DMA Form 1

DEFENSE MINERALS ADMINISTRATION
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DMA Docket No. 1160X

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Exploration loan

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Routing Slip

To:	Iron Ores Branch	Date	5/14/51
To:	Director, Supply Div.	Date	10/1/51
To:	Reports & Records	Date	OCT 2 1951
To:		Date	
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360
DMA-1160X
FILE COPY
SURNAME:

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

Pesonen

OCT 2 1951

Mr. G. F. Royal
Post Office Box 12
Aspen, Colorado

Subject: DMA-1160X - Application for exploration loan - Pitkin County, Colorado - Iron and Manganese.

My dear Mr. Royal:

Your application for a loan to explore an iron-manganese deposit located in Pitkin County, Colorado, has been reviewed by this agency and, I regret to inform you, has been denied for the following reason:

Field investigations indicate that the proposed exploration is not justified for the reason that the quantity and quality of iron-manganese mineralization are insufficient to assure a commercial deposit.

Sincerely yours,

Tom Lyon
Tom Lyon, Director
Supply Division

JF 10/2

md
10/1/51
Copy to: Acting Administrator
DMA Field Team, Region IV
Mr. Thayer, U.S.G.S.
Mr. Lyon
Mr. Pesonen
Reports & Records Docket

Reports - Records

360
DMA-1160X
FILE COPY
SURNAME:

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

Pesonen

October 1, 1951

a.e.c.

Memorandum

To: Reports and Records Branch

From: Paul E. Pesonen, Acting Chief, Iron Ores Branch

Subject: DMA-1160X - Application for exploration loan - G. F. Royal, Pitkin County, Colorado - Iron and Manganese - Estimated cost $4,000.

The subject application was reviewed by the Iron Ores Branch and has been denied for the following reasons:

Field examination by the Field Team, Region IV indicates that scattered patches of very low grade limonite, manganese minerals and galena occur in a matrix of brecciated limestone within a fault zone. The mineralized zone has been sufficiently prospected and sampled on the surface to indicate the lack of commercial values. The geological environ and structural relations do not suggest the possibility of greater or more valuable mineralization at depth. The iron analyses of seven samples ranged from 0.6 to 14.5 percent Fe.

The entire docket, consisting of the following, is attached for your records and files:

2 copies of application form MF-103 with supplemental answers attached thereto.
1 copy of lease.
2 copies of review of application
2 copies of report from Field Team, Region IV
Memo from Field Team, Region IV, dated May 9, 1951 transmitting application
Letter to applicant dated May 15, 1951 acknowledging receipt of application
Memorandum from Martha Carr, U.S.G.S., dated June 5, 1951
Memorandum to Coordinating Committee dated June 15, 1951 requesting field examination
Letter to Field Team, Region IV, dated June 15, requesting field examination

Letter to applicant dated June 20, 1951, advising application has been referred to Field Team for examination
Memorandum from Field Team, Region IV, dated June 28, 1951, to Messrs. Koschmann and Allsman requesting field examination.

Paul E. Pesonen, Acting Chief
Iron Ores Branch

Attachments

Tom Lyon

PEPesonen:md
Copy to: Acting Administrator
Mr. Lyon
Mr. Pesonen
Reports & Records Docket

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

October 1, 1951

Memorandum

To: Reports and Records Branch

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Paul E. Pesonen, Acting Chief
Iron Ores Branch

Attachments

Approved:

Director, Supply Division

August 13, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Docket 1160K, Pumpler Lode, G. F. Royal, Aspen, Pitkin County, Colorado

Enclosed are the brochure, the original and two copies of the report on the above docket.

We concur with the examining team and recommend that the loan be denied.

J. H. East, Jr.

A. N. Koschmann

Enclosures
One copy by Air Mail
Two copies by Regular Mail

August 13, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Docket 1165X, Regular Lode, G. F. Royal, Aspen, Pitkin County, Colorado

Enclosed are the brochure, the original and two copies of the report on the above docket.

We concur with the examining team and recommend that the loan be denied.

J. H. Hash, Jr.

A. H. Koschmann

Enclosures
One copy by Air Mail
Two copies by Regular Mail

Mining Division
Region IV

August 13, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: DMA Docket 1160K, Pumsler Lode, G. F. Regal, Aspen, Pitkin County, Colorado

We concur with the examining team in recommending denial of the above application for an exploration project at an estimated cost of $4,000.

Paul T. Allemann

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 16 1951

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

200 New Customhouse
Denver 2, Colorado

July 30, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 1160X--Russler Claim, Near Ashcroft, Pitkin County, Colorado

Attached are 8 copies of the geologic report by D. E. Evans, U. S. Geological Survey, covering DMA Docket 1160X. Mr. Evans points out that geological conditions are unfavorable to the existence of a commercial iron-manganese deposit. He therefore recommends that the application be denied.

I concur with this recommendation.

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

Attachments (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
DENVER, COLORADO

Region IV

Building 2-A
Denver Federal Center
August 7, 1951

Memorandum

To: Chief, Mining Division, Region IV

From: W. M. Traver, Jr.

Subject: DMA Docket 1160X, Engineering Report on the Puzzler Lode, G. F. Royal, Aspen, Pitkin County, Colorado

Please find enclosed the original and seven copies of Harrer's engineering report on the subject docket.

The "Review of Application for Exploration Assistance", by Paul E. Pesonen, transmitted with the brochure asked the following questions which are not answered in the report:

17. (3) Will Colorado Fuel and Iron Corporation take ore?
(9) Would drilling be more feasible?

Obviously the answers to both questions are negative, the first due to the fact that the highest iron assay of samples taken was far below Colorado Fuel and Iron Corporation's requirements, and the second due to there being no likelihood of delineating commercial reserves by any method of exploration.

Both Evans, the Survey geologist, and Harrer, the Bureau of Mines engineer, recommend denial of the exploration loan request for $4,000.00. I am in accord with their findings.

We were not provided with a copy of the brochure and the one loaned us by Evans is being returned to Mr. Koschmann.

W. M. Traver, Jr.
W. M. Traver, Jr.

enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-116CK, The Pussler Lode, G. F. Royal Lease

Columbia Mining District

Pitkin County, Colorado

C. M. Harrer, Mining Engineer
Bureau of Mines

O. D. Evans, Geologist
U. S. Geological Survey

August 7, 1951

THE PUZZLER LODE, O. F. ROYAL LEASE
COLUMBIA MINING DISTRICT
PITKIN COUNTY, COLORADO

Summary, Conclusions, and Recommendations

By C. M. Harrer
Mining Engineer
Bureau of Mines

and

O. D. Evans
Geologist
U. S. Geological Survey

THE PUZZLER LODE, G. F. ROYAL LEASE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By C. M. Harrer and O. D. Evans

The Puzzler Lode, patent no. 1058721, survey no. 20484, sec. 18, T. 11 S., R. 84 W., Columbia Mining District, Pitkin County, Colo., was examined on July 10, 1951, in company with G. F. Royal, of Aspen, Colo.

Iron and manganese occur as limonite and psilomelane or pyrolusite scattered throughout shattered limestone adjacent to a northwest-trending, steeply-dipping fault.

The quantity and quality of iron-manganese mineralization exposed in underground mine workings are insufficient to assure a commercial deposit. Geologic conditions indicate that a commercial deposit of iron manganese or other critical metals will not be found by further prospecting in the area.

This property is not an attractive iron, manganese, or lead mining venture and the proposed exploration is not justified. The loan of $4,000.00 is, therefore, not recommended for approval.

Geology

PUZZLER CLAIM

NEAR ASHCROFT, PITKIN COUNTY, COLORADO

DMA DOCKET 1160X

Geology

July 24, 1951

by O. D. Evans, Geologist
U. S. Geological Survey

PUZZLER CLAIM
NEAR ASHCROFT, PITKIN COUNTY, COLORADO

The Puzzler Claim is approximately 6 miles south of Aspen, Colorado, on the west slope of Richmond Hill. Here a series of Paleozoic sediments were intruded by several types of igneous rocks during the Laramide revolution, and later folded and complexly faulted. The ores of the district have been deposited along these faults. Silver and lead are the main metals produced in the Aspen district.

The steep hillside at the Puzzler claim is covered with float except for a few small outcrops of limestone which may be slump material. Mine workings cut through 15 feet of aplite and about 60 feet of broken, brecciated limestone with a 3-foot bed of red and yellow shale. See figure 3. The aplite-limestone contact is largely concealed by timber, but it appears to be vertical. The limestone is of Ordovician or Devonian age. It strikes N 23 degrees W and dips 67 degrees southwest. A fault marked by as much as 2 feet of grey gouge and fine grained breccia cuts the limestone, and has been drifted upon for 50 feet. This fault strikes N 60 degrees W and dips 66 to 74 degrees northeast. It shows increasing strength to the northwest. The limestone was probably shattered by movement along this fault.

Limonite with some pyrolusite and psilomelane is scattered throughout the broken limestone and in places are the predominant minerals. The heavy limonite in the hanging wall at the northwestern end of the fault contains numerous crystals of galena as much as 2 inches in diameter.

The galena is scattered throughout an area 2 to 3 feet in diameter. This occurrence of ore along a fault is typical of the Aspen district. The nearest known deposit of commercial grade was mined in the Little Annie mine, 2 miles to the northwest.

Conclusions

The grade and quantity of the iron and manganese in the Puzzler workings is not sufficient to warrant the proposed crosscut at a lower elevation. Geological conditions are not favorable to the existence of a commercial iron-manganese deposit, and it is recommended that the application be denied.

SAMPLING

Seven samples were taken along the zone of mineralization to supplement geologic evaluation and their locations are shown and the analyses tabulated on the accompanying map, figure 3.

MINABLE ORE RESERVES

There are no minable ore reserves.

PRESENT STATUS

Development consists of 100 feet of crosscut adit and 75 feet of drifting in the weakly mineralized fault zone, figure 3.

Mining equipment consists of a wheelbarrow and a few hand tools.

PROJECT PROPOSAL AND COSTS

The applicant proposes to develop the weakly mineralized shear zone 100 feet below the present adit level with another 190-foot crosscut adit and 60 feet of drift on the mineralized fault zone, at an estimated cost of $4,000.00.

Since the mine is not equipped for exploration, a cost of $30.00 per foot of advance, including equipment rental, is believed more realistic. Cost of the exploration project on this basis is estimated by the examining engineer at $7,500.00 and it will require five months to complete the project.

Local labor from the Aspen-Ashcroft area would be employed at $1.00 to $1.65 per hour.

CONCLUSIONS

The Puzzler Lode prospect does not present a favorable geologic environment for the development of an iron-manganese deposit of commercial importance.

Limonite, psilomelane, pyrolusite, and galena mineralization is spotty and very weak and analyses shown on figure 3 bear out the

THE PUZZLER LODE, G. F. ROYAL LEASE
COLUMBIA MINING DISTRICT
PITKIN COUNTY, COLORADO

Engineering Report

By C. M. Harrer
Mining Engineer
Bureau of Mines

Engineering

THE PUZZLER LODE, G. F. ROYAL LEASE
COLUMBIA MINING DISTRICT
PITKIN COUNTY, COLORADO

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Sampling..... 3
Minable ore reserves..... 3
Present status..... 3
Project proposal and costs..... 3
Conclusions..... 3
Recommendations..... 4

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1. Location map, Puzzler Lode, Pitkin County, Colorado..... 1
2. Claim map, Puzzler Lode, Pitkin County, Colorado..... 1
3. Plan of Puzzler Lode near Ashcroft, Pitkin County, Colorado, showing geology, location of samples..... 4

THE PUZZLER LODE, G. F. ROYAL LEASE

ENGINEERING REPORT

By

C. M. Harrer

INTRODUCTION

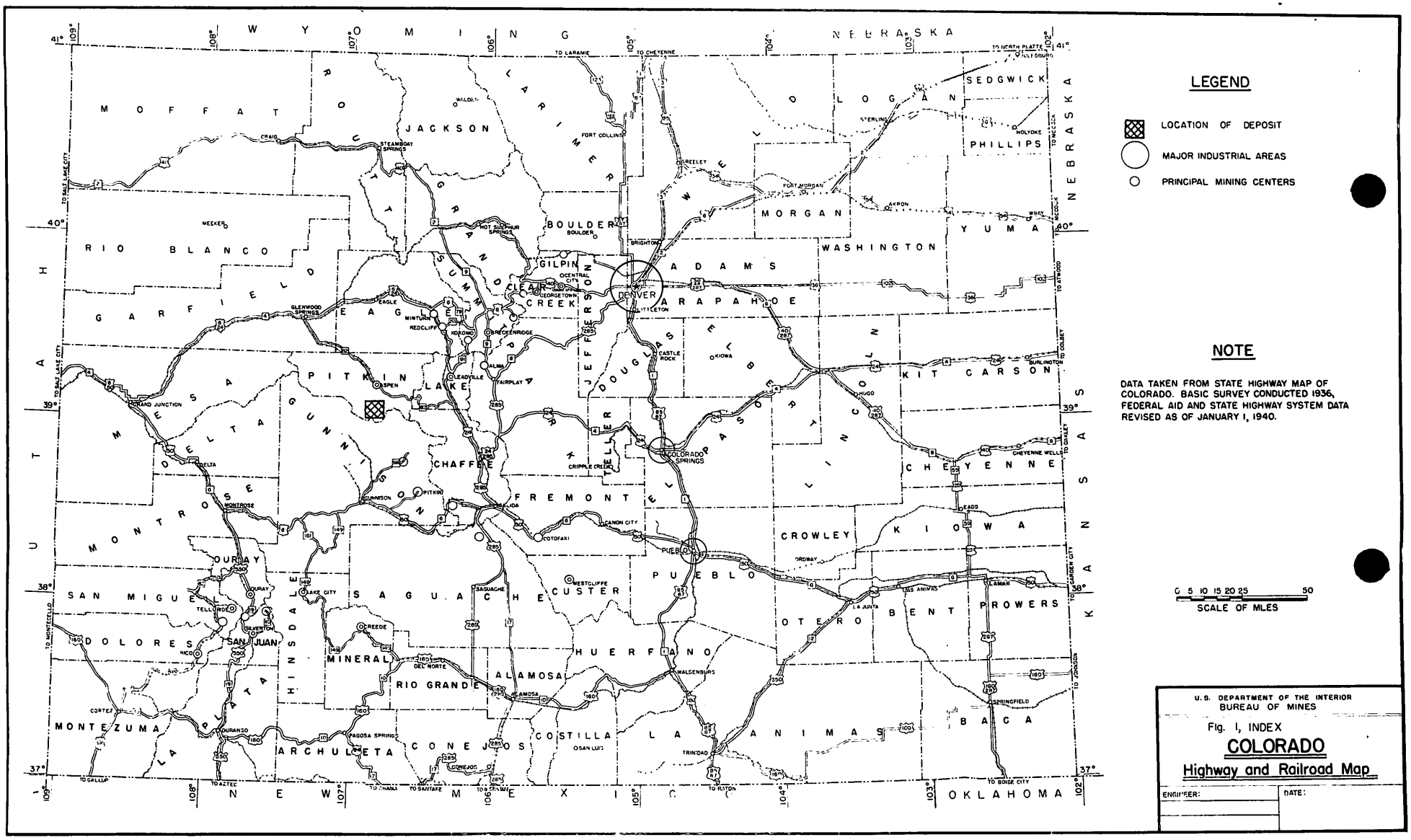
The examination was made at the request of G. F. Royal, of Aspen, Colo., in connection with a proposed exploration loan of $4,000.00 under the Defense Production Act of 1950, Docket DMA-1160X, and was completed on July 10, 1951, by the author and D. L. Roberts, mining engineers, of the Colorado Branch, Bureau of Mines, Region IV, in the company of G. F. Royal, lessee, and O. D. Evans, geologist, of the U. S. Geological Survey.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The Puzzler Lode, survey no. 20484, is located near the center of sec. 18, T. 11 S., R. 84 W., Columbia Mining District, Pitkin County, Colorado (fig. 1), about 11 miles by road south of Aspen. It is reached by driving 1.6 miles south of Aspen on Colorado State Highway 82 to the intersecting Castle Creek road; thence 9.0 miles southeast along the Castle Creek road. This point is also 3.1 miles by road, northwest of Ashcroft, Colo. This is about 2000 feet northeast of the Castle Creek road (fig. 2).

The Castle Creek road is a well maintained gravel road, open throughout the year.

Mine workings, at an altitude of 10,700 feet, are at present difficultly accessible over a narrow switchback mountain trail.


LEGEND
LOCATION OF DEPOSIT
MAJOR INDUSTRIAL AREAS
PRINCIPAL MINING CENTERS
NOTE
DATA TAKEN FROM STATE HIGHWAY MAP OF COLORADO. BASIC SURVEY CONDUCTED 1936, FEDERAL AID AND STATE HIGHWAY SYSTEM DATA REVISED AS OF JANUARY 1, 1940.
0 5 10 15 20 25 50
SCALE OF MILES
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Fig. 1, INDEX
COLORADO
Highway and Railroad Map
ENGINEER:
DATE:
WYOMING
NEBRASKA
KANSAS
OKLAHOMA
NEW MEXICO
UTAH
MOFFAT
JACKSON
LARIMER
WELD
LOGAN
SEDGWICK
PHILLIPS
RIO BLANCO
GARFIELD
GRAND
SUMMIT
BOULDER
GILPIN
CLEAR CREEK
JEFFERSON
ADAMS
MORGAN
WASHINGTON
YUMA
ARAPAHOE
DENVER
DOUGLAS
ELBERT
EAGLE
PITKIN
LAKE
MESA
DELTA
GUNNISON
CHAFFEE
FREMONT
EL PASO
LINCOLN
KIT CARSON
CHEYENNE
MONTROSE
OURAY
SAN MIGUEL
DOLORES
SAN JUAN
HINSDALE
SAGUACHE
CUSTER
PUEBLO
CROWLEY
KIOWA
OTERO
BENT
PROWERS
MINERAL
RIO GRANDE
ALAMOSA
HUERFANO
LA PLATA
MONTEZUMA
ARCHULETA
CONEJOS
COSTILLA
LA ANIMA
BACA
TO LARAMIE
TO CHEYENNE
TO NORTH PLATTE
TO SALT LAKE CITY
TO MECCOK
TO ATWOOD
TO COLBY
TO OAKLEY
TO GARDEN CITY
TO JOHNSON
TO BOISE CITY
TO TRINIDAD
TO RATON
TO SANTA FE
TO CHAMA
TO AZTEC
TO GALLUP
TO MONTEZUMA
TO GRAND JUNCTION
TO BURLINGTON
TO HUGO
TO LAS ANIMAS
TO LA JUNTA
TO SPRINGFIELD
TO ORDWAY
TO CANON CITY
TO COTOPAXI
TO WALSENBURG
TO DEL NORTE
TO PAGOSA SPRINGS
TO CONEJOS
TO OSAN LUIS
TO CRIPPLE CREEK
TO GLENWOOD SPRINGS
TO MINTURN
TO REDCLIFF
TO LEADVILLE
TO ALMA
TO FAIRPLAY
TO CRAIG
TO STEAMBOAT SPRINGS
TO HOT SULPHUR SPRINGS
TO WALDEN
TO FORT COLLINS
TO GREELEY
TO FORT MORGAN
TO STERLING
TO AKRON
TO WRAY
TO HOLYOKE
TO BRIGHTON
TO LITTLETON
TO CASTLE ROCK
TO KIOWA
TO CHEYENNE WELLS
TO EADS
TO LAMAR
TO WEEKER
TO DELTA
TO MONTROSE
TO OURAY
TO TELLURIDE
TO SILVERTON
TO NICO
TO CORTEZ
TO DURANGO
TO PAGOSA SPRINGS
TO CONEJOS
TO SALIDA
TO CRESTED
TO GUNNISON
TO PITKIN
TO LAKE CITY
TO CREEDE
TO SAGUACHE
TO WESTCLIFFE
TO COLORADO SPRINGS
TO PUEBLO
TO ASPEN
TO EAGLE
TO KREMMLING
TO HOT SULPHUR SPRINGS
TO BOULDER
TO GEORGETOWN
TO CENTRAL CITY
TO BRECKENRIDGE
TO ALMA
TO FAIRPLAY
TO LEADVILLE
TO CRIPPLE CREEK
TO COTOPAXI
TO CANON CITY
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TO SAGUACHE
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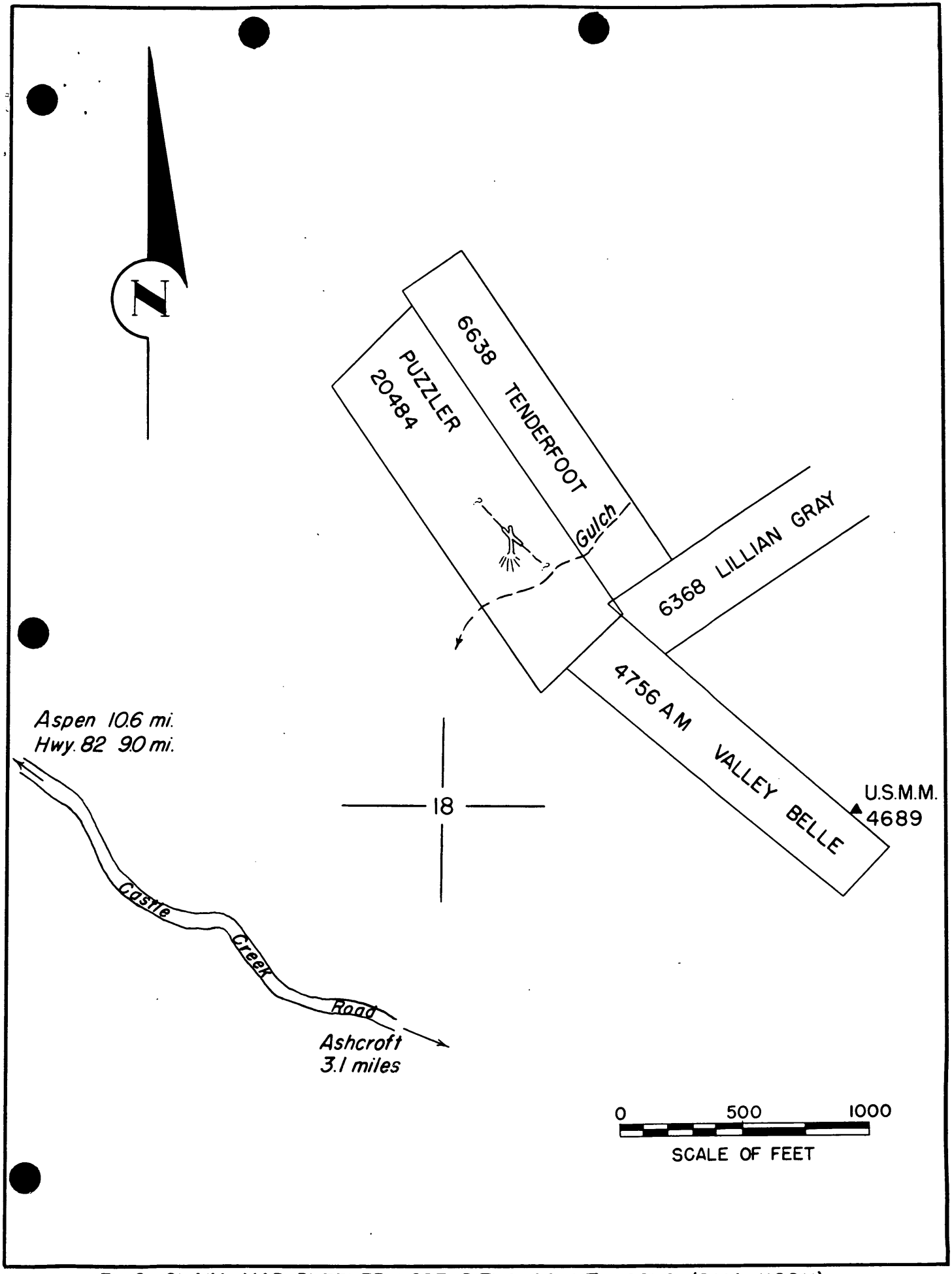


Fig. 2 - CLAIM MAP, PUZZLER LODE, PITKIN COUNTY, COLO. (DMA-1160X)

The terrain is steep and rugged and the slopes are well wooded and within the White River National Forest. Mining operations would require the construction of an access road. Water is obtainable from Castle Creek in the valley floor. The character of terrain is indicated on the Aspen U. S. Geological Survey quadrangle sheet.

HISTORY AND PRODUCTION

The Puzzler Lode was originally owned by J. R. Williams to whom a patent (No. 1058721) was issued on Sept. 30, 1932. On his death the property passed to his daughter, Emma C. Bradshaw. The applicant, G. F. Royal, holds a two-year lease on the property.

There is no record of production from the property.

OWNERSHIP AND EXTENT

The loan applicant, G. F. Royal, of Aspen, holds a two-year lease with option-to-purchase the Puzzler Lode claim for $2,000.00 from the owner, Emma C. Bradshaw, dated May 1, 1951. The lease-option agreement stipulates a royalty payment of 10 percent of net smelter or mill returns for ores valued at $100.00 or less per ton and a royalty of 25 percent of net mill or smelter returns for ores valued at over $100.00 per ton. Royalty payments will not apply towards the purchase price. Failure to pay the $2,000.00 purchase price of the claim within the two-year lease period voids the option-to-purchase agreement.

DESCRIPTION OF THE DEPOSIT

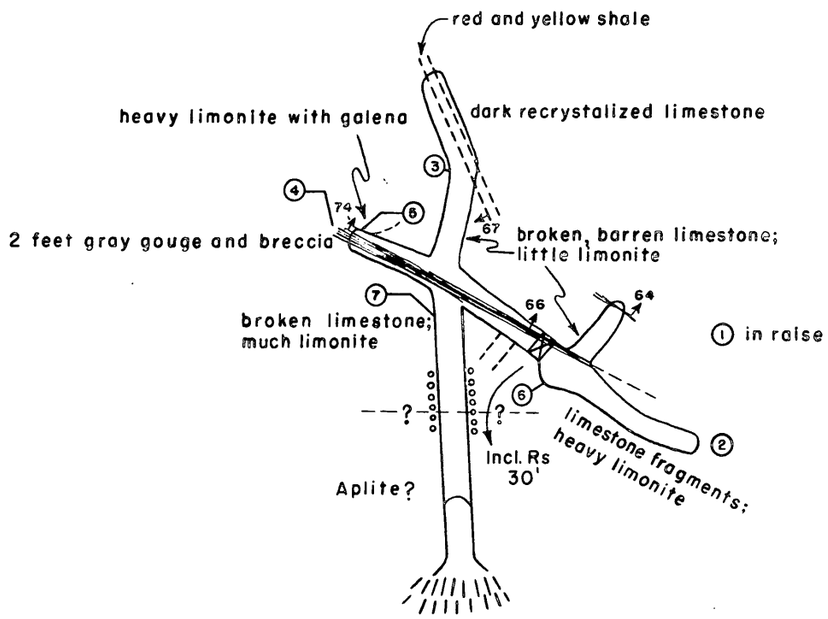
The deposit is a fault zone in shattered limestone with small and scattered patches of weak limonite, psilomelane, pyrolusite, and galena mineralization which will not develop into an ore body of commercial consequence.

contention that no appreciable iron, manganese, or galena as ore is present, and the existence of minable ore bodies within the limits of the claim is considered unlikely.

Exploration of the weakly mineralized fault zone at the proposed horizon, 100 feet below present development, is not justified by present indications.

RECOMMENDATIONS

The applicant's proposed exploration loan for $4,000.00 is not recommended for approval.



Sample No.	Width	Au Oz	Ag Oz	Cu %	Pb %	Zn %	Fe %	Mn %	S %	P %
1 (H-502)	3.0'	<.005	<0.1	< .05	< .1	0.05	3.2	0.4	.16	0.05
2 (H-503)	5.0'	<.005	<0.1	< .05	0.1	< .05	1.2	0.25	.04	<0.01
3 (H-504)	4.5'	<.005	<0.1	< .05	< .1	< .05	0.6	0.1	.06	<0.01
4 (H-505)	3.0'	<.005	0.5	< .05	0.4	0.15	7.7	1.15	2.03	0.07
5 (H-506)	3.0'	<.005	0.1	< .05	< .1	0.25	14.5	2.8	.09	0.01
6 (H-507)	3.0'	<.005	<0.1	< .05	< .1	< .05	2.2	0.45	.06	<0.01
7 (H-508)	8.0'	<.005	0.2	< .05	< .1	0.05	2.6	0.35	.48	<0.01

< Less Than

N

Department of Interior
U. S. GEOLOGICAL SURVEY

Plan of
PUZZLER LODE
near Ashcroft, Pitkin County, Colorado
showing geology, location of samples
July 24, 1951

① Sample Number — Scale: 1" = 30'

Geology by O. D. Evans
Sampling by C. M. Harrer and D. L. Roberts, U.S. Bureau of Mines.

DMA DOCKET 1160X — Fig. 3

Mining Division
Region IV

August 13, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: DMA Docket 1160X, Pumpler Lode, G. F. Royal, Aspen, Pitkin County, Colorado

We concur with the examining team in recommending denial of the above application for an exploration project at an estimated cost of $4,000.

Paul T. Allemon

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 16 1951

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

200 New Customhouse
Denver 2, Colorado

July 30, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 1160X--Puzzler Claim, Near Ashcroft, Pitkin County, Colorado

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I concur with this recommendation.

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

Attachments (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF MINES

DENVER, COLORADO

Region IV

Building 2-A
Denver Federal Center
August 7, 1951

Memorandum

To: Chief, Mining Division, Region IV

From: W. M. Traver, Jr.

Subject: DMA Docket 1160X, Engineering Report on the Russler Lode, G. F. Royal, Aspen, Pitkin County, Colorado

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The "Review of Application for Exploration Assistance", by Paul B. Pasonen, transmitted with the brochure asked the following questions which are not answered in the report:

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Obviously the answers to both questions are negative, the first due to the fact that the highest iron assay of samples taken was far below Colorado Fuel and Iron Corporation's requirements, and the second due to there being no likelihood of delineating commercial reserves by any method of exploration.

Both Evans, the Survey geologist, and Harrer, the Bureau of Mines engineer, recommend denial of the exploration loan request for $4,000.00. I am in accord with their findings.

We were not provided with a copy of the brochure and the one loaned us by Evans is being returned to Mr. Koschmann.

W. M. Traver, Jr.
W. M. Traver, Jr.

enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-1160X, The Puzzler Lode, G. F. Royal Lease

Columbia Mining District

Pitkin County, Colorado

C. M. Harrer, Mining Engineer
Bureau of Mines

O. D. Evans, Geologist
U. S. Geological Survey

August 7, 1951

THE PUZZLER LODE, G. F. ROYAL LEASE
COLUMBIA MINING DISTRICT
PITKIN COUNTY, COLORADO

Summary, Conclusions, and Recommendations

By C. M. Harrer
Mining Engineer
Bureau of Mines

and

O. D. Evans
Geologist
U. S. Geological Survey

THE PUZZLER LODE, G. F. ROYAL LEASE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By C. M. Harrer and O. D. Evans

The Puzzler Lode, patent no. 1058721, survey no. 20484, sec. 18, T. 11 S., R. 84 W., Columbia Mining District, Pitkin County, Colo., was examined on July 10, 1951, in company with G. F. Royal, of Aspen, Colo.

Iron and manganese occur as limonite and psilomelane or pyrolusite scattered throughout shattered limestone adjacent to a northwest-trending, steeply-dipping fault.

The quantity and quality of iron-manganese mineralization exposed in underground mine workings are insufficient to assure a commercial deposit. Geologic conditions indicate that a commercial deposit of iron manganese or other critical metals will not be found by further prospecting in the area.

This property is not an attractive iron, manganese, or lead mining venture and the proposed exploration is not justified. The loan of $4,000.00 is, therefore, not recommended for approval.

Geology

PUZZLER CLAIM

NEAR ASHCROFT, PITKIN COUNTY, COLORADO

DMA DOCKET 116OX

Geology

July 24, 1951

by O. D. Evans, Geologist
U. S. Geological Survey

PUZZLER CLAIM
NEAR ASHCROFT, PITKIN COUNTY, COLORADO

The Puzzler Claim is approximately 6 miles south of Aspen, Colorado, on the west slope of Richmond Hill. Here a series of Paleozoic sediments were intruded by several types of igneous rocks during the Laramide revolution, and later folded and complexly faulted. The ores of the district have been deposited along these faults. Silver and lead are the main metals produced in the Aspen district.

The steep hillside at the Puzzler claim is covered with float except for a few small outcrops of limestone which may be slump material. Mine workings cut through 15 feet of aplite and about 60 feet of broken, brecciated limestone with a 3-foot bed of red and yellow shale. See figure 3. The aplite-limestone contact is largely concealed by timber, but it appears to be vertical. The limestone is of Ordovician or Devonian age. It strikes N 23 degrees W and dips 67 degrees southwest. A fault marked by as much as 2 feet of grey gouge and fine grained breccia cuts the limestone, and has been drifted upon for 50 feet. This fault strikes N 60 degrees W and dips 66 to 74 degrees northeast. It shows increasing strength to the northwest. The limestone was probably shattered by movement along this fault.

Limonite with some pyrolusite and psilomelane is scattered throughout the broken limestone and in places are the predominant minerals. The heavy limonite in the hanging wall at the northwestern end of the fault contains numerous crystals of galena as much as 2 inches in diameter.

The galena is scattered throughout an area 2 to 3 feet in diameter. This occurrence of ore along a fault is typical of the Aspen district. The nearest known deposit of commercial grade was mined in the Little Annie mine, 2 miles to the northwest.

Conclusions

The grade and quantity of the iron and manganese in the Puzzler workings is not sufficient to warrant the proposed crosscut at a lower elevation. Geological conditions are not favorable to the existence of a commercial iron-manganese deposit, and it is recommended that the application be denied.

THE PUZZLER LODE, G. F. ROYAL LEASE
COLUMBIA MINING DISTRICT
PITKIN COUNTY, COLORADO

Engineering Report

By G. M. Harrer
Mining Engineer
Bureau of Mines

Engineering

THE PUZZLER LODE, G. F. ROYAL LEASE
COLUMBIA MINING DISTRICT
PITKIN COUNTY, COLORADO

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Project proposal and costs..... 3
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Recommendations..... 4

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Figure — Follows Page

1. Location map, Puzzler Lode, Pitkin County, Colorado..... 1
2. Claim map, Puzzler Lode, Pitkin County, Colorado..... 1
3. Plan of Puzzler Lode near Ashcroft, Pitkin County, Colorado, showing geology, location of samples..... 4

THE PUZZLER LODE, G. F. ROYAL LEASE

ENGINEERING REPORT

By

C. M. Harrer

INTRODUCTION

The examination was made at the request of G. F. Royal, of Aspen, Colo., in connection with a proposed exploration loan of $4,000.00 under the Defense Production Act of 1950, Docket DMA-1160X, and was completed on July 10, 1951, by the author and D. L. Roberts, mining engineers, of the Colorado Branch, Bureau of Mines, Region IV, in the company of G. F. Royal, lessee, and O. D. Evans, geologist, of the U. S. Geological Survey.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The Puzzler Lode, survey no. 20484, is located near the center of sec. 18, T. 11 S., R. 84 W., Columbia Mining District, Pitkin County, Colorado (fig. 1), about 11 miles by road south of Aspen. It is reached by driving 1.6 miles south of Aspen on Colorado State Highway 82 to the intersecting Castle Creek road; thence 9.0 miles southeast along the Castle Creek road. This point is also 3.1 miles by road, northwest of Ashcroft, Colo. This is about 2000 feet northeast of the Castle Creek road (fig. 2).

The Castle Creek road is a well maintained gravel road, open throughout the year.

Mine workings, at an altitude of 10,700 feet, are at present difficultly accessible over a narrow switchback mountain trail.

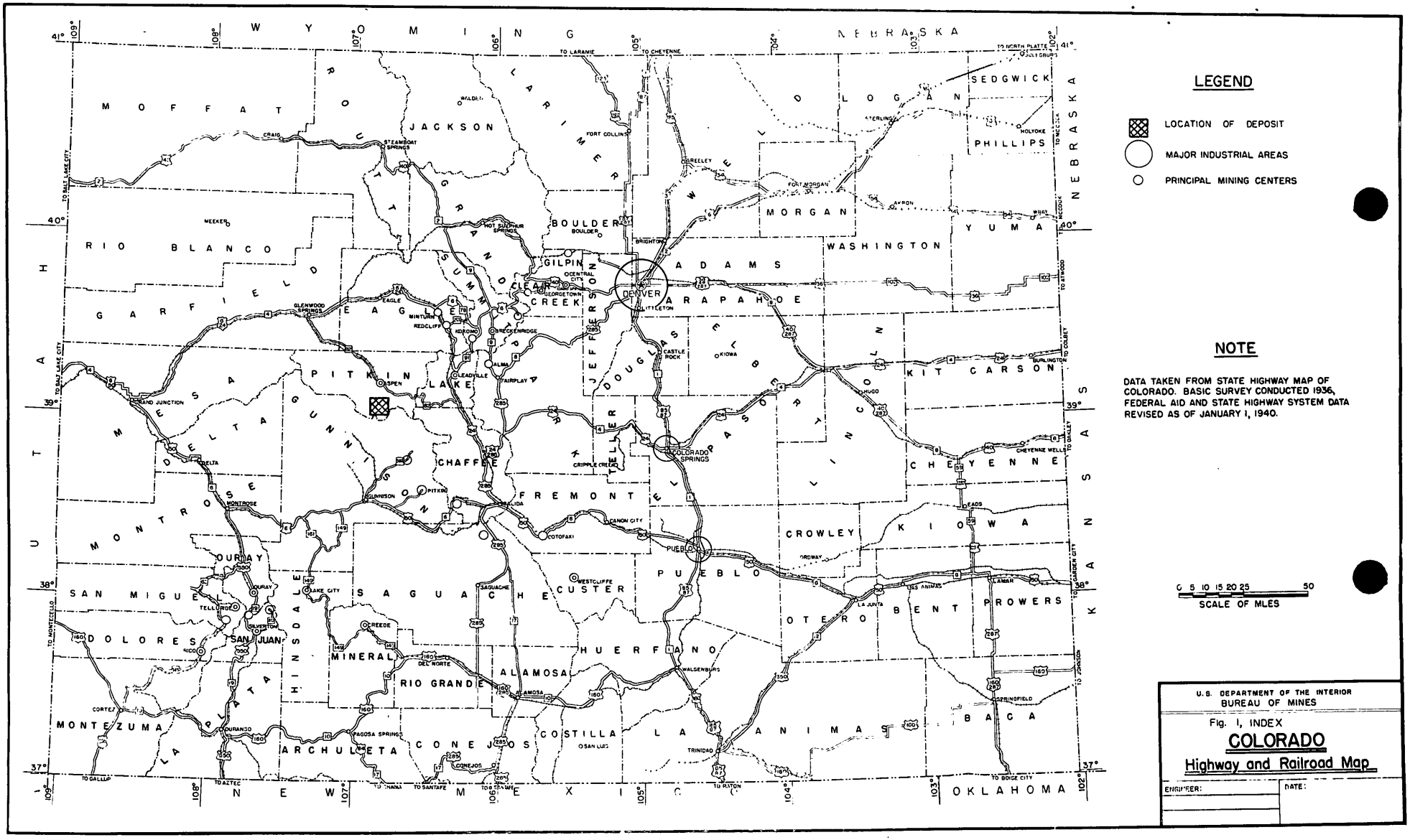


Fig. 1 - LOCATION MAP, PUZZLER LODE, PITKIN COUNTY, COLO. (DMA-1160X)

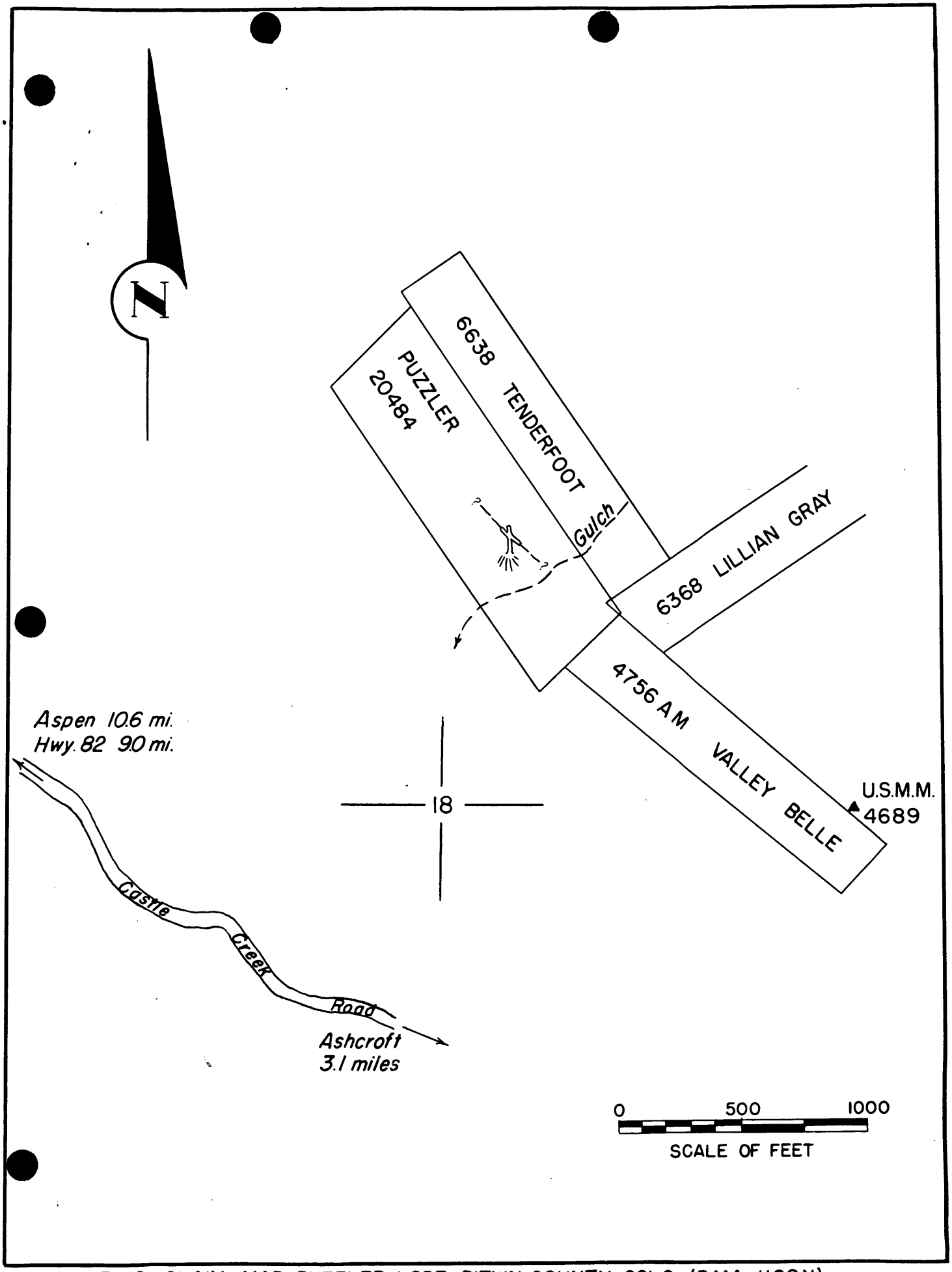


Fig. 2 - CLAIM MAP, PUZZLER LODE, PITKIN COUNTY, COLO. (DMA-1160X)

The terrain is steep and rugged and the slopes are well wooded and within the White River National Forest. Mining operations would require the construction of an access road. Water is obtainable from Castle Creek in the valley floor. The character of terrain is indicated on the Aspen U. S. Geological Survey quadrangle sheet.

HISTORY AND PRODUCTION

The Puzzler Lode was originally owned by J. R. Williams to whom a patent (No. 1058721) was issued on Sept. 30, 1932. On his death the property passed to his daughter, Emma C. Bradshaw. The applicant, G. F. Royal, holds a two-year lease on the property.

There is no record of production from the property.

OWNERSHIP AND EXTENT

The loan applicant, G. F. Royal, of Aspen, holds a two-year lease with option-to-purchase the Puzzler Lode claim for $2,000.00 from the owner, Emma C. Bradshaw, dated May 1, 1951. The lease-option agreement stipulates a royalty payment of 10 percent of net smelter or mill returns for ores valued at $100.00 or less per ton and a royalty of 25 percent of net mill or smelter returns for ores valued at over $100.00 per ton. Royalty payments will not apply towards the purchase price. Failure to pay the $2,000.00 purchase price of the claim within the two-year lease period voids the option-to-purchase agreement.

DESCRIPTION OF THE DEPOSIT

The deposit is a fault zone in shattered limestone with small and scattered patches of weak limonite, psilomelane, pyrolusite, and galena mineralization which will not develop into an ore body of commercial consequence.

SAMPLING

Seven samples were taken along the zone of mineralization to supplement geologic evaluation and their locations are shown and the analyses tabulated on the accompanying map, figure 3.

MINABLE ORE RESERVES

There are no minable ore reserves.

PRESENT STATUS

Development consists of 100 feet of crosscut adit and 75 feet of drifting in the weakly mineralized fault zone, figure 3.

Mining equipment consists of a wheelbarrow and a few hand tools.

PROJECT PROPOSAL AND COSTS

The applicant proposes to develop the weakly mineralized shear zone 100 feet below the present adit level with another 190-foot crosscut adit and 60 feet of drift on the mineralized fault zone, at an estimated cost of $4,000.00.

Since the mine is not equipped for exploration, a cost of $30.00 per foot of advance, including equipment rental, is believed more realistic. Cost of the exploration project on this basis is estimated by the examining engineer at $7,500.00 and it will require five months to complete the project.

Local labor from the Aspen-Ashcroft area would be employed at $1.00 to $1.65 per hour.

CONCLUSIONS

The Puzzler Lode prospect does not present a favorable geologic environment for the development of an iron-manganese deposit of commercial importance.

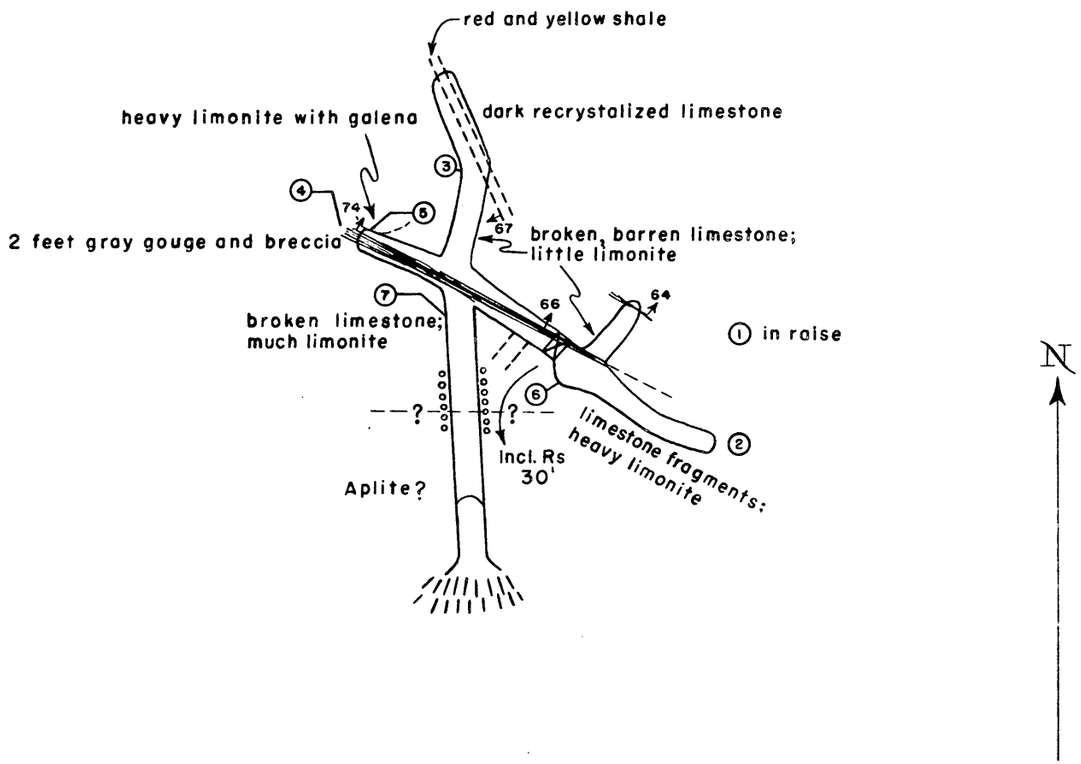
Limonite, psilomelane, pyrolusite, and galena mineralization is spotty and very weak and analyses shown on figure 3 bear out the

contention that no appreciable iron, manganese, or galena as ore is present, and the existence of minable ore bodies within the limits of the claim is considered unlikely.

Exploration of the weakly mineralized fault zone at the proposed horizon, 100 feet below present development, is not justified by present indications.

RECOMMENDATIONS

The applicant's proposed exploration loan for $4,000.00 is not recommended for approval.



Sample No.	Width	Au Oz	Ag Oz	Cu %	Pb %	Zn %	Fe %	Mn %	S %	P %
1 (H-502)	3.0'	<.005	<0.1	< .05	< .1	0.05	3.2	0.4	.16	0.05
2 (H-503)	5.0'	<.005	<0.1	< .05	0.1	< .05	1.2	0.25	.04	<0.01
3 (H-504)	4.5'	<.005	<0.1	< .05	< .1	< .05	0.6	0.1	.06	<0.01
4 (H-505)	3.0'	<.005	0.5	< .05	0.4	0.15	7.7	1.15	2.03	0.07
5 (H-506)	3.0'	<.005	0.1	< .05	< .1	0.25	14.5	2.8	.09	0.01
6 (H-507)	3.0'	<.005	<0.1	< .05	< .1	< .05	2.2	0.45	.06	<0.01
7 (H-508)	8.0'	<.005	0.2	< .05	< .1	0.05	2.6	0.35	.48	<0.01

< Less Than

Department of Interior
U. S. GEOLOGICAL SURVEY

Plan of
PUZZLER LODE
near Ashcroft, Pitkin County, Colorado
showing geology, location of samples
July 24, 1951

① Sample Number — Scale: 1" = 30'

Geology by O. D. Evans
Sampling by C. M. Harrer and D. L. Roberts, U.S. Bureau of Mines.

DMA DOCKET 1160X — Fig. 3

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

224 New Customhouse
Denver, Colorado

June 28, 1951

Memorandum

To: A. H. Koschmann (with brochure)

P. T. Allsman

From: DMA Field Team, Region IV

Subject: DMA Docket 1160X, G. F. Royal, Pitkin County, Colorado

Attached is the brochure on DMA 1160X and a letter of instructions from the Chairman of the Coordinating Committee. Please make the necessary investigations and comply with the instructions outlined in Mr. Lyon's letter.

Paul T. Allsman
P. T. Allsman, Alternate

A. H. Koschmann
A. H. Koschmann

Attachments

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 16 1951

June 20, 1951

Mr. G. W. Royal
P. O. Box 12
Aspen, Colorado

Subject: DMA-1160X - Application for exploration loan, Pitkin County, Colorado.

Dear Sir:

The subject application has been referred to Mr. J. H. East, Jr., Executive Officer, DMA Field Team, Region IV, 224 New Customhouse Building, Denver 2, Colorado, for field investigation.

It is probable that the field team may contact you while making their investigation for additional information. When this information is received from the field team, it will be possible for us to make a decision as to the merit of your application.

Very truly yours,

Director, Supply Division

PEPesonen:md

Copy to: Adm. reading file
Mr. Thayer, U.S.G.S.
DMA Field Team, Region IV
Mr. Lyon
Mr. Strobel
Mr. Wardee
Files

FILE COPY
SURNAME:

PESONEN
McKinley

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

June 20, 1951

Mr. G. F. Royal
P. O. Box 12
Aspen, Colorado

Subject: DMA-1160X - Application for exploration loan, Pitkin County, Colorado.

Dear Sir:

The subject application has been referred to Mr. J. H. East, Jr., Executive Officer, DMA Field Team, Region IV, 224 New Customhouse Building, Denver 2, Colorado, for field investigation.

It is probable that the field team may contact you while making their investigation for additional information. When this information is received from the field team, it will be possible for us to make a decision as to the merit of your application.

Very truly yours,

Director, Supply Division

PEPesonen:md

Copy to: Adm. reading file
Mr. Thayer, U.S.G.S.
DMA Field Team, Region IV
Mr. Lyon
Mr. Strobel
Mr. Pardee
Files

FILE COPY
SURNAME:

PESONEN

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

Mailed 6/20/51

June 15, 1951

Memorandum

To: Coordinating Committee

From: Iron Ores Commodity Committee

Subject: DMA-1160X - Application for exploration loan of $2,000 - G. F. Royal, Pitkin County, Colorado.

The subject application has been reviewed by the Iron Ores Commodity Committee.

The exact location of the deposit cannot be determined from the application, nor can it be tied to published information of iron ore deposits in the vicinity (see Geological Survey memorandum dated June 5, 1951).

The applicant proposes to drive a drift 190 feet to intersect the 6 to 8 foot thick iron ore vein 100 feet below the outcrop.

A field investigation is necessary to determine:

1. Quality of the ore, including deleterious elements.
2. Extent and altitude of the deposit.
3. Possible persistence in depth and potential reserves that exploration might develop.
4. Conveyance of title of property to present owner.
5. If drilling would be cheaper and better.
6. Applicant's ability to repay loan if small ore reserves are developed.

Providing the visual examination of the deposit is favorable for an exploration project, it is recommended that the field team have the contract, lease and landlord's agreement signed.

PEPesonen:md
Copy to: Adm. reading file
Mr. Moon
Mr. Lyon
Mr. Pardee
Mr. Rove, U.S.G.S.
Mr. Strobel
Files

Franklin G. Pardee, Chairman
Iron Ores Commodity Committee

FILE COPY
SURNAME:

Pesonen

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

June 15, 1951

Via Air Mail

Mr. J. H. East, Jr.
Executive Officer
DMA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Subject: DMA-1160X - Field investigation - exploration loan of $2,000. G. F. Royal, Pitkin County, Colorado.

Dear Mr. East:

The subject application has been reviewed by the Iron Ores and Coordinating Committees.

Kindly make an examination as to the merits of this project and, providing you find conditions favorable, have the lessee sign the enclosed contract forms MF-200 and the owner sign the Landlord's Subordination Agreement, MF-202.

The owner of the patented claim is recorded in Washington to John R. Williams. Find out when the patent was conveyed to Emma C. Bradshaw, and if any liens or mortgages are held.

We are enclosing copy of the application Form MF-103 and the "Review of Application for Exploration Assistance", which are self-explanatory. The technical data Form MF-100 should also be submitted.

As time is of essence, you can base your decision on the approval or rejection of this project on a reconnaissance.

Very truly yours,

Kon Lyon

Chairman, Coordinating Committee

PEPesonen:md

Enclosures

Russell B. Moon

Member, Bureau of Mines

Olaf N. Rove

Member, Geological Survey

Copy to: Adm. reading File
Mr. Moon
Mr. Rove, U.S.G.S.
Mr. Lyon
Mr. Strobel
Mr. Pardee
Files

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA-1160X

Commodity Iron & Manganese

Total Amount $4,000

Govt. Participation $2,000

1. Name and Address of Applicant G. F. Royal
P.O. Box 12, Aspen, Colorado.

2. Location of Property Pitkin County, Colorado.
Columbia Mining District

3. Mineral or metal Iron & Manganese Is it listed in Section 9 of MO-5?
If not, application will be rejected.

4. Geologic probability of discovery -- based on data in application (question #16, 17, 18, 20 and 22).*

Mines or Survey reports, etc., do you rate chances:

a) Good Iron ore body 6' to 8' wide running 40% hematite, 10% manganese

b) Poor

c) None

d) Don't know --- needs field examination to determine quantity & extent of ore

e) Is there an alternative and favorable project? no
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Check (8) of question (question 5, 6, 7)

6. If applicant is a lessee, is a copy of the lease attached? yes - unsigned

Does the lease have sufficient time to run to cover a future productive period? 2 yrs. lease with option to buy

*Question numbers are those of MF-103

7. Are subordination agreements necessary? yes

a) MF-201?

b) MF-202 Landlord's Subordination Agreement required

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower yes - applicant and two men.

b) Equipment and supplies applicant's own compressor plus $1,000 for supplies
(question 14 plus general knowledge of availability)

c) Accessibility (question 12) On Ashcroft Highway - all weather road

d) Water (question 13) yes

e) Power (question 13) not stated

Is a field check needed on any of these points? yes - power

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4) yes - 30 years experience in mining

Is a field check needed on this point? yes

10. Exhibit A. (questions 21 and 22)

a) Is the project adequately described? no.

If not, are there sufficient data given so that you can describe the project? no. If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? no

c) Is the proposed work "exploration" under the definition of Section 8, MD-5? yes

If not, what part of it is? Inapplicable

Is this part a worthwhile exploration project? Inapplicable

d) Are the cost estimates detailed? Yes

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? no If so, attach a draft.

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant? no

g) Is a field examination necessary to complete Exhibit A? Yes

11. Exhibit B (question 23-d)

a) Is it applicable? no

b) If so, are sufficient data furnished? — If so, attach a draft.

c) Is a field check needed? Yes

12. Exhibit C (question 23-e, f and g) detailed list of supplies not given.

a) Is it applicable?

b) Sufficient data? no If so, attach a draft.

c) Are rents and charges reasonable? no charge

d) Is a field check needed? Yes

13. Exhibit D (question 23-a,b)

a) Are there sufficient data? 2 men - 8 hour day @ $1.00 hour

b) Is the schedule adequate for the work proposed? yes

c) Is the schedule excessive for the work proposed? no

d) Are the proposed wages and salaries reasonable? yes

e) Is a field check needed? yes

14. Exhibit E (question 23-c)

a) Is it applicable? no

b) Sufficient data?

c) Reasonable?

d) Field check needed?

15. In your judgment, can the proposed work be done in the proposed time? yes

(All exploration must be completed within two years.)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing questions? 1. Occurrence + distribution of ore - altitude
2. Geologic factors as to grade
3. Will C 7 + 9 take ore
4. Is commercial operation feasible
5. Prospects for early repayment of loan
6. Competency of applicant
7. Check cost of project.

8. Patent No. 1058721 issued Sept 30. 1932 to John R. Williams; when was patent conveyed to Emma C. Bradshaw?
9. Would drilling be more feasible
10. Is exploration desired for other metals besides iron + manganese?

Reviewed by: P. E. Pesonen m.a.

Date 6/14/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. I M a 1160X

Commodity Iron & Manganese

Total Amount $4000

Govt. Participation $2000

1. Name and Address of Applicant G. F. Royal
P.O. Box 12 Aspen, Colorado

2. Location of Property Pitkin County Colorado
Columbia Mining District

3. Mineral or metal Iron & Manganese Is it listed in Section 9 of MO-5? yes

If not, application will be rejected.

4. Geologic probability of discovery -- based on data in application (question #16, 17, 18, 20 and 22). *

Mines or Survey reports, etc., do you rate chances:

a) Good Iron ore body 6' to 8' wide Running 40% hematite 10% manganese

b) Poor

c) None

d) Don't know --- needs field examination to determine quality & est. tonnage of ore

e) Is there an alternative and favorable project? no
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? check (8) of question 17 of this review
(question 5, 6, 7)

6. If applicant is a lessee, is a copy of the lease attached? yes unsigned

Does the lease have sufficient time to run to cover a future productive period? 2 year lease with option to buy.

*Question numbers are those of MF-103

7. Are subordination agreements necessary? yes

a) MF-201?

b) MF-202 Landlord's Subordination Agreement required

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower yes - Applicant and two men

b) Equipment and supplies applicant's own compressor plus $1000 for supplies (question 14 plus general knowledge of availability)

c) Accessibility (question 12) on Ashcroft Highway - all weather access

d) Water (question 13) yes

e) Power (question 13) not stated

Is a field check needed on any of these points? yes - power

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4) yes - 30 years experience in mining

Is a field check needed on this point? yes

10. Exhibit A. (questions 21 and 22)

a) Is the project adequately described? no

If not, are there sufficient data given so that you can describe the project? no If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? no

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? yes

If not, what part of it is? inapplicable

Is this part a worthwhile exploration project? inapplicable

d) Are the cost estimates detailed? yes

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? no If so, attach a draft.

e) Are the cost estimates reasonable? yes

f) Should more information be requested from applicant? no

g) Is a field examination necessary to complete Exhibit A? yes

11. Exhibit B (question 23-d)

a) Is it applicable? no

b). If so, are sufficient data furnished? — If so, attach a draft.

c) Is a field check needed? yes

12. Exhibit C (question 23-e, f and g) Detailed list of supplies not given

a) Is it applicable?

b) Sufficient data? no If so, attach a draft.

c) Are rents and charges reasonable? no charge

d) Is a field check needed? yes

13. Exhibit D (question 23-a,b)

a) Are there sufficient data? 2 men 8 hour day @ $1.00 hour

b) Is the schedule adequate for the work proposed? yes

c) Is the schedule excessive for the work proposed? no

d). Are the proposed wages and salaries reasonable? yes

e) Is a field check needed? yes

14. Exhibit E (question 23-e)

a) Is it applicable? no

b) Sufficient data?

c) Reasonable?

d) Field check needed?

15. In your judgment, can the proposed work be done in the proposed time? yes

(All exploration must be completed within two years.)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing questions? 1 Occurrence & distribution of ore - attitude
2 Geologic factors as to grade
3 Will C F & I take ore no too Low Grade
4 Is commercial operation feasible
5 Prospects for early repayment of loan
6 Competency of applicant
7 Check cost of project

8. Patent No. 1058721 issued Sept. 30, 1932 to JOHN R. WILLIAMS. When was patent conveyed to Emma C. Bradshaw?

9. Would drilling be more feasible?

10. Is exploration desired for other metals besides iron & manganese?

Reviewed by: Paul E. Pesonen

Date June 14, 1951

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Mr. F. G. Pardee

DATE: ~~May 25~~ June 5, 1951

FROM : Martha Carr

SUBJECT: DMA-1160X, Application for exploration loan for iron ore, Pitkin Co., Colo.

Iron ore deposits in the following areas in the Columbia district, Pitkin County, Colo., are described in an unpublished report on the "Taylor Peak iron deposits, Colorado," by J. T. Stark, 1943, 17 pp., but as no location of the Royal property was furnished by the applicant, and the Puzzler Lode is not referred to in the text of the Taylor Peak report, the information may not be pertinent:

Secs. 16, 17, 21, and 28, T. 12 S., R. 84 W.
The largest outcrop of ore, the Cooper Fork deposits, is in secs. 16 and 17. It was under lease at that time (1943) by the CF&I. The ore of the Taylor Peak deposits is magnetite-limonite. Outcrops are at elevations of 11,500-12,500 ft., and transportation is difficult. Sulphur runs as high as 2.98% in some samples, averaging 1.07% in 11 samples. Cooper Fork orebody is estimated by Harder to contain 3-4 million tons. In 11 samples, Mn ran .04-.17.

The report by Stark substantiates earlier reports on these deposits (USGS Bull. 285, pp. 196-198, by C. K. Leith, 1906, and Bull. 380, pp. 188-198, by E. C. Harder, 1909). Only the Cooper Fork deposit warrants further investigation by drilling and this only after careful consideration of the transportation difficulties and the sulphur content of the ore.

Martha Carr

Martha Carr

FILE COPY
SURNAME:

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

May 15, 1951

Mr. G. F. Royal
P. O. Box 12
Aspen, Colorado

Subject: DMA-1160 X
Re: Exploration Loan
Puzzler Lode Patented
Mining Claim

My dear Mr. Royal:

Receipt is acknowledged of your application and attachments of May 7, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number 1160 X and referred to Mr. Franklin Pardee, Chief, Iron Branch, on May 14, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1160 X.

Sincerely yours,

LANDON F. STROBEL a.e.c.

Landon F. Strobel
Executive Secretary

LFSTROBEL:aec
cc: Strobel-2
Files
Mr. Pardee
Mr. Lyon

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dma 1160 X

Date received 5/14/51

Participation

G. F. Royal
Post Office Box 12
Aspen, Colorado

Name and address of applicant

Date May 7th 1951

FILL IN THIS BLOCK

Date of application May 7th 1951

Estimated cost $4000.00

Mineral or metal Iron and Manganese

Percentage of Government participation 50%

Location of mine Pitkin County, Colorado
Columbia Mining District

Date of filing MF-100

DMA Docket Number, if available dma 1160 X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Individual

*2. If a partnership, state names and addresses of partners. None

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.

*4. Describe the mining and general business experience of (a) the applicant, and (b) the person or persons who will manage the project. 30 years experience in mining

*5. Are you the owner or the lessee of the property? Lessee

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None

7. If lessee, attach a copy of the lease and state if it is in good standing. Attached

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. $1000.00

9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? $2000.00

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16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property. Attached

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any. Emma C. Bradshaw

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads. attached

*13. State source and quantity of water available for operations and its sufficiency at all seasons. attached
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. None

15. State in detail how the ore could be shipped and how and where milled. Attached

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

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(*a*) If mine is in production, furnish the following information: None

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
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(*a*) Describe the ore or mineral deposits briefly.

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20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Iron attached

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NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

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23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. attached

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(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

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24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

By G. F. Royal

(Name of company) (Signature of authorized official)

(Date) (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

ATTACHED ANSWERS TO QUESTIONS NOT FULLY COVERED IN THE FORM

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Question no 24

I should completed the tunnel in four months after the machinery is installed which will take about one month; after this period I should drift on the vein about fifty or sixty feet for the purposes of proving its merit, width, and blcoking out tonnage

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

OFFICE OF
REGIONAL DIRECTOR

REGION IV

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

May 9, 1951

Memorandum

To: Landon Strobel, Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Application of G. F. Royal, P. O. Box 12, Aspen, Colorado

There is enclosed copies of Form MF 103 submitted by the above applicant, together with a copy of an Agreement of Lease.

Paul T. Allsman

P. T. Allsman, Alternate

Enclosures
Three copies of MF 103
Lease Agreement

May 15, 1951

Mr. G. F. Royal
P. O. Box 12
Aspen, Colorado

Subject: DMA-1160 X
Re: Exploration Loan
Pussler Lode Patented
Mining Claim

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LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:aec
cc: Strobel-2
Files
Mr. Pardee
Mr. Lyon

Form MF-102
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

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DO NOT FILL IN THIS BLOCK

Docket No. dma 1160 X

Date received 5-14-51

Participation

G. F. Royal
Post Office Box 12
Aspen, Colorado

Name and address of applicant

Date May 7th 1951

FILL IN THIS BLOCK

Date of application May 7th 1951

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Percentage of Government participation 50%

Location of mine Pitkin County, Colorado
Columbia Mining District

Date of filing MF-100

DMA Docket Number, if available dma 1160 X

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16—64067-1

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By G. F. Royal

(Name of company) (Signature of authorized official)

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MF-103
(1 1951)

U. DEPARTMENT OF THE INTERI

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Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dma 1160X

Date received 5-14-51

Participation

REGIONAL DIRECTOR'S OFFICE REGION IV MAY 9 - 1951 BUREAU OF MINES DENVER, COLORADO

G. F. Royal
Post Office Box 12
Aspen, Colorado

Name and address of applicant

Date May 7th 1951

FILL IN THIS BLOCK

Date of application May 7th 1951

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Percentage of Government participation 50%

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Date of filing MF-100

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Question no 24

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12 ottr. = 190'

 Deed 1160 X

This Agreement of Lease, Made and entered into this First day of May, A. D. 19 51, by and between

Emma C. Bradshaw

part y of the first part, and

G. F. Royal

part y of the second part, **Witnesseth,** That the said party of the first part, for and in consideration of the rents, covenants and agreements hereinafter expressed to be paid, kept and performed by the said parties of the said second part, has leased, let and demised, and by these presents do lease, let and demise unto the said party of the second part, the following described premises, to-wit:

The Puzzler Lode Mining Claim
U. S. Mineral Survey No 20484
located in the Columbia Mining
District of Pitkin County,
Colorado

To Have and to Hold, For the purpose of mining, with NO power to assign or sub-let the whole or any part of said premises

for the term of TWO YEARS

from the date hereof. Said party of the second part, for and in consideration of the premises aforesaid, has covenanted, contracted and agreed, and by these presents do covenant, contract and agree with said party of the first part her heirs, executors, administrators, successors or assigns, to commence work on said premises as soon as possible

and to work the same continuously and with reasonable diligence, in thorough and workmanlike manner; performing thereon at least 20 shifts of work, of One men each, during every calendar month of the life of said lease; keeping the same securely timbered in all parts during the term of this lease; to keep accurate accounts, and to render monthly statements, accompanied by vouchers, to the said party of the first part, her agent or attorney, showing the amount of all ore taken from said premises, and the yield of the same, and the cost of hauling and milling the same, and to pay to said party of the first part, her agent or attorney, as rental for said premises, as follows, to-wit:

10% of the Net Smelter or Mill Returns
on all ores haveing a value of $100.00
or less
25% of the net smelter returns on all ores
having a value of over $100.00.

It is mutually agreed that at any time after this lease is signed by both parties and during said lease term the second party is to have the exclusive right and option to purchase said demised premises by paying first party the full sum of Two Thousand Dollars ($2000.00) in cash. After the receipt of the said two thousand dollars first party agrees to execute and good and sufficient mining deed immediately. Failure to pay or purcahse the demised premises during the two year term of this lease will work a full and complete forfeiture of this option to purchase and first party shall be automatically released from any claim to purchase property by second party.

It is mutually agreed that time is of the essence of this contract; that second party will pay all bills, production tax, assessments and claims arising from his operation of the property when said claims bills, or assessments become due. Should any suits or attchments be instituted against the demised property for and on account of the operations on the property by second party then in that event first party may cancel this lease immediately without notice to second party and possess said demised property without any claim or demand of any person in the demised premises. It being distinctly understood that first party and the demised premises is not responsible for the debts incurred by second party in his operations of the said demised premises.

It is likeise understood and mutually agreed that royalties received by first party from propduction do not and will not apply towards the purchase price of the demised premises.

Said part y of the second part furthermore agree that the said part y of the first part, her agent or attorney, shall have the right at any and all times to enter upon and descend into any and all parts of said premises, and that the said part y of the second part will render to her all the assistance in his power in so doing.

Said part y of the second part furthermore agree that in case he fail s to commence work on said premises as aforesaid, or to work the same continuously and with reasonable diligence and in workmanlike manner, or to keep the same securely timbered, or render said statements, or to pay said rental as aforesaid, or in any respect to keep and fulfill any and all agreements herein expressed or implied, then, and in that case, it shall be lawful for the said part y of the first part, her agent or attorney, to declare this lease void and of no effect thereafter, and without process of law to enter upon and take possession of said premises; and

in such case

and also at the expiration of this lease by limitation, said part y of the second part agree s to surrender, yield and deliver to said part y of the first part, her heirs, administrators, executors, successors and assigns, quiet and peaceable possession of said premises in good condition.

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MINING LEASE

FROM

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TO

.....

Office of
County Clerk and Recorder.

COUNTY OF.....

COLORADO.

I hereby certify that the within instrument was filed in this office for record on the

.....day of.....

A. D. 19....., at.....o'clock.....M.,

and was duly recorded in Book.....

Page.....

.....

COUNTY CLERK AND RECORDER.

.....

DEPUTY.

FEES, $.....

OUT WEST PRTG. & STATY. CO., COLO. SPRINGS H3472