel County, Colorado (fig. 1).

There are five small exposures of uranium-vanadium ore along more than [illegible] feet of grid outcrop of the lowest seds of the main mass member of the Morrison formation. The upper beds have been removed by erosion. A small amount of work has been done on the ore exposures with a production of less than 200 tons of ore, judging from the mine

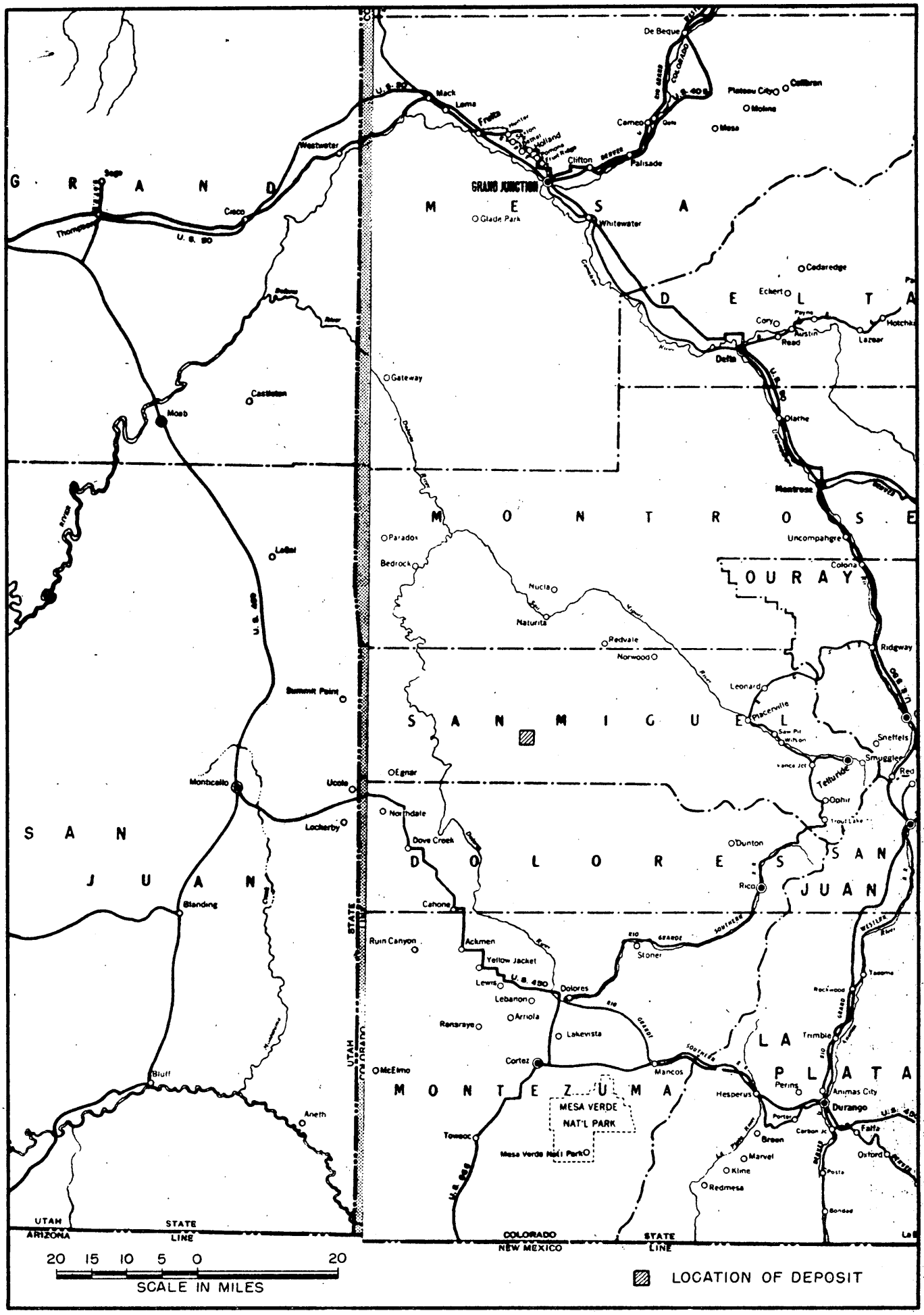


FIGURE 1. - LOCATION MAP, GARNER AND ROYER (ZEBRA, YELLOW JACKET, AND HATTIE CLAIMS) SAN MIGUEL COUNTY, COLORADO. (DMEA 3020)

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3330 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan
R. R. McLellan
Mining Engineer

cc: AO
DMEA 3020
DMEA Charon.

MEH:pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 157
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3[illegible] (Uranium) Zebra, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of R. R. McLellan's memorandum report recommending denial of the application of D. J. Royer and Millard Garner (DMEA 3[illegible]) for a loan of $2,455.00 to do 72 hours of bulldozing for access roads and 4,125 feet of vacuum drilling on the Zebra, Hattie, and Yellow Jacket claims located in San Miguel County, Colorado.

McLellan bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. H. Travar

W. H. Travar

Encl: 10 orig

cc: 10
DMEA 3[illegible]
DMEA Carr S.

[illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 131
Denver Federal Center
Denver 25, Colorado
August 27, 1953

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: R. L. Nininger

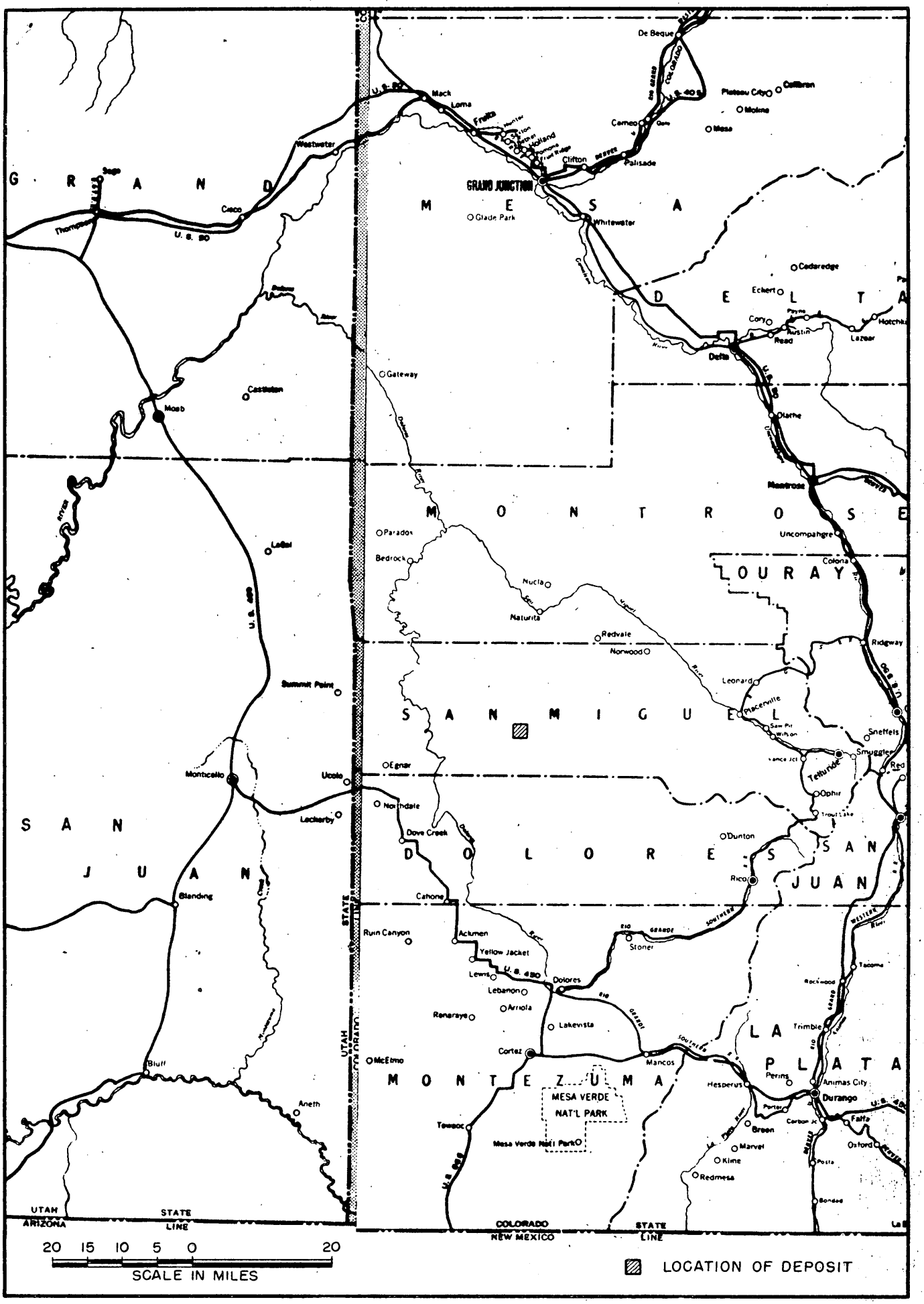
Subject: Mat 3 2 (Uranium) Sara, Hattie, and Yellow Jacket claims, D. J. Roger and Millard Garner, applicants, San Miguel County, Colorado.

An investigation of the subject uranium-vanadium property was made by a Region IV examining team to check the information in an application for Government exploration assistance. Denial of the application is recommended.

The applicants, D. J. Roger and Millard Garner, of Norwood, Colorado, proposed to share in building roads and 4,125 feet of exploratory drilling in the mines at a cost of $[illegible]. Government participation would be [illegible] percent, or $[illegible].

The claims are located in secs. [illegible] and 10, T. [illegible] S., R. 16 W., New Mexico principal meridian, Cypress Valley District, San Miguel County, Colorado (fig. 1).

There are five small exposures of uranium-vanadium ore along more than [illegible] feet of grid outcrop of the lowest beds of the Salt Wash member of the Morrison formation. The upper beds have been removed by erosion. A small amount of work has been done on the ore exposures with a production of less than [illegible] tons of ore, judging from the size


GRAND
MESA
DELTA
MONTROSE
OURAY
SAN MIGUEL
DOLORES
SAN JUAN
MONTEZUMA
LA PLATA
SAN JUAN
GRAND JUNCTION
Mack
Loma
Fruita
Westwater
Cisco
Thompson
Moab
Castleton
Gateway
Paradox
Bedrock
Nucla
Naturita
Redvale
Norwood
Ouray
Ridgway
Telluride
Ophir
Rico
Dunton
Dolores
Cortez
Mancos
Durango
Bluff
Aneth
Monticello
Blanding
Lockerby
Ucolo
Egnar
Dove Creek
Cahone
Ruin Canyon
Actumen
Yellow Jacket
Lewis
Lebanon
Arriola
Renarsye
Lakevista
McElmo
Towaoc
Mesa Verde Nat'l Park
MESA VERDE NAT'L PARK
Stoner
Hesperus
Perins
Animas City
Trimble
Tacoma
Rockwood
Bayfield
Marvel
Klime
Redmesa
Bondad
Oxford
Falfa
Carbon Jc
Porter
Green
Lazear
Hotchkiss
Austin
Cory
Eckert
Cedaredge
Delta
Olathe
Montrose
Uncompahgre
Colona
Placerville
Sneffels
Smuggler
Vance Jct
Trout Lake
Nucla
Naturita
Leonard
Cameo
Palisade
Clifton
Holland
Molina
Mesa
Plateau City
Collbran
De Beque
Glade Park
Whitewater
Westwater
Sego
Castleton
Summit Point
Lisbon
Ucolo
Northdale
Dove Creek
Cahone
Actumen
Yellow Jacket
Lewis
Lebanon
Arriola
Renarsye
Lakevista
Cortez
McElmo
Towaoc
Mesa Verde Nat'l Park
Mancos
Dolores
Stoner
Hesperus
Durango
Bayfield
Marvel
Klime
Redmesa
Bondad
Oxford
Falfa
Carbon Jc
Porter
Green
Perins
Animas City
Trimble
Tacoma
Rockwood
Lazear
Hotchkiss
Austin
Cory
Eckert
Cedaredge
Delta
Olathe
Montrose
Uncompahgre
Colona
Ridgway
Placerville
Sneffels
Smuggler
Vance Jct
Trout Lake
Telluride
Ophir
Rico
Dunton
Dolores
Stoner
Cortez
Mancos
Durango
Bluff
Aneth
Monticello
Blanding
Lockerby
Ucolo
Egnar
Dove Creek
Cahone
Ruin Canyon
Actumen
Yellow Jacket
Lewis
Lebanon
Arriola
Renarsye
Lakevista
McElmo
Towaoc
Mesa Verde Nat'l Park
Moab
Castleton
Gateway
Paradox
Bedrock
Nucla
Naturita
Redvale
Norwood
Leonard
Placerville
Sneffels
Smuggler
Vance Jct
Trout Lake
Telluride
Ophir
Rico
Dunton
Dolores
Stoner
Cortez
Mancos
Durango
Bluff
Aneth
Monticello
Blanding
Lockerby
Ucolo
Egnar
Dove Creek
Cahone
Ruin Canyon
Actumen
Yellow Jacket
Lewis
Lebanon
Arriola
Renarsye
Lakevista
McElmo
Towaoc
Mesa Verde Nat'l Park
Mancos
Dolores
Stoner
Hesperus
Durango
Bayfield
Marvel
Klime
Redmesa
Bondad
Oxford
Falfa
Carbon Jc
Porter
Green
Perins
Animas City
Trimble
Tacoma
Rockwood
Lazear
Hotchkiss
Austin
Cory
Eckert
Cedaredge
Delta
Olathe
Montrose
Uncompahgre
Colona
Ridgway

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash Formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3930 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan
R. R. McLellan
Mining Engineer

cc: [illegible]
DMEA 3020
DMEA Chron.

MRM/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 27, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMRA 3323 (Uranium) Cobra, Rattle, and Yellow Jacket claims, E. J. Royer and Hilliard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of R. E. Whelan's memorandum report recommending denial of the application of E. J. Royer and Hilliard Garner (DMRA 3323) for a loan of $5,455.00 to do 72 hours of bulldozing for access roads and 6,[illegible] feet of wagon drilling on the Cobra, Rattle, and Yellow Jacket claims located in San Miguel County, Colorado.

Whelan bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Cobra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. M. Traver

W. M. Traver

enclosures

cc: [illegible]
DMRA [illegible]
DMRA Carson.

WMT:pmm

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 13
Denver Federal Center
Denver 15, Colorado
August 2[illegible], 1[illegible]

Memorandum

To: [illegible], Mineral Resources Branch, Mining Division, Region IV

From: [illegible]

Subject: Lease 5.2 (Uranium) Cora, Kettle, and Yellow Jacket claims, D. J. Boyer and Willard Carter, applicants, San Miguel County, Colorado

An investigation of the subject uranium-vanadium property was made by a Region IV examining team to check the information in an application for Government exploration assistance. Results of the application is recommended.

The Applicants, D. J. Boyer and Willard Carter, of Norwood, Colorado, proposed to build [illegible] of new roads and 4,[illegible] feet of rotary drilling to [illegible] holes at a cost of [illegible]. Government participation [illegible] percent, or [illegible].

The claims are located in secs. [illegible] and 15, T. 43 N., R. 10 [illegible], New Mexico Principal Meridian, Dynamo Valley District, San Miguel County, Colorado (Fig. 1).

There are five small exposures of uranium-vanadium ore along more than [illegible] feet of grid outcrop of the lowest beds of the Salt Wash member of the Morrison Formation. The upper beds have been [illegible] by erosion. A small amount of work has been done on the ore exposures with a production of less than [illegible] tons of ore, including [illegible] also

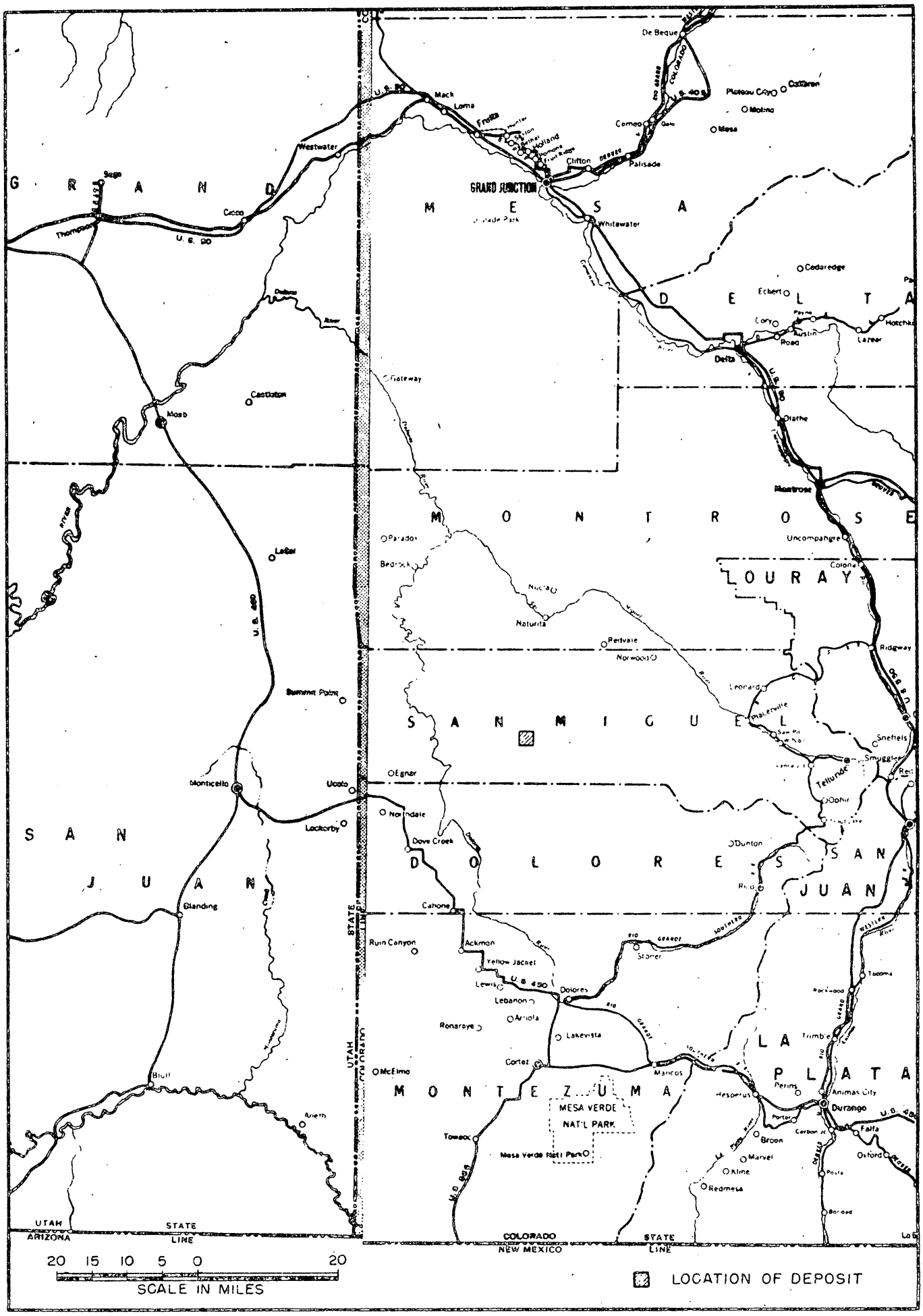


FIGURE 1. - LOCATION MAP, GARNER AND ROYER (ZEBRA, YELLOW JACKET, AND HATTIE CLAIMS) SAN MIGUEL COUNTY, COLORADO. (DMEA 3020)

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3530 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zaura and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan
R. R. McLellan
Mining Engineer

cc: AO
DMEA 3080
DMEA Chron.

RRM/pmm

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 157
Denver Federal Center
Denver 14, Colorado
August 20, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMA 3[illegible] (Uranium) Laura, Hattie, and Yellow Jacket claims, D. J. Royer and Millard Garner, applicants, San Miguel County, Colorado

Enclosed are the original and ten copies of W. A. McLellan's memorandum report recommending denial of the application of D. J. Royer and Millard Garner (DMA 3[illegible]) for a loan of $[illegible] to do 72 hours of bulldozing for access roads and 4,[illegible] feet of diamond drilling on the Laura, Hattie, and Yellow Jacket claims located in San Miguel County, Colorado.

McLellan bases his recommendation for denial on the facts that any other deposits likely to be found on the property would be so small and scattered as to be already mined, the suspected trend between the Laura and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor.

I agree with the recommendation for denial of the application.

W. M. Traver

W. M. Traver

Enclosures

cc: Mr.
DMA 3[illegible]
DMA Chron.

WMT:pmm

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building [illegible], Room [illegible]
Denver Federal Center
Denver 15, Colorado
August [illegible], [illegible]

Memorandum

To: [illegible], Minerals Resources Branch, Mining Division, Region IV

From: [illegible], Geologist

Subject: Dec. [illegible] (Uranium) claims, Mattie, and Yellow Jacket claims, D. J. Moyer and Millard Garner, applicants, San Miguel County, Colorado

An investigation of the subject uranium-vanadium property was made by a Region IV examining team to assist the Bureau in an application for Government exploration assistance. Denial of the application is recommended.

The applicants, D. J. Moyer and Millard Garner, of Norwood, Colorado, proposed 12 hours of bulldozing for access roads and [illegible] hours of rotary drilling in 6 holes at a cost of $[illegible] to Government participation of 50 percent, or $[illegible].

The claims are located in secs. 15 and 16, T. 43 N., R. 16 W., New Mexico Principal Meridian, Dypsie Valley District, San Miguel County, Colorado (fig. 1).

There are five small exposures of uranium-vanadium ore [illegible] than [illegible] feet [illegible] grade water [illegible] the lowest [illegible] the east [illegible] of the Morrison formation. The upper [illegible] have been covered by erosion. A small amount of work has been done on the [illegible] exposure with a production of less than [illegible] tons of ore, judging from the [illegible]

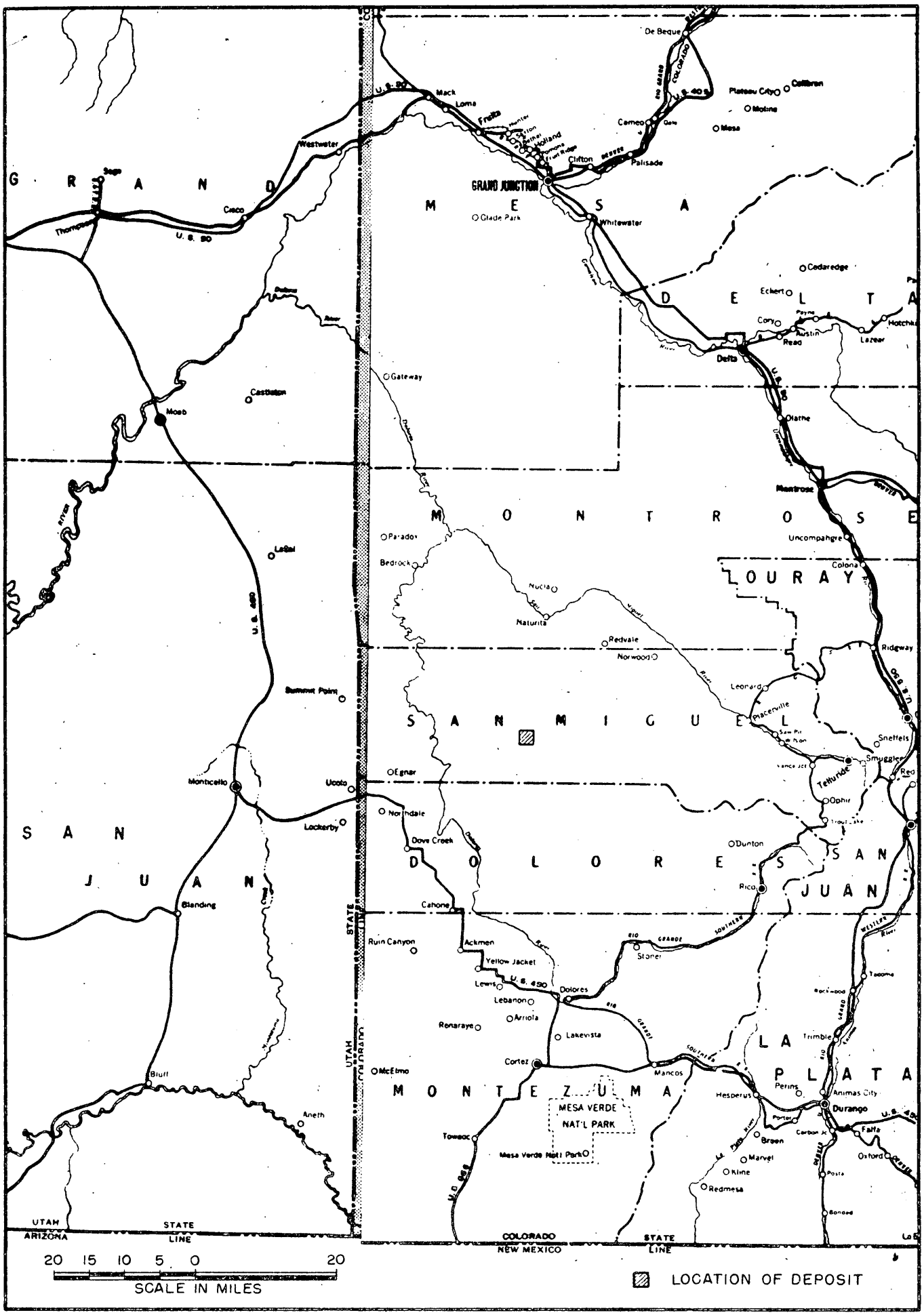


FIGURE 1. - LOCATION MAP, GARNER AND ROYER (ZEBRA, YELLOW JACKET, AND HATTIE CLAIMS) SAN MIGUEL COUNTY, COLORADO. (DMEA 3020)

workings. The probable size of the ore bodies was from 2 to 10 feet wide, 5 to 15 feet long, and 1 foot thick. There was no ore of mineable grade or thickness showing in the working faces at the time of the examination, and no indicated or inferred ore reserves can be estimated.

Although the formation is classed as favorable according to criteria of the Geological Survey, known deposits in the lower beds of the Salt Wash formation throughout the Colorado Plateau area are small and scattered.

A request by the owner of the property for drilling and an access road in 1943, at the time a Bureau of Mines drilling project described in R.I. 3930 was in operation in the area, was denied on the grounds that there was little possibility of finding ore in significant quantities.

A supposed trend of ore deposits between the Zebra and Yellow Jacket claims, suggested by the applicants, is not substantiated by the exposures in the workings.

The applicants proposed exploration by wagon drilling in three phases. The first phase, requiring a maximum of 1,500 feet of drilling in 25 to 30 holes 50 feet deep on 25-foot centers around the limits of old workings, was to determine possible extensions of the known ore deposits. The other phases were to be undertaken only if ore was located in the first phase and would serve to test the area between the Zebra and Yellow Jacket workings and extend the limits of any ore discovered in preliminary drilling.

The examining team considered the applicants' estimate of access road requirements low and added 16 hours of bulldozing to the 72 hours requested.

It is concluded that any other deposits likely to be found on the property would be as small and scattered as those already mined, the suspected trend between the Zebra and Yellow Jacket claims cannot be confirmed, and the probability of finding ore deposits of significant size is poor. It is, therefore, recommended that the application be denied.

R. R. McLellan
R. R. McLellan
Mining Engineer

cc: [illegible]
DMEA 3[illegible]
DMEA Chron.

[illegible]/pam

Region IV

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
August 6, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3013, Climax Uranium Company (Uranium), Mesa County, Colorado
DMEA 3020, Garner and Royer (Uranium), (Zebra, Yellow Jacket, and Hattie claims), San Miguel County, Colorado

Both of the above applications are among those on which Mineral Resources Branch engineers participated in field examinations.

In accordance with your recent instructions, our engineers, as time permits, will prepare short denial memorandum reports on the projects to justify our participation.

W. M. TRAVER

W. M. Traver

WMT/cb

cc: WHKing w/original
RPFischer (2)
DMEA 3013
DMEA 3020
Chron.

[illegible] New Customhouse
Denver 2, Colorado

June 22, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: [illegible].

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 3020 (Uranium), Garner & Beyer, Eskra, Yellow Jacket and Rattle 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. Hershman
for A. H. Koschmann

Enclosures

HMC:cwm

cc: WMTraver w/copy of Final Report
ERGordon w/copy of Final Report
RPFischer w/copy of Final Report
CETowle w/copy of Final Report
AHKoschmann w/copy of Final Report
Mining Division w/copy of Final Report
DMEA w/copy of Final Report
Subject
AHKoschmann (2)
Chron.

224 New Customhouse
Denver 2, Colorado

June 22, 1953.

Mr. Millard Garner
Mr. D. J. Moyer
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. Koschmann
for A. N. Koschmann
Field Team, Region IV

HMC:cwm

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

DMEA Form 3b
(Revised)

DEFENSE MINERALS EXPLORATION ADMINISTRATION

CONTROLLED DOCUMENT
Revised Abstract

DMEA Docket No. 3020

Name of Applicant Millard Garner and D. J. Royer

Change:	From		To	
	III 1	☐	III 1	☐
	III 2	☐	III 2	☒ 6-15-53
	III 3	☐	III 3	☐
	III 4	☒	III 4	☐
	III 5	☐	III 5	☐
			III 6	☐
			III 7	☐

Add:

II 7 $ 5,455.00

II 8 $ None

II 8a % _____

II 9 $ _____

Remarks:

Initials of person preparing sheet BMC

Date sheet prepared 6-15-53

33978

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

June 22, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3020, Garner and Royer, Zebra, Hattie, and Yellow Jacket claims, Slick Rock District, San Miguel County, Colo.

Attached is the brochure on the above docket which was returned to this office by Mr. R. P. Fischer. Our geologic report covering this docket has previously been transmitted to you.

E. M. Hackman
for A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosure

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. DMEA-3020
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: Millard Garner and D. J. Royer (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*) State the mineral or minerals for which you wish to explore uranium and vanadium

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated April 13, 1953

DWIGHT J. ROYER AND MILLARD GARNER
(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. GARNER
Norwood, Colorado

1. NAME OF APPLICANT

Millard Garner
El Rancho Costa Plenty
Norwood, Colorado

Dwight J. Royer
Norwood, Colorado

The above two persons operate these claims under a partnership.

Mr. Royer is authorized to sign the agreement.

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

3. APPLICANTS 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.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. ROYER - M. GARNER
Norwood, Colorado

4. PHYSICAL DESCRIPTION

a. No operations or exploration work are being carried on 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 80 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.

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

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 foot deep spaced around the outcrops and mine workings at 25 foot intervals and at 25 foot 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.

Not exploration

(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

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

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

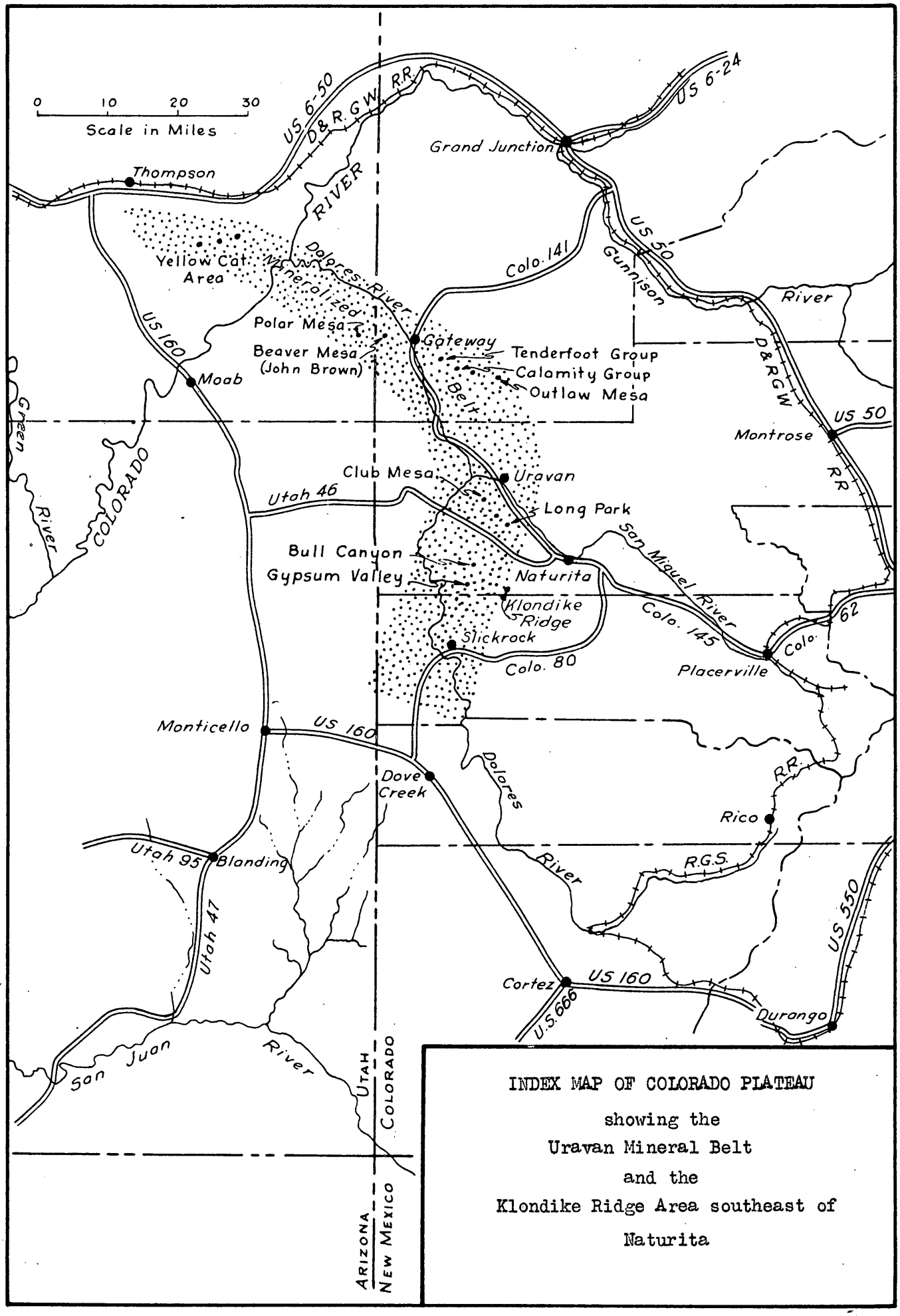
b. Labor, supervision, engineering

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

c. Operating supplies	None
e. 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

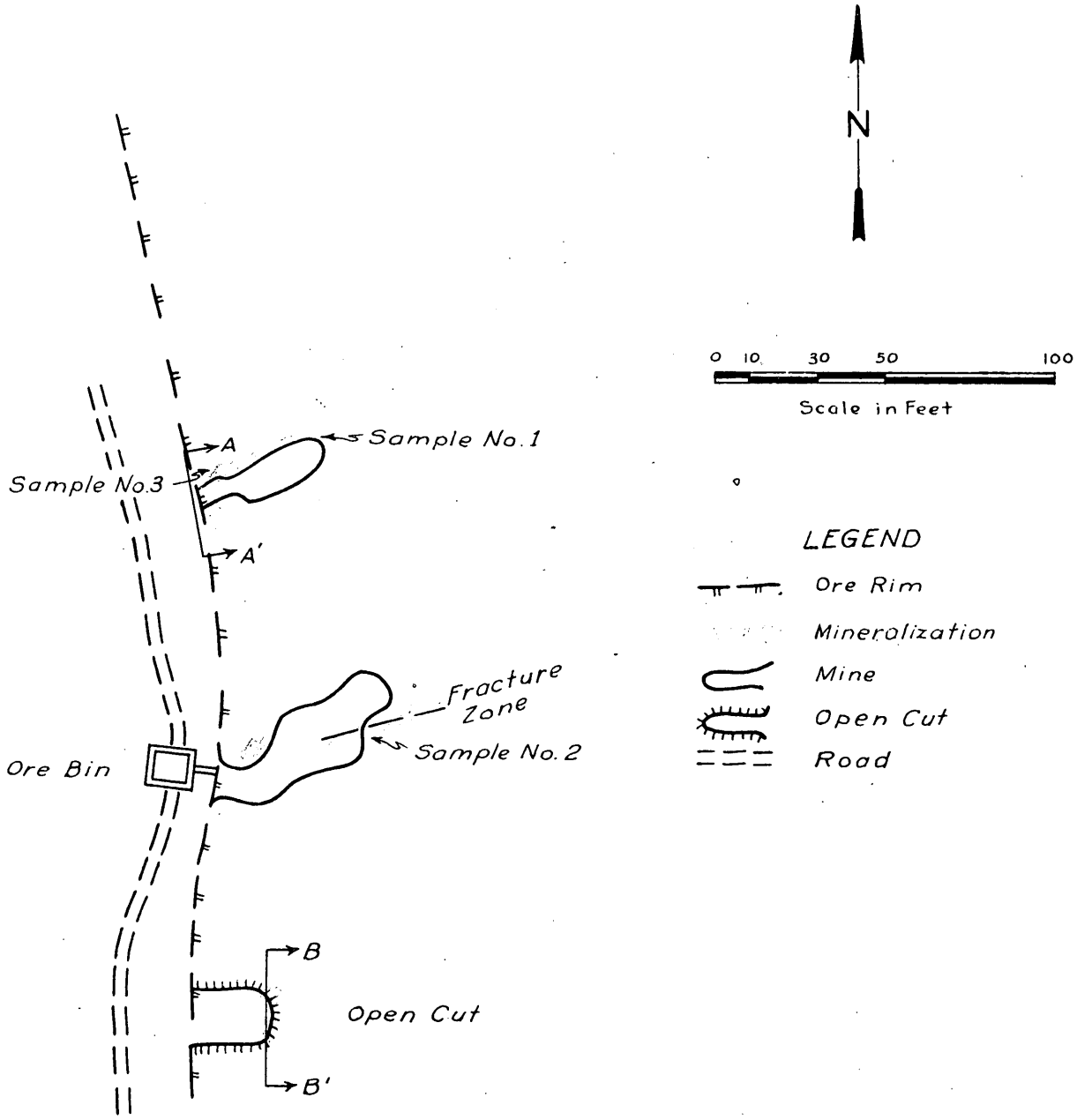
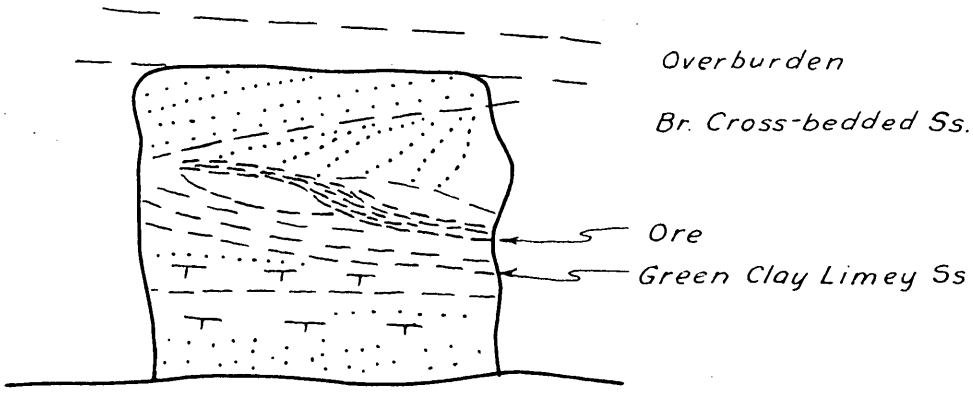
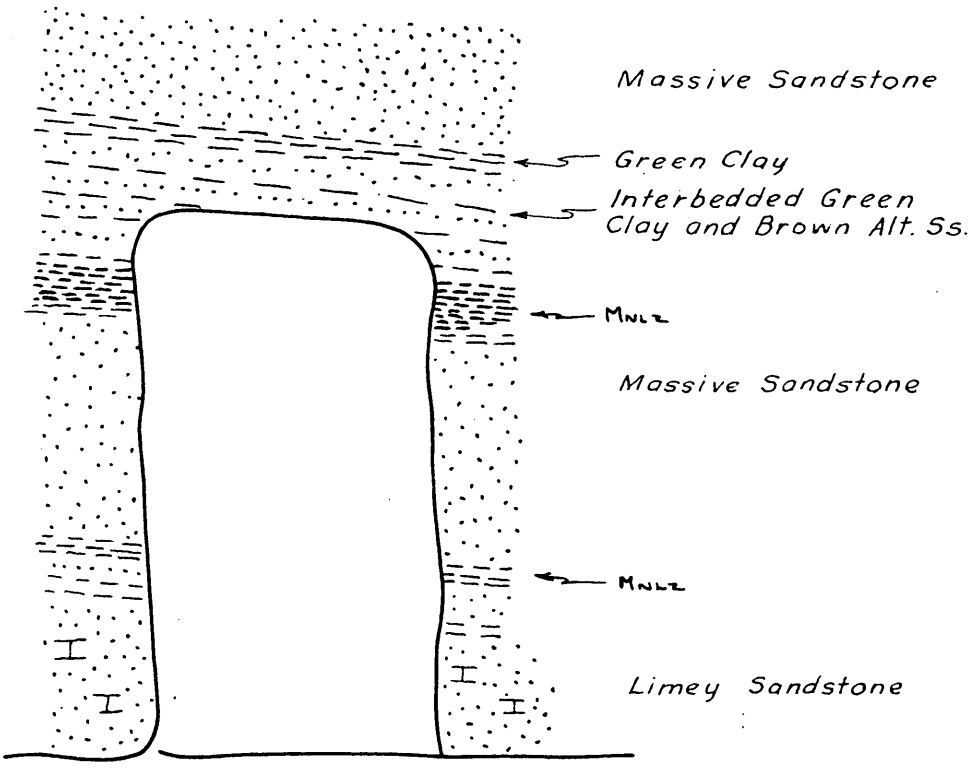


FIGURE No. 2
WORKINGS ON THE ZEBRA CLAIM



SECTION B-B'



SECTION A-A'

FIGURE 3
SECTION THROUGH MINERALIZED ZONES - ZEBRA CLAIM

Buck:

— 30 20 —

This is either the survey's brochure which Wagner picked up in Grand Junction or an extra copy you furnished us for the examination.

We are returning it as we have no further use for it. Survey is dropping.

Lowell

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Budget Bureau No. 42-R1038.2.
RECEIVED
MAY 5 1953
MAY 8 - 1953
BUREAU OF MINES
Denver, Colo.

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 5/15/53
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 Garnor and D. J. Royer (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*) State the mineral or minerals for which you wish to explore Uranium and vanadium

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated April 13, 1953

DWIGHT J. ROYER AND MILLARD GARNER
(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. [illegible] - D. [illegible]
Norwood, Colorado

1. [illegible] [illegible]

Millard Warner
El Rancho Costa Plenty
Norwood, Colorado

Wright J. Loyer
Norwood, Colorado

The above two persons operate their claims under a partnership.

Mr. Loyer is authorized to sign the agreement.

R. J. [illegible] - [illegible]
Norwood, Colorado

3. [illegible]

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 19 W, N.M.P.M., San Miguel County, Colorado.

b. Plus known by claim name.

c. Owner

d. Not applicable

e. None

f.

[illegible]	[illegible]	[illegible]	[illegible]
Zebra	46	176	1033
Zebra No. 1	46	176	1033
Hattie	153	210	1052
Yellow Jacket	55	174	1059

4. [illegible]

a. No exploration or exploration work are being carried on 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 Cobra 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 [illegible] tons of 2.[illegible] U_3O_8 and 2.[illegible] 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 carbonate of the Leadville member of the Morrison formation and are typical of these type deposits.

Samples taken at the mine workings (#1 and 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	2.61	0.[illegible]	12 in.	Cut taken at portal of north tunnel

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

(4 c. 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 there.

Shipping - Ore would be shipped to either the Vanadium Corporation Mill at Naturita, 33 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 Milford Garner near Cedar which is about 12 miles from the claims. The applicant would furnish living facilities for this project.

c. 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 foot deep spaced around the outcrops and mine workings at 25 foot intervals and at 25 foot distance from the mine or outcrop. This would include the two prospects which show ore on the Yellow Jacket. And, would include 70 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 outcrop on the Yellow Jacket and should include at least 25 holes averaging 50 feet 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 southeasterly 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)

1500 feet 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 - Nico Argentina 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. Wright J. Boyer

Presently owns and operates saw mill in the Norwood Area

6. [illegible]

a. Independent Contractor

Rotary drilling

4155 feet @ 0.80/ft. 3300.00

Bulldozer work

70 hours @ 10.00/hr. 700.00

b. Labor, supervision, engineering

Superintendent-geologist @ [illegible]/mo.
2 months [illegible]
Engineer 10 days @ 40.00/day 400.00

c. Operating supplies None

d. Rehabilitation and repairs None

f. Improvements, etc. None

g. Miscellaneous

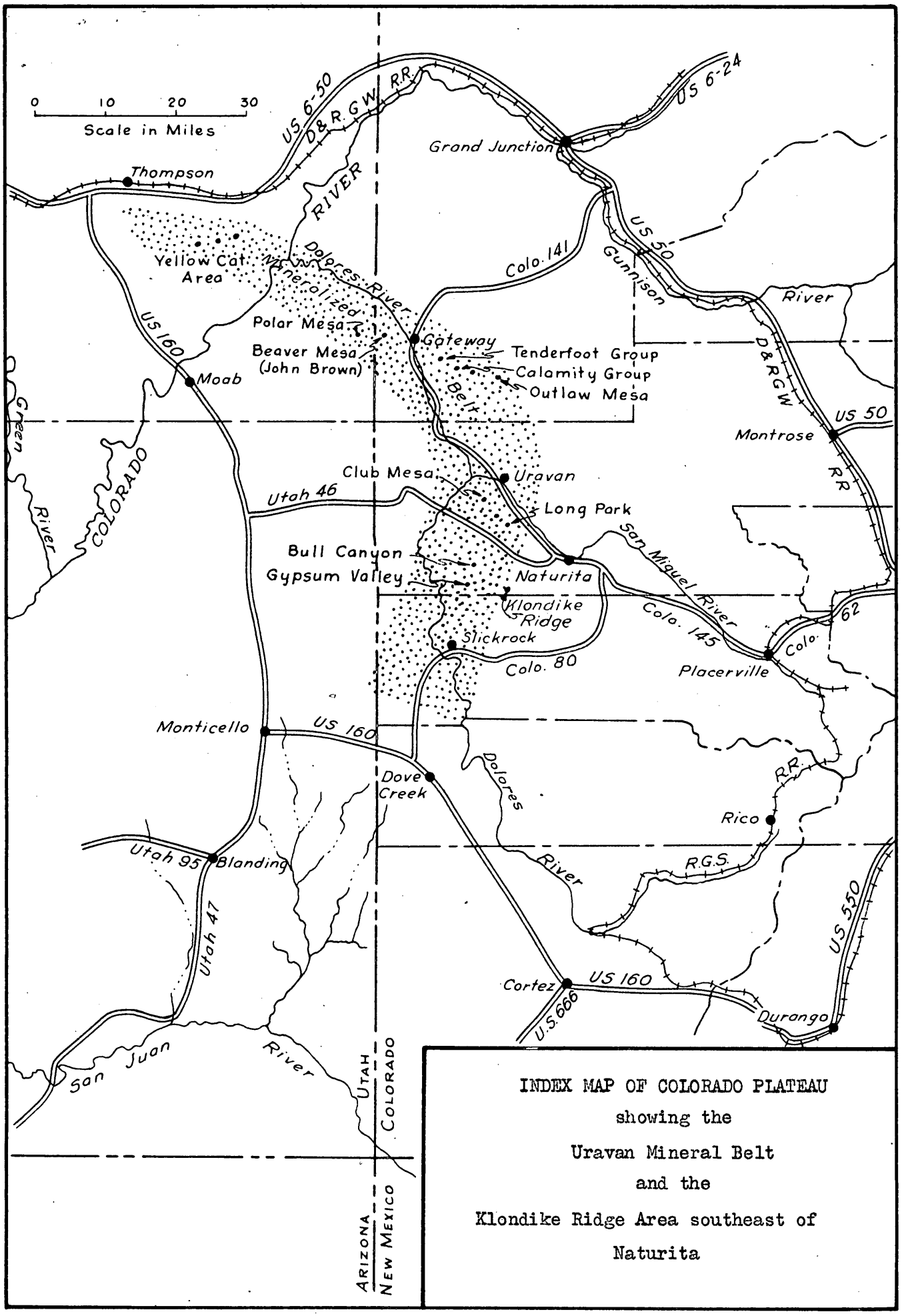
Sample analysis, 20 ea. @ 5.00 100.00

Drafting 15.00

Map reproduction 20.00

TOTAL 5456.00

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

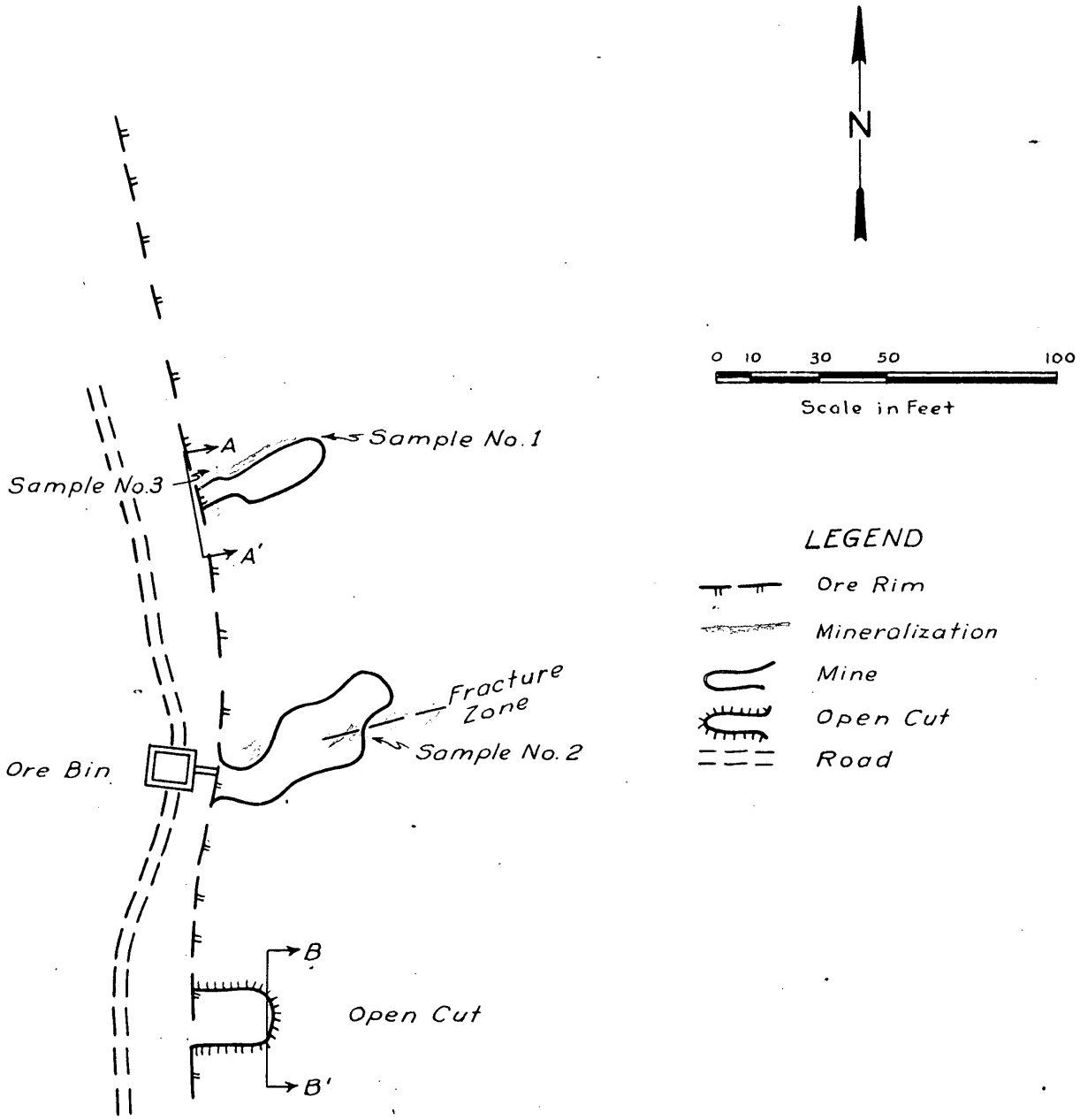
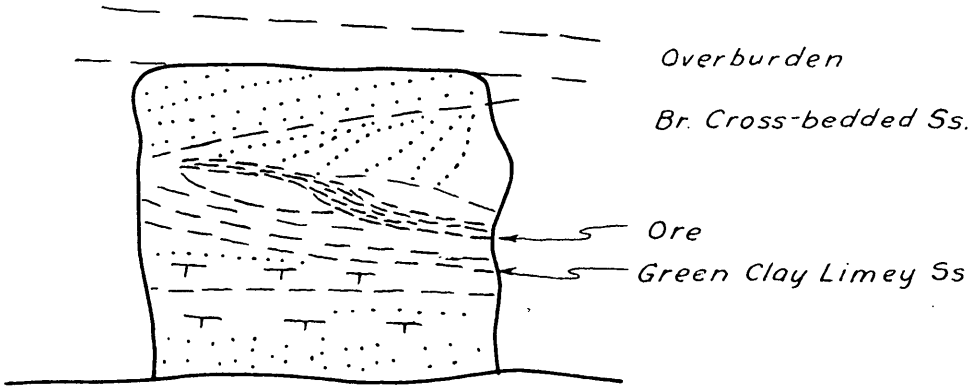
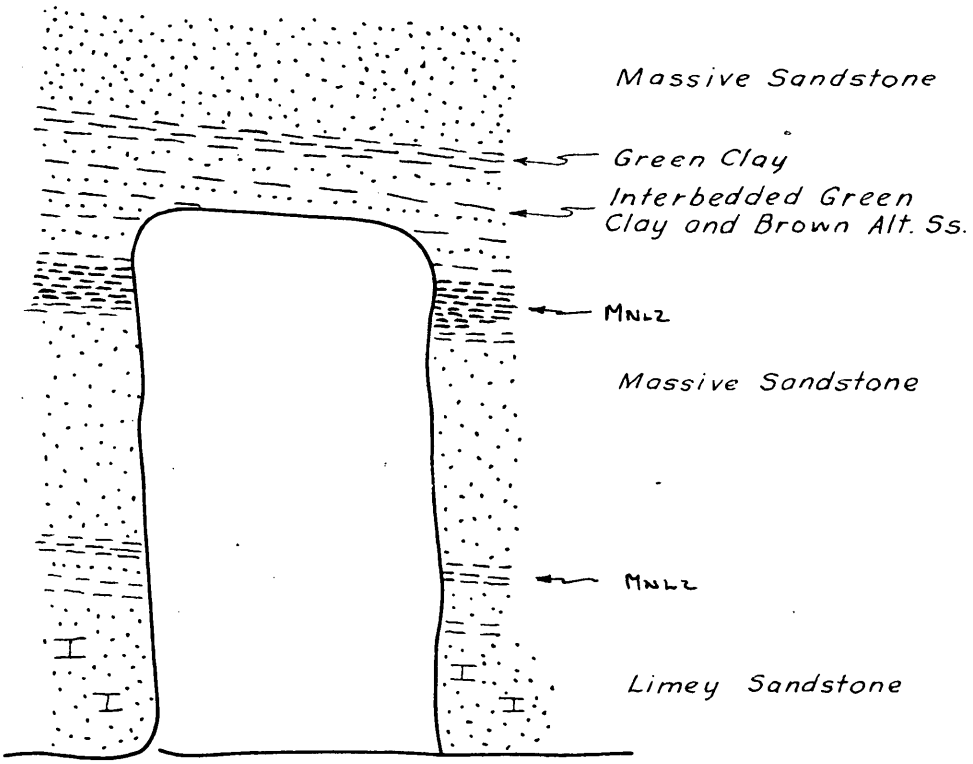


FIGURE No. 2
WORKINGS ON THE ZEBRA CLAIM

DMEA - 3020



SECTION B-B'



SECTION A-A'

FIGURE 3
SECTION THROUGH MINERALIZED ZONES - ZEBRA CLAIM

DMEA-3020

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

May 18, 1953

Memorandum

To: W. M. Traver, Jr.
Bureau of Mines, Denver, Colorado

From: R. P. Fischer

Subject: DMEA No. 3020, status report

On the basis of casual field observations by C. F. Withington, it appears that the area of the Zebra, Hattie, and Yellow Jacket claims is not favorable and likely the drilling will be deeper than indicated in the application. We do not have sufficient specific information, however, to recommend a denial of this application, nor can we suggest a modification of the proposal. For this reason, I suggest that Withington make a preliminary field examination prior to contacting your office to arrange a joint examination with an engineer. Consideration should be given, however, to the possibility of a joint examination of this property at the time one of your engineers makes a field examination of the Whirlwind mine, San Juan County, Utah.

If you wish a joint examination at the time of the Whirlwind mine examination, please notify me and indicate where and when Withington should contact your engineer.

Acting District Supervisor
Colorado Plateau District

RPF/je

cc: W. H. King
A. H. Koschmann
C. F. Withington
G. J. file
Reading file

224 New Customhouse
Denver 2, Colorado

May 21, 1953

Memorandum

To: W. M. Traver, Jr.

From: Executive Officer, DMEA Field Team, Region IV

Subject: Brochures.
DMEA Docket No. 3003, Calvin Black and Keith Jones
DMEA Docket No. 3020, Millard Garner and D. J, Royer

Enclosed are copies of brochures, DMEA 3003, Black and Jones, Applicants, Blanding, Utah, and DMEA 3020, Garner and Royer, Applicants, Norwood, Colorado.

W. H. KING

W. H. King

Enclosures

HMC:cwm

cc: Subject
Docket (Black and Jones)
✓Docket (Garner and Royer)
Chron.

224 New Customhouse
Denver 2, Colorado

May 11, 1953

Memorandum

To: R. P. Fischer (with brochure)

W. M. Traver, Jr.

From: Field Team, Region IV

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

Enclosed herewith is the subject application for Government assistance in exploration work estimated to cost $5,455.00.

A suitable report is required.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

W.H.K.

Enclosure

Hmc
HMC:fwo

cc Subject, Chron, Koschmann (2)

224 New Customhouse
Denver 2, Colorado

May 1, 1953.

Memorandum

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

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docketing for Exploration Assistance

Enclosed herewith in duplicate is DMA Form 3a and MF-103, and supporting data pertaining to the following applications for Government assistance in exploration work:

Tijuana Mines, Inc.
931 East Denton Lane
Phoenix, Arizona

Irl Conway and Ed Conway
Tonto Basin
Arizona

Millard Garner and D. J. Royer
Norwood
Colorado

James L. McBroom
Box 184
Nederland, Colorado

W. H. KING
W. H. King

Enclosures

cwm

cc: Code 200 file
Docket (Tijuana Mines)
Docket (Irl & Ed Conway)
Docket (Garner & Royer)
Docket (Jas. L. McBroom)
Chron.
AHKoschmann (2)

DMA Form 3a

DEFENSE MINERALS ADMINISTRATION

CONTROLLED DOCUMENT
Abstract

I. Check One:

1 ☐ 2 ☐ 3 ☑ 4 ☐ 5 ☐ 6 ☐

II. Fill in each item:

1. _____ 2. _____ 2a. _____

3. Millard Garner + D. J. Royer
Norwood Colo.

_____ (Code) _____

4. Zebra, Hattie + Yellow Jacket

5. Country _____ State Colo County San Miguel

_____ (Code) _____ (Code)

6. Uranium

7. $ 5455

8. $ _____ % 90

9. Est. Ann. Increase - _____ Unit of Measure - _____

10. $ _____

11. _____

III. Check one:

1 ☐ 2 ☐ 3 ☐ 4 ☑

Initials of person preparing sheet HMC

Date sheet prepared 4-28-53

224 New Customhouse
Denver 2, Colorado

April 28, 1953

Mr. Millard Garner
El Rancho Costa Plenty
Norwood, Colorado

Dear Mr. Garner:

This will acknowledge receipt of your application and accompanying map on your Zebra, Hattie, and Yellow Jacket Claims.

You will be advised prior to the date of the field examination so that you or your representative can accompany the field examiners.

Very truly yours,

John F. Shaw
for W. H. King
Executive Officer
DMEA Field Team, Region IV

HMC:fw●

cc Subject
Chron
Koschmann (2)

224 New Customhouse
Denver 2, Colorado

April 13, 1953

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Letter to Millard Garner

This will acknowledge receipt of your letter dated April 8, 1953 regarding an application which Mr. Garner thinks he has submitted.

We have no record of receiving this application. A copy of our letter to Mr. Garner is attached.

W. H. King
W. H. King

Enclosure

Ann
HMC:fwo

cc Subject
Chron

224 New Customhouse
Denver 2, Colorado

April 13, 1953

Mr. Millard Garner
Norwood, Colorado

Dear Mr. Garner:

On February 27 we advised you that we had not received your application for DMEA assistance and we suggested that you contact Mr. John Schumacher and ask him if he had completed your application.

As of this date we have no record of receiving your application.

Enclosed is another set of application forms similar to the ones we sent you in our letter of August 15, 1952, and if you are still interested in exploration aid we will be glad to process your application when it is received by this office.

Very truly yours,

W. H. King

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

Enclosure

HMC

HMC:fwo

cc COMittendorf
Subject
Chron

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

Mining Division
Date Rec'd.
APR 10 1953
BUREAU OF MINES
Denver, Colorado

APR 8 1953

Mr. W. H. King
Executive Officer
224 New Customhouse Building
Denver 2, Colorado

Dear Mr. King:

This will acknowledge your memorandum dated April 3, 1953 requesting correspondence with Mr. Millard Garner on the subject of an application filed by him with the Defense Minerals Exploration Administration.

In response to your request there are enclosed herewith two letters dated October 31, 1952 and February 24, 1952 from Mr. Garner, together with a copy of our letter dated November 13, 1953 and the original of a letter sent to Mr. Garner in response to his letter of February 24, 1952. This is all the correspondence we have had with this applicant.

Our records show no application filed by Mr. Garner, however, we do have on record an application filed by Gamblin and Knowles, Docket No. DMEA 2959.

It would seem advisable to refer Mr. Garner to Mr. Schumacher, through whom he filed the application for exploration assistance.

Sincerely yours,

O O Mathews

Administrator

Enclosures - 4

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

APR 8 1953

Mr. W. H. King
Executive Officer
224 New Customhouse Building
Denver 2, Colorado

Dear Mr. King:

This will acknowledge your memorandum dated April 3, 1953 requesting correspondence with Mr. Millard Garner on the subject of an application filed by him with the Defense Minerals Exploration Administration.

In response to your request there are enclosed herewith two letters dated October 31, 1952 and February 24, 1952 from Mr. Garner, together with a copy of our letter dated November 13, 1953 and the original of a letter sent to Mr. Garner in response to his letter of February 24, 1952. This is all the correspondence we have had with this applicant.

Our records show no application filed by Mr. Garner, however, we do have on record an application filed by Gamblin and Knowles, Docket No. DMEA 2959.

It would seem advisable to refer Mr. Garner to Mr. Schumacher, through whom he filed the application for exploration assistance.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures - 4

COPY

Norwood, Colorado
October 31, 1952

Department of Interior
Defense Minerals Exploration
Washington, D. C.

Dear Sirs:

Some several weeks ago, we made application for Government loan for exploration assistance program. To date we have heard nothing from our application.

It is time of year we would like to go to work and are anxious to get started.

We wish to know if you have received our application?

Sincerely yours,

Garner and Royer
By Millard Garner

C O P Y

Norwood, Colorado
February 24, 1952

Dept. of Interior
Defense Minerals Exp. Adm.
Washington, D. C.

Gentlemen:

Some months ago we made loan application for drilling and exploring for uranium on our mining claims.

This application was made through Mr. Johnnie Schumaker of Grand Junction, Colorado. To date we have heard nothing of this loan application, and wonder what is the situation?

Your advice will be appreciated.

We are anxious to hear so when Spring comes we can get to work.

Thank you,

Millard Garner
Norwood, Colo.

C O P Y

November 13, 1953
(date stamp)

Mr. Millard Garner
Norwood
Colorado

Dear Mr. Garner:

This will acknowledge your letter dated October 31, 1952, advising that several weeks ago you made application for Government loan for exploration assistance and have heard nothing regarding your application.

A search of our records in this office does not indicate receipt of an application from you. Perhaps you filed your application with our Executive Officer in Region IV, Denver, Colorado. It is suggested that you contact the Executive Officer in Region IV, if you did file your application with that office.

Sincerely yours,

/S/ C. O. Mittendorf

Administrator

REAdams/meb
11-12-52
cc to: Adm. Reading file
Mails & Files Br.

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

Mr. Millard Garner
Norwood,
Colorado

MAR 9 1953

Dear Mr. Garner:

This will acknowledge receipt of your letter of February 24, 1953 referring to an application for an exploration project on the Lee Mack and Blue Bell claims filed by Mr. John I. Schumacher of Grand Junction, Colorado.

Under date of November 20, 1952 Mr. John F. Shaw, for the Executive Officer of the DMEA Field Team, Region IV, Denver, Colorado, acknowledged receipt of this application and advised that the land covered by the claims was entirely covered by oil and gas leases. Mr. Schumacher was further advised that this application would be held in abeyance until he submitted proof of valid title.

In order to furnish proof of valid title you should be governed by the following procedures:

In the event that your claims were located prior to the filing of the oil and gas leases on the same land, it will be necessary for you to clear your title to the land through the Bureau of Land Management. To obtain such clearance you should submit a map of the property showing a survey line from the property to a Section Corner, and also a photostat of the recording of the claims. These data should be sent to the Bureau of Land Management, Interior Department, Washington 25, D. C., with your request for clearance of the title to your property. If your claims were located after the filing of the oil and gas leases it will be necessary for you to obtain a lease from the Atomic Energy Commission so that you can work the property. In this case it is suggested that you contact the Atomic Energy Commission in Grand Junction, Colorado.

When you obtain a clearance of title from the Bureau of Land Management or a lease from the Atomic Energy Commission, copies of the papers relating thereto should be forwarded to the Denver Office of Defense Minerals Exploration Administration so that the processing of this application can proceed.

Sincerely yours,

C O Mitteudorf

Administrator

Bill Fuig
John Shaw

224 New Customhouse
Denver 2, Colorado

April 3, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration

From: Executive Officer, DMEA Field Team, Region IV

Subject: Letter to Millard Garner

Enclosed is the original of a letter dated March 9, 1953, signed by the Administrator and addressed to Millard Garner. This letter was left in our office this morning by Mr. Gamblin, who received it from John I. Schumacher who, in turn, received it from Mr. Garner.

The first paragraph of your letter refers to a letter dated February 24, 1953 from Mr. Garner. We have in this office a letter from Millard Garner dated February 24, 1953, in which he refers to a previous letter in which he requested application forms for exploration assistance. We replied by stating that we had sent him the necessary forms on December 9, 1952. We suggested that he contact John I. Schumacher in Grand Junction, consulting engineer, whom he had mentioned in his request for application forms.

The first paragraph of the enclosed letter refers to an exploration project on the Lee Mack and Blue Bell claims. An application on these claims was filed by John I. Schumacher for Gamblin and Knowles and has been assigned docket No. 2959.

The second paragraph of the enclosed letter states that under date of February 20, 1953, John F. Shaw, for the Executive Officer, acknowledged receipt of this application. This letter pertains to the application of Gamblin and Knowles which has been received as docket No. 2959. We have no knowledge of any application having been submitted by Millard Garner.

If you would send us copies of your correspondence with Millard Garner it might aid us in straightening out this matter.

W. H. King
W. H. King

Enclosure
JFS:cwm

cc: Subject
Chron.
Koschmann (2)

C
O
P
Y

March 9, 1953.

Mr. Millard Garner
Norwood
Colorado

Dear Mr. Garner:

This will acknowledge receipt of your letter of February 24, 1953 referring to an application for an exploration project on the Lee Mack and Blue Bell claims filed by Mr. John I. Schumacher of Grand Junction, Colorado.

Under date of November 20, 1952 Mr. John F. Shaw, for the Executive Officer of the DMEA Field Team, Region IV, Denver, Colorado, acknowledged receipt of this application and advised that the land covered by the claims was entirely covered by oil and gas leases. Mr. Schumacher was further advised that this application would be held in abeyance until he submitted proof of valid title.

In order to furnish proof of valid title you should be governed by the following procedures:

In the event that your claims were located prior to the filing of the oil and gas leases on the same land, it will be necessary for you to clear your title to the land through the Bureau of Land Management. To obtain such clearance you should submit a map of the property showing a survey line from the property to a Section Corner, and also a photostat of the recording of the claims. These data should be sent to the Bureau of Land Management, Interior Department, Washington 25, D. C., with your request for clearance of the title to your property. If your claims were located after the filing of the oil and gas leases it will be necessary for you to obtain a lease from the Atomic Energy Commission so that you can work the property. In this case it is suggested that you contact the Atomic Energy Commission in Grand Junction, Colorado.

When you obtain a clearance of title from the Bureau of Land Management or a lease from the Atomic Energy Commission, copies of the papers relating thereto should be forwarded to the Denver Office of Defense Minerals Exploration Administration so that the processing of this application can proceed.

Sincerely yours,

/s/ C. O. Mittendorf
Administrator

C
O
P
Y

March 9, 1953.

Mr. Millard Garner
Norwood
Colorado

Dear Mr. Garner:

This will acknowledge receipt of your letter of February 24, 1953 referring to an application for an exploration project on the Lee Mack and Blue Bell claims filed by Mr. John I. Schumacher of Grand Junction, Colorado.

Under date of November 20, 1952 Mr. John F. Shaw, for the Executive Officer of the DMEA Field Team, Region IV, Denver, Colorado, acknowledged receipt of this application and advised that the land covered by the claims was entirely covered by oil and gas leases. Mr. Schumacher was further advised that this application would be held in abeyance until he submitted proof of valid title.

In order to furnish proof of valid title you should be governed by the following procedures:

In the event that your claims were located prior to the filing of the oil and gas leases on the same land, it will be necessary for you to clear your title to the land through the Bureau of Land Management. To obtain such clearance you should submit a map of the property showing a survey line from the property to a Section Corner, and also a photostat of the recording of the claims. These data should be sent to the Bureau of Land Management, Interior Department, Washington 25, D. C., with your request for clearance of the title to your property. If your claims were located after the filing of the oil and gas leases it will be necessary for you to obtain a lease from the Atomic Energy Commission so that you can work the property. In this case it is suggested that you contact the Atomic Energy Commission in Grand Junction, Colorado.

When you obtain a clearance of title from the Bureau of Land Management or a lease from the Atomic Energy Commission, copies of the papers relating thereto should be forwarded to the Denver Office of Defense Minerals Exploration Administration so that the processing of this application can proceed.

Sincerely yours,

/s/ C. O. Mittenbergt
Administrator

221 New Customhouse
Denver 2, Colorado

August 15, 1952

Mr. Hillard Garner
Norwood, Colorado

Dear Mr. Garner:

This will acknowledge receipt of your letter dated August 12 requesting information on Government aid in exploration.

Attached are copies of DMEA Order - 1, a pamphlet of questions and answers on the Defense Minerals Exploration Program, and five copies of Form MF-103.

An application consists of Form MF-103 in quadruplicate, and the fifth copy is for your file.

If your property complies with the provisions as set forth in DMEA Order - 1, you may send your application to this office or direct to the Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C.

Very truly yours,

W. H. King

W. H. King
Executive Officer
Field Team, Region IV

Enclosures

HMC:es

cc: Chron
Subject
Connors

Norwood, Colo.
Aug. 12, 1952.

Region IV
Defense Minerals Exp Adm.
Denver, Colo.
Gentlemen: Please
send form MF-103
and MF-100 for
Exploration of
uranium Claims

Thank you,
Millard Garner
Norwood, Colorado.

Mining Division
Date Rec'd
AUG 14 1952
BUREAU OF MINES
Denver, Colorado

224 New Customhouse
Denver 2, Colorado

February 27, 1953

Mr. Millard Garner
Norwood, Colorado

Dear Mr. Garner:

This will acknowledge receipt of your letter dated February 24 in which you stated you had made an application for DMEA assistance some months ago.

Our records show that on December 9, 1952 we sent you copies of DMEA Order-1, a pamphlet of questions and answers on the Defense Minerals Exploration Program and five copies of Form MF-103.

As of this date we have no record of receiving your application, and we suggest that you contact Mr. John Schumaker of Grand Junction and ask him if he completed your application and forwarded it to us.

Very truly yours,

W. H. King

W. H. King
Executive Officer
Field Team, Region IV

Ame
HMC:oc

cc: Subject
Chron.

Ame

Norwood, Colo.
Feb. 24, 1953

Mining Division
Date Rec'd.
FEB 26 1953
BUREAU OF MINES
Denver, Colorado

Dept. of Interior,
Defense Minerals Exp. Adm.,
Denver, Colo.

Gentlemen: Some months ago we made loan application for drilling and exploring for uranium on our mining claims.

This application was made through Mr. Johnnie Schumaker of Grand Junction, Colorado.

To date we have heard nothing of this loan application and wonder what the situation is?

We are anxious to

hear so when Spring
comes we can go to
work on the Claims.
You advice will
be appreciated.
Thank you,
Millard Garner
Norwood, Colorado.

224 New Customhouse
Denver 2, Colorado

December 9, 1952

Mr. Millard Garner
Norwood, Colorado

Dear Mr. Garner:

This will acknowledge receipt of your letter, dated December 1, 1952, requesting application blanks necessary to apply for government aid in exploration work.

Enclosed are copies of DMEA Order - 1, a pamphlet containing Questions and Answers on the Defense Minerals Exploration Program, and five copies of Form MF-103.

An application consists of Form MF-103 in quadruplicate, and the fifth copy is for your file.

You may send your application direct to this office or to the Defense Minerals Exploration Program, Department of the Interior, Washington 25, D. C.

Very truly yours,

W. H. King

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

Enclosure

HMC:fwo

cc: Subject, Chron

Norwood, Colo.
Dec. 1, 1952.

Defense Minerals Exploration
Denver, Colorado.

Gentlemen:

Please send application blanks for government assistance in drilling for uranium deposits, and uranium exploration.

Thank you,
Millard Gurney
Norwood, Colo.

Mining Division
Date Rec'd.
DEC 3 - 1952
BUREAU OF MINES
Denver, Colorado

224 New Customhouse
Denver 2, Colorado

October 3, 1952

Mr. Millard Garner
Norwood, Colorado

Dear Mr. Garner:

This will acknowledge receipt of your letter dated September 30, asking if we had received your application.

Our records show that we sent you the application forms on August 15, but we have not as yet received your application.

In the event that you sent the application to the Defense Minerals Exploration Administration, Washington 25, D. C., they will forward it to us and we should receive it in a few days.

Very truly yours,

W. H. King

W. H. King
Executive Officer
Field Team, Region IV

HMC:es

cc: Chron.
Subject

Mining Division
Date Rec'd.
OCT 2 - 1952
BUREAU OF MINES
Denver, Colorado

Norwood Colo, Sept - 30 - 52

Defense Minerals Exploration adm.

Dear sirs!

Some time ago we sent in application for Government loan on Uranium development work, but as we havent heard anything from you was wondering if you recived it.

Please advise.

Milland Garner
W. J. Royer

By Milland Garner

1251 Elm Avenue
Grand Junction, Colorado
April 22, 1953

Mining Division
Date Rec'd.
APR 28 1953
BUREAU OF MINES
Denver, Colorado

File

Mr. Bill King
224 New Customhouse Building
Denver, Colorado

Dear Bill:

Inclosed are four copies of an application and accompanying maps for DMEA Exploration Loan for Mr. Dwight Royer and Millard Garner of Norwood, Colorado.

I believe that Mr. Garner inquired sometime ago as to the whereabouts of his application. Future correspondence regarding this application should be sent to Mr. Millard Garner, El Rancho Costa Plenty, Norwood, Colorado.

Best regards,

John I. Schumacher

JOHN I. SCHUMACHER

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. .....
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: Millard Garner and D. J. Royer (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*) State the mineral or minerals for which you wish to explore uranium and vanadium

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated April 13, 1953

DWIGHT J. ROYER AND MILLARD GARNER
(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. GARNER
Norwood, Colorado

1. NAME OF APPLICANT

Millard Garner
El Rancho Costa Plenty
Norwood, Colorado

Dwight J. Royer
Norwood, Colorado

The above two persons operate these claims under a partnership.

Mr. Royer is authorized to sign the agreement.

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

3. APPLICANTS 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.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

4. PHYSICAL DESCRIPTION

a. No operations or exploration work are being carried on 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 80 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 80 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.

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

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 foot deep spaced around the outcrops and mine workings at 25 foot intervals and at 25 foot 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

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

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

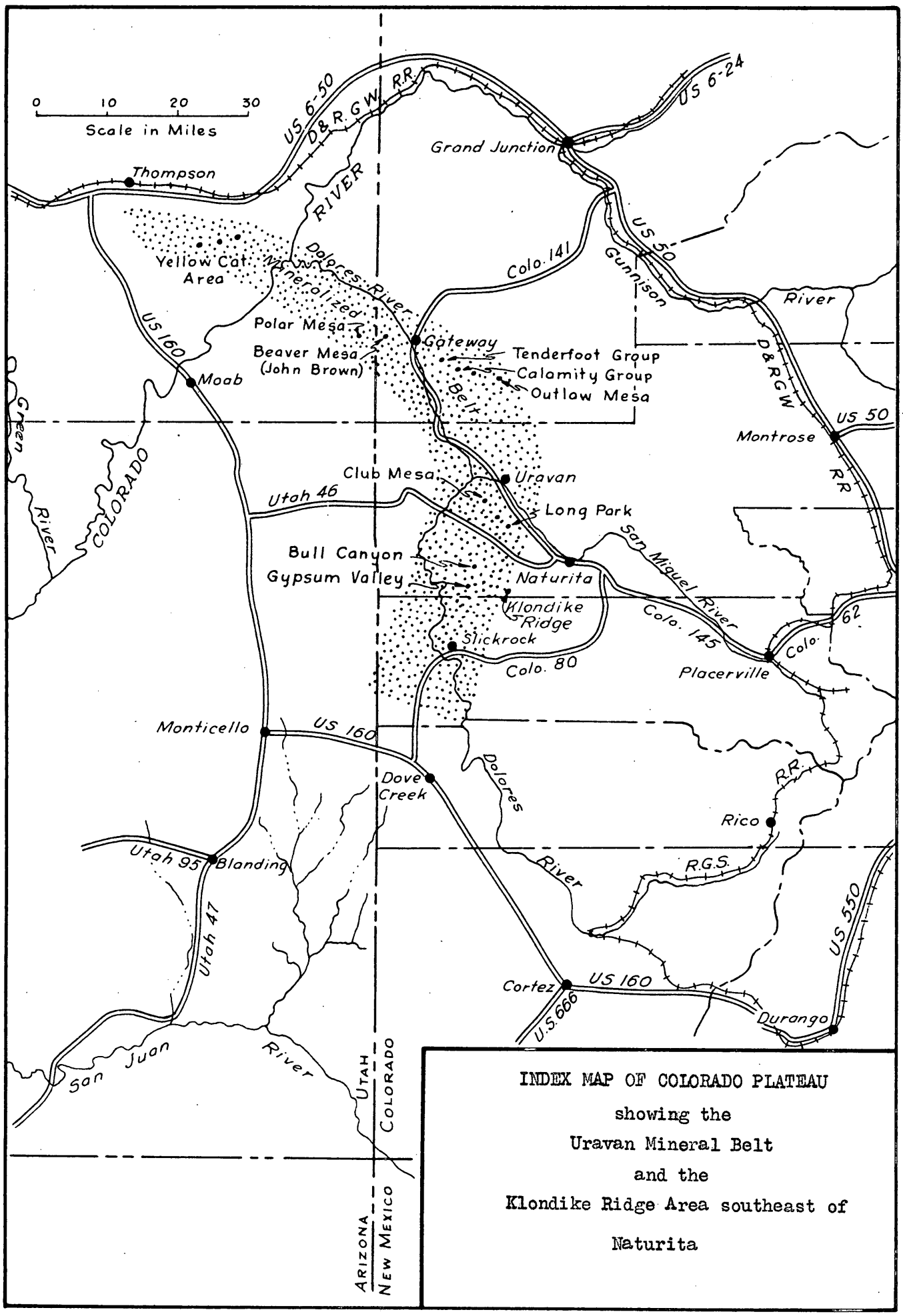
b. Labor, supervision, engineering

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

c. Operating supplies	None
e. 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

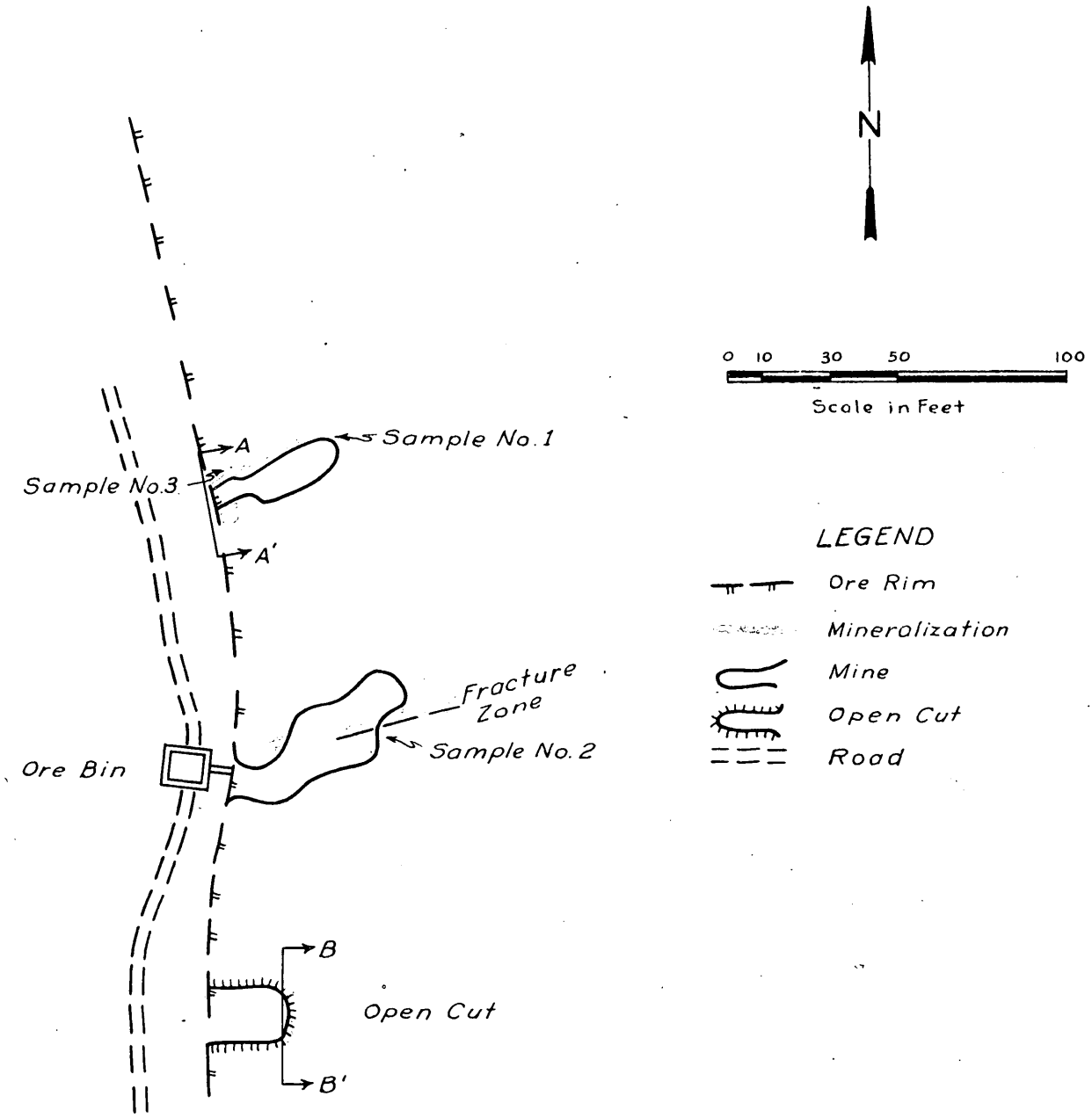
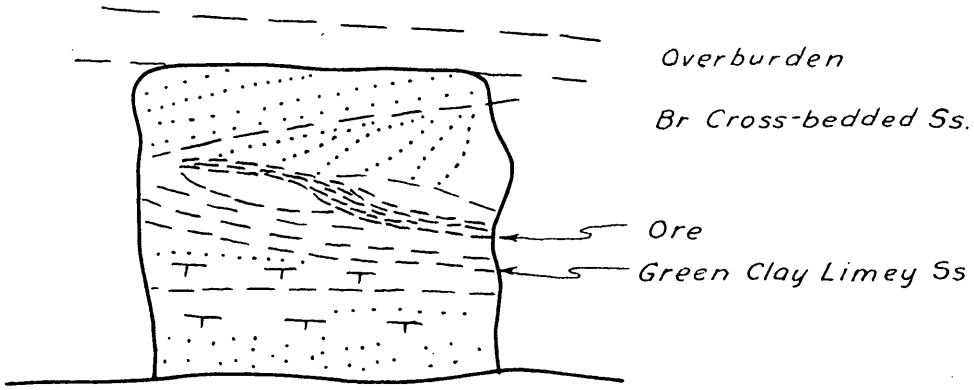
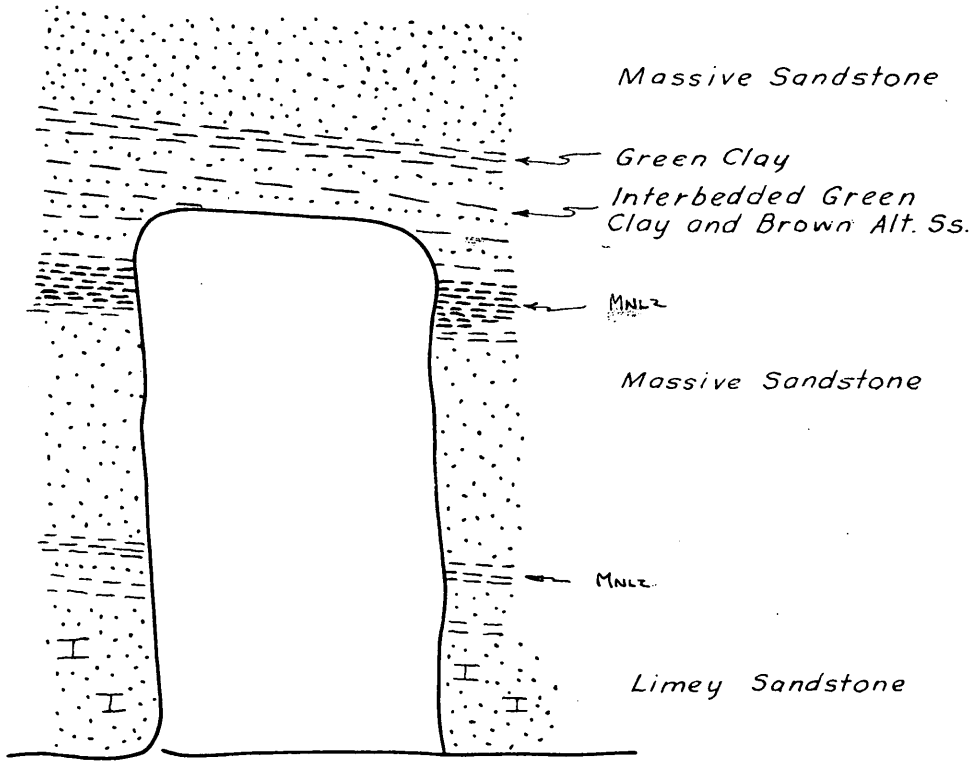


FIGURE No. 2
WORKINGS ON THE ZEBRA CLAIM



SECTION B-B'



SECTION A-A'

FIGURE 3
SECTION THROUGH MINERALIZED ZONES - ZEBRA CLAIM

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. Haushman
for A. H. Koschmann

Enclosures

HMC:cwm

cc: WMTraver w/copy of Final Report
ERGordon w/copy of Final Report
RPFischer w/copy of Final Report
CETowle w/copy of Final Report
AHKoschmann w/copy of Final Report
Mining Division w/copy of Final Report
DMEA w/copy of Final Report
Subject
AHKoschmann (2)
Chron.

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)

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

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,
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.

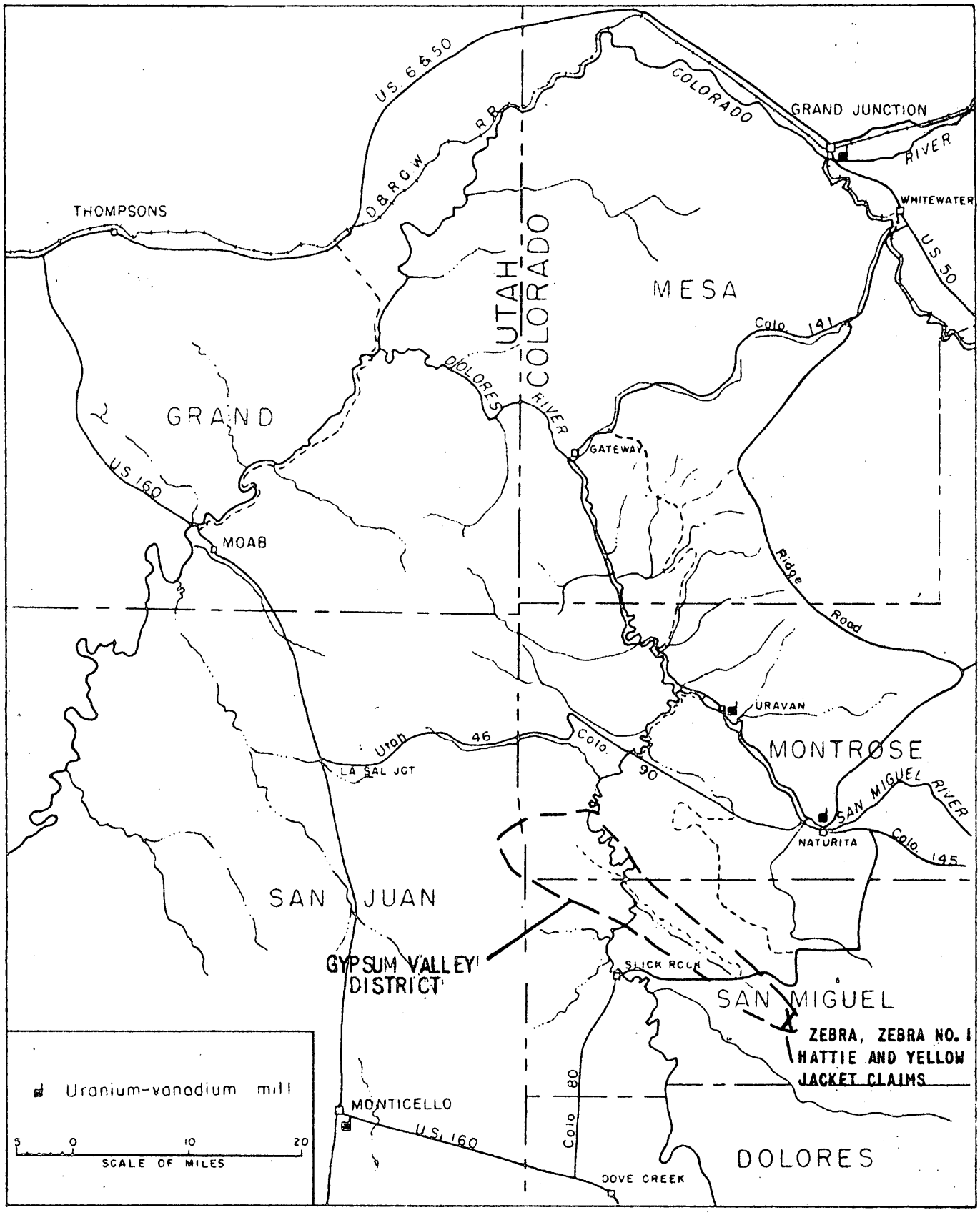


Figure 1. INDEX MAP OF PART OF THE COLORADO PLATEAU SHOWING THE APPROXIMATE LOCATION OF THE ZEBRA, ZEBRA NO. 1, HATTIE AND YELLOW JACKET CLAIMS, KLONDIKE RIDGE AREA, GYPSUM VALLEY DISTRICT, SAN MIGUEL COUNTY, COLORADO

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

---

_/ 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.

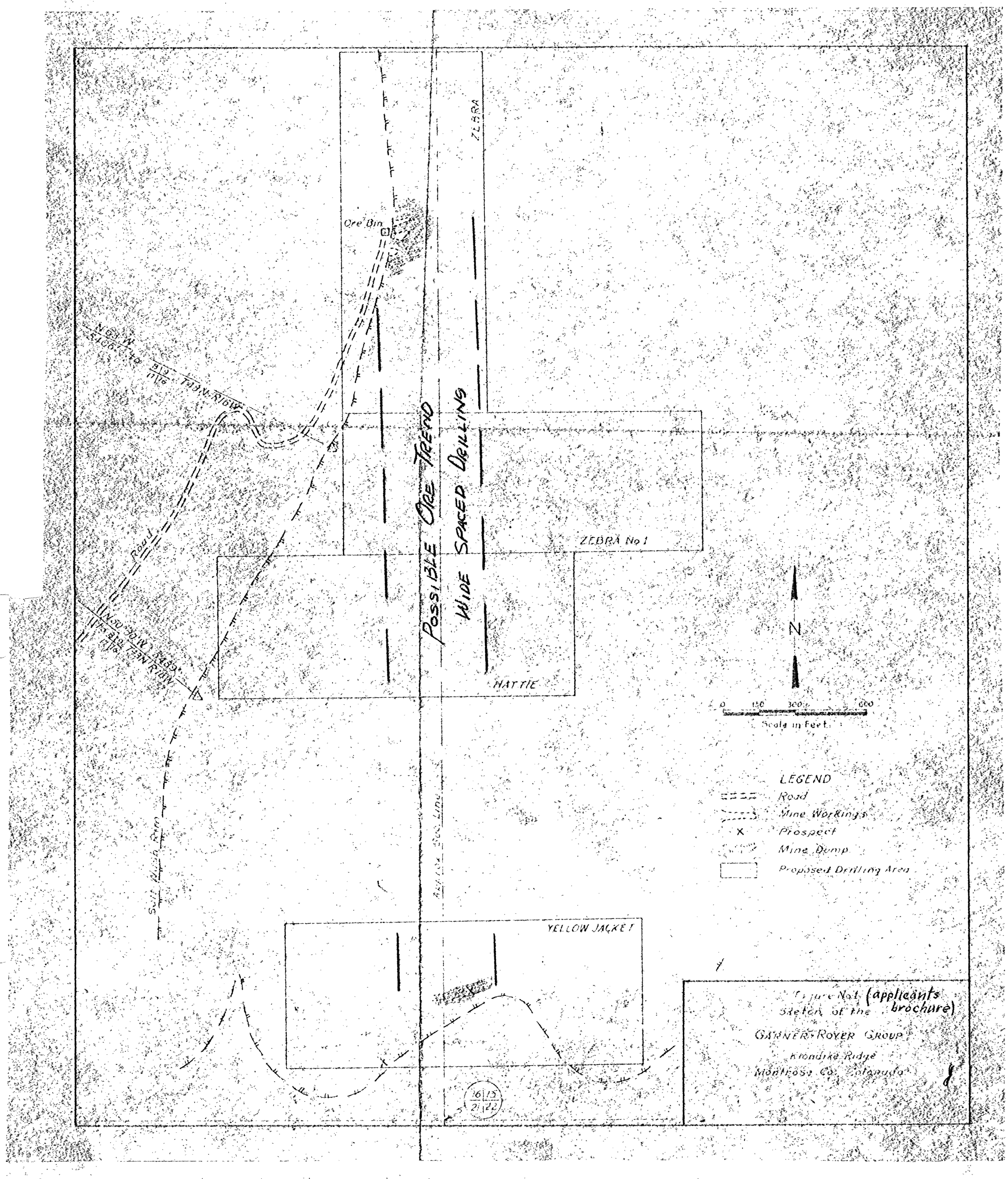


Figure 2. SKETCH MAP OF THE ZEBRA, ZEBRA NO. 1, HATTIE, AND YELLOW JACKET CLAIMS, GYPSUM VALLEY DISTRICT, SAN MIGUEL COUNTY, COLORADO

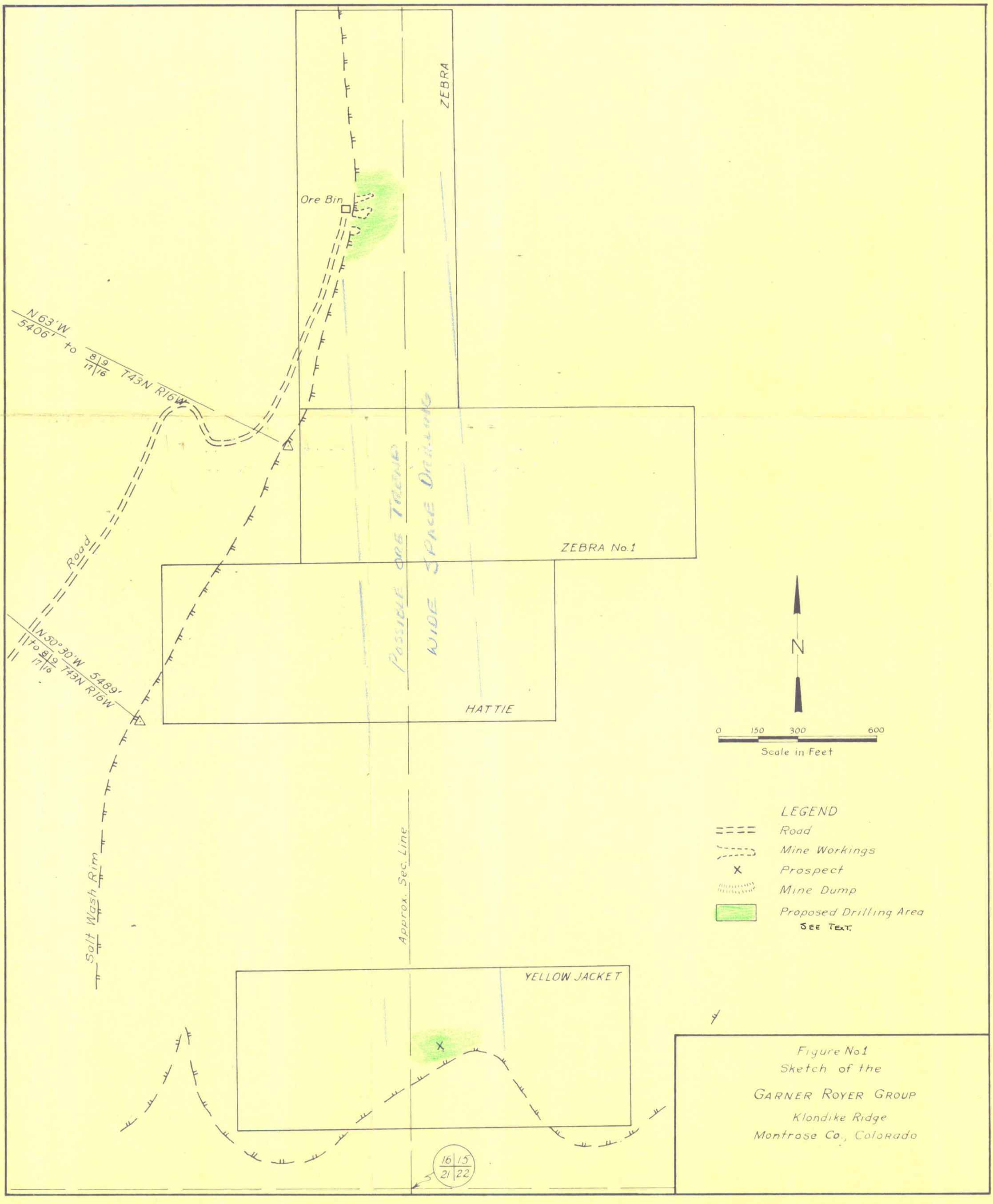


Figure No 1
Sketch of the
GARNER ROYER GROUP
Klondike Ridge
Montrose Co., Colorado

DMEA-3020