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

224 New Customhouse
Denver 2, Colorado

June 23, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMA Docket 1477X, (Manganese), Charles N. Bell II, Panco Manganese Deposits, Pitkin County, Colorado

Enclosed are four copies of the final report on DMA-1477X.

The application was denied October 29, 1951.

W. H. King

W. H. King

A. H. Koschmann

A. H. Koschmann

Enclosure

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 30 1951

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION
ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

November 2, 1951

Mr. Charles N. Bell, II
R. R. #1, Box 248
Stonehenge
Golden, Colorado

Re: DMA Docket 1477X

Dear Mr. Bell:

Your application for a loan to explore the Panco Manganese Deposit Mine has been reviewed by the Defense Minerals Administration. We have a report of a field examination made on your property to help us in judging your application.

On the basis of this report, we must conclude that the chances of finding any significant new tonnage of manganese ore by the exploration you propose are not favorable. The manganese at the Panco deposits occurs only as cement in very small, discontinuous, highly siliceous veins cutting medium grained sandstone. Under these circumstances, the expenditure of Government funds for exploration is unwarranted. We regret therefore, that your application must be declined.

We wish to thank you for bringing the property to our attention.

Very truly yours,

Paul T. Allsman for
J. H. East, Jr.
Executive Officer

cc: John M. Smith, Acting Chief
Administrative Management Division

Mining Division
Region IV

October 29, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMA Docket 1477I, Charles N. Ball II, applicant, Panco Manganese Deposits, Pitkin County, Colo.

The application of the subject docket was for an exploration loan of $30,000.

Examination by the field team indicates that the Panco Manganese Deposits consist of discontinuous, very small, and highly siliceous veins, with the manganese occurring as cement in medium grained sandstone.

The examining team recommends denial of the loan, with which we concur.

Paul T. Allemann

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 30 1951

Reviewed by
DMEA OPERATING COMMITTEE
7-7-52
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Building 20
Denver Federal Center
October 26, 1951

Mining Division
Date Rec'd.
OCT 26 1951
BUREAU OF MINES
Denver, Colorado

Memorandum

To: Chief, Mining Division, Region IV

From: Chief, Colorado Branch, Mining Division

Subject: DMA 1477X, Pence Manganese Deposits, near Snowmass, Pitkin County, Colorado

Please find enclosed the original and seven copies of the "Summary, Conclusions, and Recommendations", by C. S. Robinson and C. M. Harrer, and the original and seven copies of Harrer's engineering report on the above docket.

Due to the small minable reserves (500 tons) and the highly siliceous character of the ore, Harrer concludes the loan request for $30,000.00 should be denied. I concur. It is also worthy of note that there is a complete lack of suitable facilities for beneficiating low-grade ore assaying probably 22 percent manganese.

The docket and review furnished by the Region IV Field Team through the Mining Division are returned also.

W. M. Traver, Jr.

W. M. Traver, Jr.

enclosures

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

October 22, 1951

Memorandum

To: DMA Field Team, Region IV

From: Ogden Tweto

Subject: DMA Docket 1477X, Panco manganese deposits, Pitkin County, Colorado

Attached are 8 copies of a geologic report on the Panco manganese deposits, by C. S. Robinson. These deposits consist of concentrations of manganese oxides impregnating sandstones and conglomerates. The deposits are small, discontinuous, and low-grade.

Mr. Robinson recommends that the application for an exploration loan of $30,000 be denied, and I concur.

Ogden Tweto

Ogden Tweto, Alternate
Supervising Geologist
Colorado-Wyoming

Attachments (8)

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-1477X, Panco Manganese Deposits, Near Snowmass, Pitkin County, Colorado

Manganese

C. S. Robinson, Geologist
U. S. Geological Survey

C. M. Harrer, Mining Engineer
Bureau of Mines

October 24, 1951

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

Summary, Conclusions, and Recommendations

By C. S. Robinson
Geologist
U. S. Geological Survey

and

C. M. Harrer
Mining Engineer
Bureau of Mines

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By C. S. Robinson and C. M. Harrer

The Panco Manganese deposits near Snowmass, Pitkin County, Colo., contain concentrations of manganese oxides as cement in medium-grained conglomeratic sandstones and sandstones. Present development and surface reconnaissance indicate that these deposits are discontinuous, very small, and highly siliceous.

C. N. Bell, II, representing the applicants, has requested an exploration loan of $30,000.00 to explore these deposits by diamond drilling. It is recommended that this request be denied.

PANCO MANGANESE DEPOSITS

NEAR SNOWMASS,

PITKIN COUNTY, COLORADO

DMA POCKET 1477X

C. S. Robinson, Geologist
U. S. Geological Survey

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Figure ~~1~~: Topographic map showing location of Panco manganese deposits.

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

INTRODUCTION

The Panco manganese deposits near Snowmass, Pitkin County, Colorado, were visited by C. M. Herrer of the U. S. Bureau of Mines and C. S. Robinson of the U. S. Geological Survey in company with D. V. Watrous on October 3 and 4, 1951. The outcrops of the deposits are not where they are shown on the map accompanying the brochure; one is about 3,700 feet N. 20° W. of the town of Snowmass and the other, 7,100 feet N. 35° W., as shown in Figure 1. The first outcrop may be reached by a trail which joins a poor road that follows the railroad northwest of Snowmass. There is no trail to the second outcrop.

An investigation of this deposit was made by Ogden Tweto of the U. S. Geological Survey during World War II in connection with Strategic Mineral Investigations. A description of the occurrence of braunite from this location is given by A. F. Rogers in the American Mineralogist Volume 31, Nos. 11 and 12, pp. 561-568, 1946.

GEOLOGY

The ore occurs in vein-like deposits in the Maroon formation, of Pennsylvanian-Permian age. The Maroon formation in this area consists of interbedded siltstones, arkosic sandstones, and arkosic conglomeratic sandstones. The character of the beds changes along both dip and strike.

In general the beds strike north to northwest and dip from 5° to 30° east or west. The ore occurs along shear zones which parallel the strike of the beds but dip more steeply than the beds; usually about 20°-80° east. The veins are from less than 1 to 8 feet wide. The ore minerals are pyrolusite, psilomelane, and braunite.

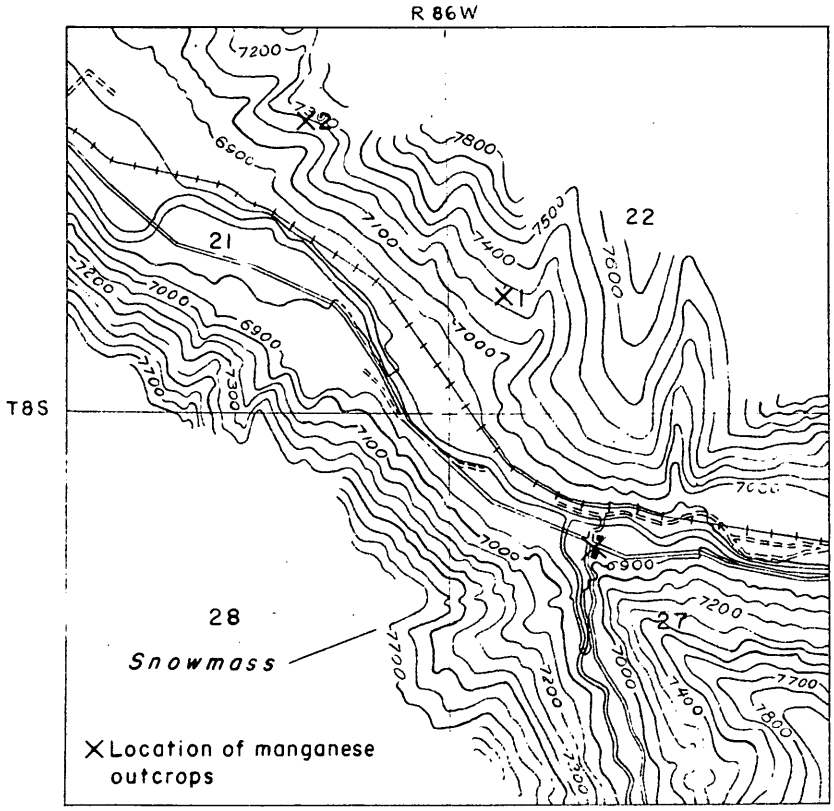
At location 1 the ore is exposed in a prospect trench about 30 feet long and a prospect pit about 90 feet southwest of the trench. The mineralized zone can be followed for about 200 feet along its strike. It definitely pinches out at both ends. The maximum width is about 5 feet as exposed in the prospect trench. The ore zone dips 20°-80° east and the beds dip 5°-20° west. Small veinlets from less than an inch to 6 inches wide cut siltstones adjacent to the sandstone. The shear zone in which the ore occurs is perhaps 20 to 30 feet wide, but the ore occurs only along this shear zone where it intersects an arkosic conglomeratic sandstone.

At location 2 the ore is exposed in a prospect adit which was driven about 30 feet into the side of the hill, and ore may be found on the dumps of two small prospect pits south of the adit. Float ore from this zone is found for about 400 feet along strike. As exposed in the adit, the ore is about 8 feet wide and dips 40°-80° east. The ore occurs in an arkosic sandstone which dips 5°-15° east. The shear zone along which the ore occurs is 10 to 30 feet wide.

CONCLUSIONS

The ore minerals, pyrolusite, psilomelane, and braunite, are believed to have been deposited by hydrothermal solutions in favorable beds along

shear zones in the Maroon formation. The favorable beds were arkosic sandstones and conglomeratic sandstones; porosity may have been the primary control. The sandstone beds are not very thick and are discontinuous along both their strike and dip. The two deposits are not at the same stratigraphic position and there was no mineralization found between these two deposits. The deposits are not extensive enough to be mineable, and an exploration loan by the Government is not warranted.



Department of interior
U. S. GEOLOGICAL SURVEY

Topographic Map
showing location of

PANCO MANGANESE DEPOSITS

near Snowmass, Pitkin Co., Colo.

DMA 1477X

From U. S. Geological Survey Topographic Map of **Roaring Fork, Colorado, Sheet 2.**

Scale: $\frac{1}{31,680}$

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

Engineering Report

By C. M. Harrer
Mining Engineer
Bureau of Mines

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

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ILLUSTRATIONS

Figure — Follows Page

1. Location map, Panco Manganese property, Pitkin County, Colo. 1
2. Panco Manganese deposits, Pitkin County, Colo. 4

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

ENGINEERING REPORT

By

C. M. Harrer

INTRODUCTION

Examination of the Panco Manganese property near Snowmass, Colo., was made at the request of C. N. Bell, II, in connection with a proposed exploration loan of $30,000.00, under the Defense Production Act of 1950, to explore manganese exposures by diamond drilling. The property was examined by the author and C. S. Robinson, of the U. S. Geological Survey, on October 3 and 4, 1951, as Defense Minerals Administration Docket 1477X. D. V. Watrous, of Idaho Springs, Colo., acted as guide on October 3, 1951.

ACKNOWLEDGMENTS

D. V. Watrous, one of the owners, a mining engineer of Idaho Springs, Colo., conducted the examining team over part of the property on the first day of the inspection and gave instructions necessary to find the remaining ground showing manganese exposures. His assistance is gratefully acknowledged.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The property is one mile to the north and northwest of Snowmass and 2½ miles southeast of Basalt, in Pitkin County, Colo., figure 1. The Roaring Fork River, Denver and Rio Grande Western Railroad, and Colorado State Highway 82 are within 0.2 mile of the property in the valley floor. The sides of the valley rise steeply above the floor

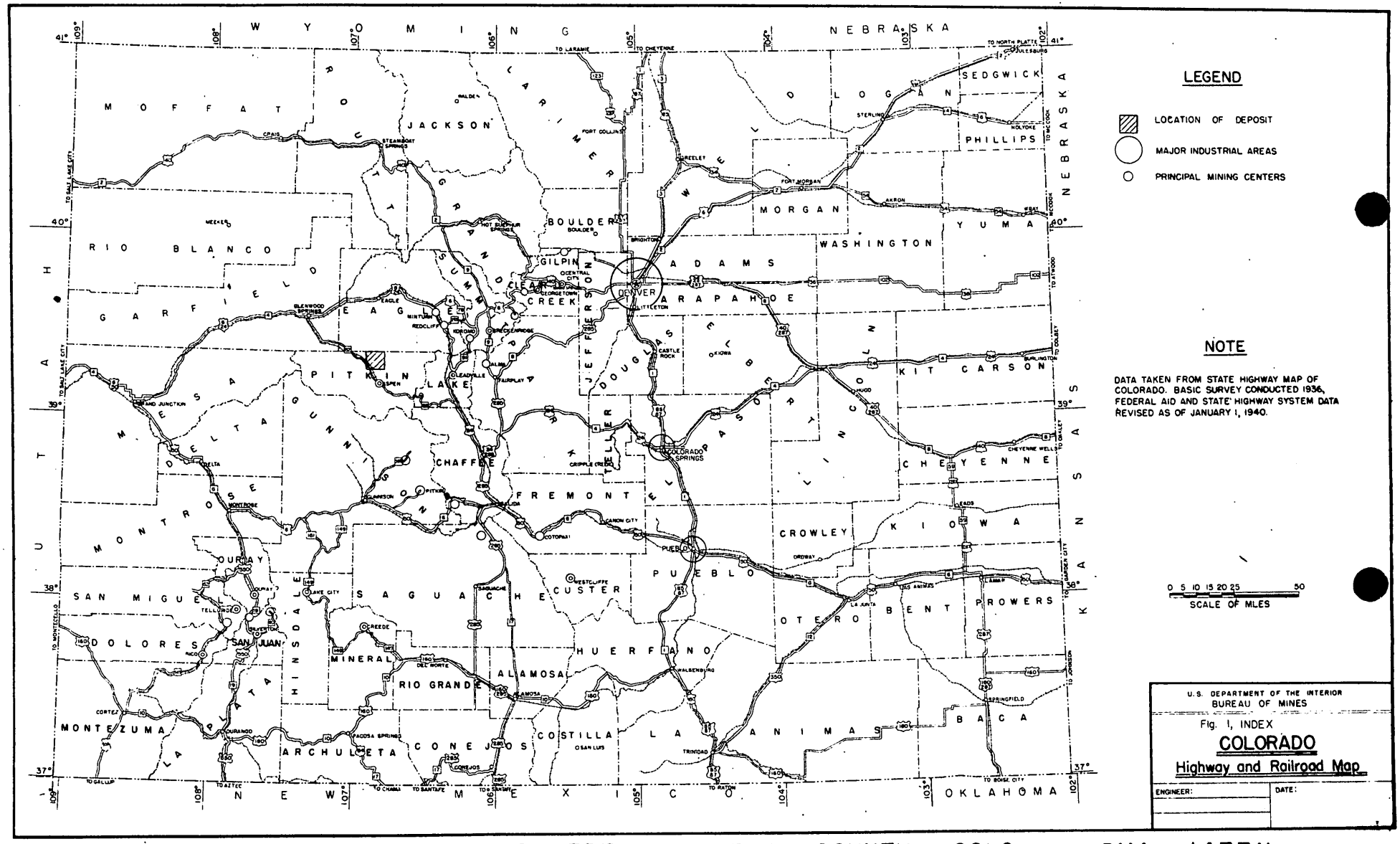


Fig. 1 PANCO MANGANESE PROPERTY PITKIN COUNTY, COLO. DMA 1477X

of the fault valley as beds of sandstone and grits. Two zones of manganese enrichment about 0.7 mile apart occur in secs. 21 and 22, T. 8 S., R. 86 W. (fig. 2), above Wingo siding on the Denver and Rio Grande Western Railroad at a general altitude of about 7,250 feet.

HISTORY AND PRODUCTION

This property was examined by a geologist of the U. S. Geological Survey in 1941.

There is no record of past production.

OWNERSHIP AND EXTENT

The Panco Manganese Company, a partnership between C. N. Bell, II, of Golden, D. V. Watrous, of Idaho Springs, and E. Bieman, of Snowmass, Colo., owns the ten unpatented, standard mining claims--Maria Nos. 1 to 9, inclusive, and the Claudine--covering the exposures. They are located north and northwest of Snowmass, Colo., in secs. 21 and 22, T. 8 S., R. 86 W., Pitkin County, Colo.

DESCRIPTION OF THE DEPOSITS

Manganese oxides, chiefly braunite, psilomelane, and pyrolusite, occur as binders cementing ferruginous sandstones and grits to form medium- to fine-grained conglomerates with varying degrees of enrichment at several exposures along the steep northeast slope of the Roaring Fork fault valley, at an altitude of about 7,300 feet. A small portion of the manganese occurs as high-grade botryoids and and porous masses within the enriched zone and can be sorted. All manganese ore examined was extremely siliceous.

Six short adits, one trench, and several small pits have exposed the discontinuous manganese concentrations over 0.7 of a mile. The adits have cut through the manganese zones and prove their limited horizontal extent. An examination of hillside exposures and float for over a mile indicates that the deposits are not continuous or of any considerable extent.

Several small stockpiles and adit dumps contain about 20 tons of ore, partly as small botryoids, but chiefly as fine- to medium-grained conglomerate and sandstone cemented by manganese oxides.

The better grade of sorted ore assays about 39 percent with some botryoid specimens assaying up to 57 percent manganese. A sample from the trench and adit at location A, figure 2, assayed 18 percent and a representative grab sample from location B assayed about 24 percent manganese, respectively.

MINABLE ORE RESERVES

It is estimated that ore reserves from this property will total about 500 tons of very siliceous ore assaying about 22 percent manganese.

PRESENT STATUS

The Panco Manganese property is inactive except for required assessment work, and mine workings are reached with difficulty over a steep and narrow trail. The two manganese exposures A and B, figure 2, are developed by six short adits, one trench, and several small, shallow pits accessible for examination. About 20 tons of low-grade manganese ore is collected in dumps at the various adit portals.

PROJECT PROPOSAL AND COSTS

The applicants propose to explore the manganese exposures at A and B (fig. 2) on their property by diamond drilling at a total cost of $30,000.00. It should be noted that the area under consideration for exploration is incorrectly located on the map submitted by the applicants.

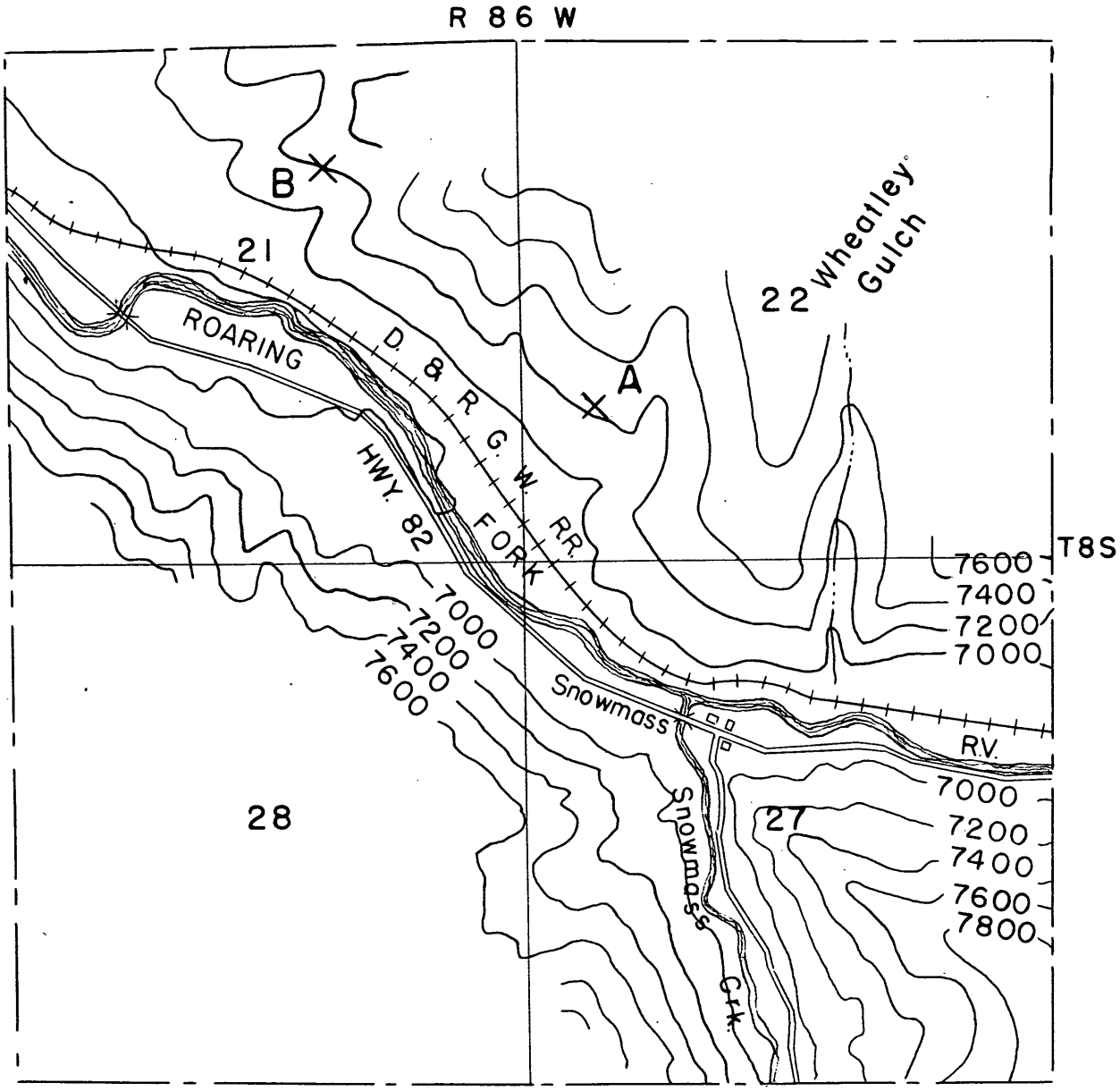
CONCLUSIONS

The Panco Manganese property has two exposures of manganese ore about 0.7 of a mile apart, on the northwest slope of Roaring Fork valley. Manganese ore, predominantly psilomelane, pyrolusite, and braunite, occurs as botryoids and the binder converting ferruginous sandstone and grits to fine- and medium-grained conglomerate. The ore will assay an average of about 22 percent and very closely sorted ore will assay as much as 39 percent manganese. Not over 500 tons of very siliceous ore averaging 22 percent manganese is expected from the deposits.

Present development and surface reconnaissance indicate that these deposits are discontinuous, very small, and highly siliceous.

RECOMMENDATIONS

It is recommended that the request for an exploration loan of $30,000.00, under Defense Minerals Administration Docket 1477X, be denied.



LEGEND

A - B MANGANESE EXPOSURES

0 2000 4000

Scale of Feet

COPIED FROM USGS TOPOGRAPHIC MAP
ROARING FORK SH. 2

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 2 DMA 1477X

PANCO MANGANESE PROPERTY

PITKIN COUNTY, COLO.

ENGR	DATE
TRACED RCD 10-51	
CHECKED	

Fig. 2 PANCO MANGANESE DEPOSITS PITKIN CO., COLO. DMA 1477X

Mining Division
Region IV

October 29, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMA Docket 1477K, Charles H. Ball II, applicant, Panco Manganese Deposits, Pitkin County, Colo.

The application of the subject docket was for an exploration loan of $30,000.

Examination by the field team indicates that the Panco Manganese Deposits consist of discontinuous, very small, and highly siliceous veins, with the manganese occurring as cement in medium grained sandstone.

The examining team recommends denial of the loan, with which we concur.

Paul T. Allsman

Paul T. Allsman

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 30 1951

Reviewed by
DMEA OPERATING COMMITTEE
7-7-52
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Building 20
Denver Federal Center
October 26, 1951

Mining Division
Date Rec'd.
OCT 26 1951
BUREAU OF MINES
Denver, Colorado

Memorandum

To: Chief, Mining Division, Region IV

From: Chief, Colorado Branch, Mining Division

Subject: DMA 1477K, Ponco Manganese Deposits, near Snowmass, Pitkin County, Colorado

Please find enclosed the original and seven copies of the "Summary, Conclusions, and Recommendations", by C. S. Robinson and C. M. Harrer, and the original and seven copies of Harrer's engineering report on the above docket.

Due to the small minable reserves (500 tons) and the highly siliceous character of the ore, Harrer concludes the loan request for $30,000.00 should be denied. I concur. It is also worthy of note that there is a complete lack of suitable facilities for beneficiating low-grade ore assaying probably 22 percent manganese.

The docket and review furnished by the Region IV Field Team through the Mining Division are returned also.

W. M. Traver, Jr.

W. M. Traver, Jr.

enclosures

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

October 22, 1951

Memorandum

To: DMA Field Team, Region IV

From: Ogden Tweto

Subject: DMA Docket 1477X, Panco manganese deposits, Pitkin County, Colorado

Attached are 8 copies of a geologic report on the Panco manganese deposits, by C. S. Robinson. These deposits consist of concentrations of manganese oxides impregnating sandstones and conglomerates. The deposits are small, discontinuous, and low-grade.

Mr. Robinson recommends that the application for an exploration loan of $50,000 be denied, and I concur.

Ogden Tweto

Ogden Tweto, Alternate
Supervising Geologist
Colorado-Wyoming

Attachments (8)

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-1477X, Panco Manganese Deposits, Near Snowmass, Pitkin County, Colorado

Manganese

C. S. Robinson, Geologist
U. S. Geological Survey

C. M. Harrer, Mining Engineer
Bureau of Mines

October 24, 1951

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

Summary, Conclusions, and Recommendations

By C. S. Robinson
Geologist
U. S. Geological Survey

and

C. M. Harrer
Mining Engineer
Bureau of Mines

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By C. S. Robinson and C. M. Harrer

The Panco Manganese deposits near Snowmass, Pitkin County, Colo., contain concentrations of manganese oxides as cement in medium-grained conglomeratic sandstones and sandstones. Present development and surface reconnaissance indicate that these deposits are discontinuous, very small, and highly siliceous.

C. N. Bell, II, representing the applicants, has requested an exploration loan of $30,000.00 to explore these deposits by diamond drilling. It is recommended that this request be denied.

PANCO MANGANESE DEPOSITS

NEAR SNOWMASS,

PITKIN COUNTY, COLORADO

DMA DOCKET 1477X

C. S. Robinson, Geologist
U. S. Geological Survey

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ILLUSTRATIONS

Figure 1: Topographic map showing location of Panco manganese deposits.

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

INTRODUCTION

The Panco manganese deposits near Snowmass, Pitkin County, Colorado, were visited by C. M. Harrer of the U. S. Bureau of Mines and C. S. Robinson of the U. S. Geological Survey in company with D. V. Matrous on October 3 and 4, 1951. The outcrops of the deposits are not where they are shown on the map accompanying the brochure; one is about 3,700 feet N. 20° W. of the town of Snowmass and the other, 7,100 feet N. 35° W., as shown in Figure 1. The first outcrop may be reached by a trail which joins a poor road that follows the railroad northwest of Snowmass. There is no trail to the second outcrop.

An investigation of this deposit was made by Ogden Tweto of the U. S. Geological Survey during World War II in connection with Strategic Mineral Investigations. A description of the occurrence of braunite from this location is given by A. F. Rogers in the American Mineralogist Volume 31, Nos. 11 and 12, pp. 561-568, 1946.

GEOLOGY

The ore occurs in vein-like deposits in the Maroon formation, of Pennsylvanian-Permian age. The Maroon formation in this area consists of interbedded siltstones, arkosic sandstones, and arkosic conglomeratic sandstones. The character of the beds changes along both dip and strike.

In general the beds strike north to northwest and dip from 5° to 30° east or west. The ore occurs along shear zones which parallel the strike of the beds but dip more steeply than the beds; usually about 20°-80° east. The veins are from less than 1 to 8 feet wide. The ore minerals are pyrolusite, psilomelane, and braunite.

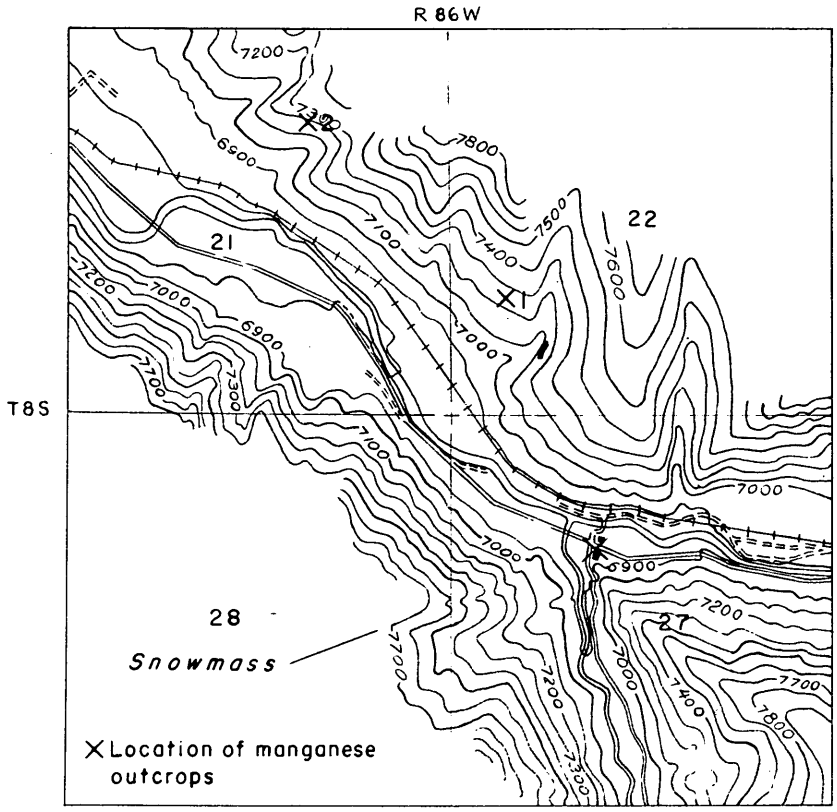
At location 1 the ore is exposed in a prospect trench about 30 feet long and a prospect pit about 90 feet southwest of the trench. The mineralized zone can be followed for about 200 feet along its strike. It definitely pinches out at both ends. The maximum width is about 5 feet as exposed in the prospect trench. The ore zone dips 20°-80° east and the beds dip 5°-20° west. Small veinlets from less than an inch to 6 inches wide cut siltstones adjacent to the sandstone. The shear zone in which the ore occurs is perhaps 20 to 30 feet wide, but the ore occurs only along this shear zone where it intersects an arkosic conglomeratic sandstone.

At location 2 the ore is exposed in a prospect adit which was driven about 30 feet into the side of the hill, and ore may be found on the dumps of two small prospect pits south of the adit. Float ore from this zone is found for about 400 feet along strike. As exposed in the adit, the ore is about 8 feet wide and dips 40°-80° east. The ore occurs in an arkosic sandstone which dips 5°-15° east. The shear zone along which the ore occurs is 10 to 30 feet wide.

CONCLUSIONS

The ore minerals, pyrolusite, psilomelane, and braunite, are believed to have been deposited by hydrothermal solutions in favorable beds along

shear zones in the Maroon formation. The favorable beds were arkosic sandstones and conglomeratic sandstones; porosity may have been the primary control. The sandstone beds are not very thick and are discontinuous along both their strike and dip. The two deposits are not at the same stratigraphic position and there was no mineralization found between these two deposits. The deposits are not extensive enough to be mineable, and an exploration loan by the Government is not warranted.



Department of Interior
U. S. GEOLOGICAL SURVEY

Topographic Map
showing location of

PANCO MANGANESE DEPOSITS

near Snowmass, Pitkin Co., Colo.

DMA 1477X

From U.S. Geological Survey Topographic Map of **Roaring Fork, Colorado, Sheet 2.**

Scale: $\frac{1}{31,680}$

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

Engineering Report

By C. M. Harrer
Mining Engineer
Bureau of Mines

PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

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PANCO MANGANESE DEPOSITS
NEAR SNOWMASS,
PITKIN COUNTY, COLORADO

ENGINEERING REPORT

By

C. M. Harrer

INTRODUCTION

Examination of the Panco Manganese property near Snowmass, Colo., was made at the request of C. N. Bell, II, in connection with a proposed exploration loan of $30,000.00, under the Defense Production Act of 1950, to explore manganese exposures by diamond drilling. The property was examined by the author and C. S. Robinson, of the U. S. Geological Survey, on October 3 and 4, 1951, as Defense Minerals Administration Docket 1477X. D. V. Watrous, of Idaho Springs, Colo., acted as guide on October 3, 1951.

ACKNOWLEDGMENTS

D. V. Watrous, one of the owners, a mining engineer of Idaho Springs, Colo., conducted the examining team over part of the property on the first day of the inspection and gave instructions necessary to find the remaining ground showing manganese exposures. His assistance is gratefully acknowledged.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The property is one mile to the north and northwest of Snowmass and 2½ miles southeast of Basalt, in Pitkin County, Colo., figure 1. The Roaring Fork River, Denver and Rio Grande Western Railroad, and Colorado State Highway 82 are within 0.2 mile of the property in the valley floor. The sides of the valley rise steeply above the floor

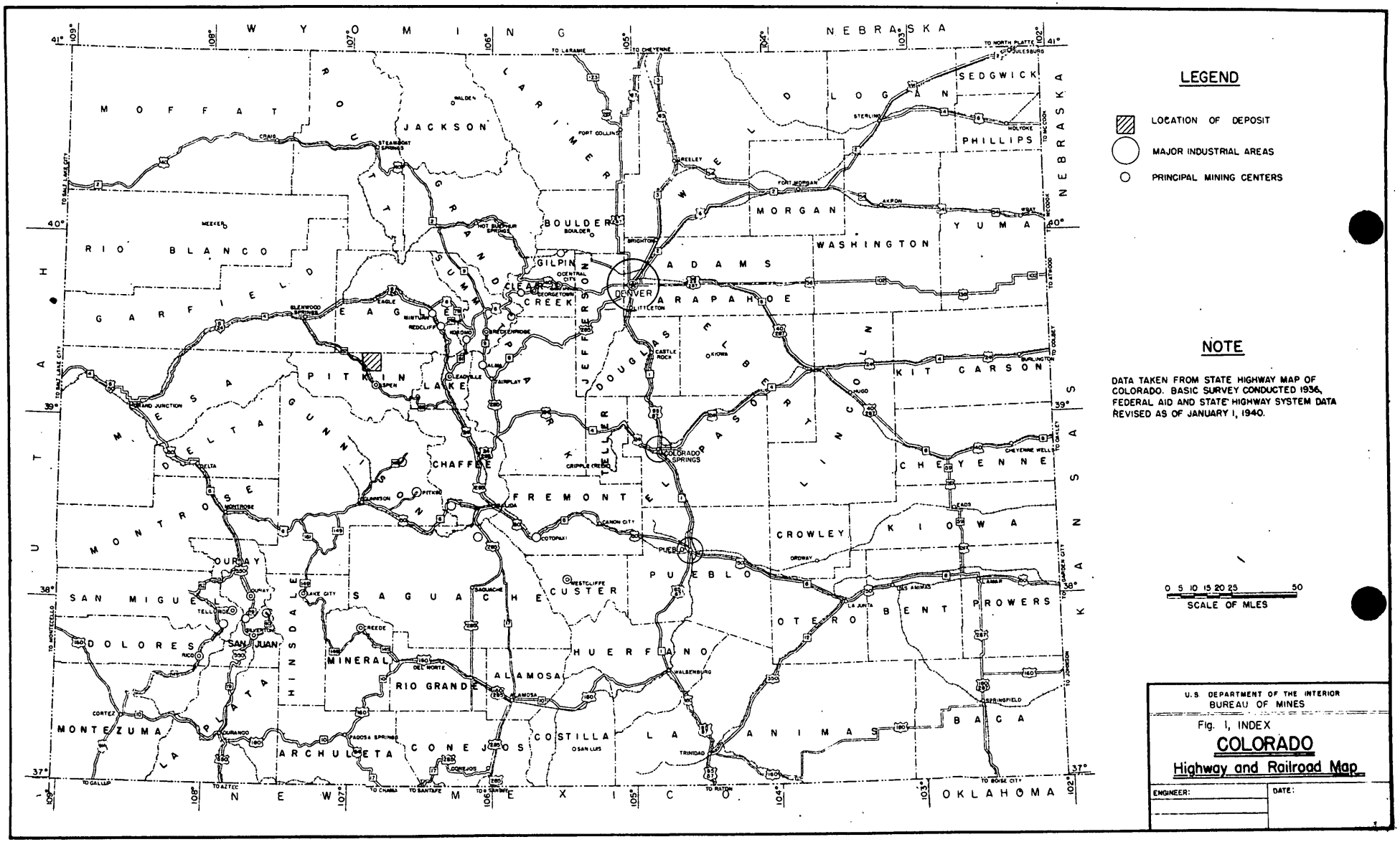


Fig. 1 PANCO MANGANESE PROPERTY PITKIN COUNTY, COLO. DMA 1477X

of the fault valley as beds of sandstone and grits. Two zones of manganese enrichment about 0.7 mile apart occur in secs. 21 and 22, T. 8 S., R. 86 W. (fig. 2), above Wingo siding on the Denver and Rio Grande Western Railroad at a general altitude of about 7,250 feet.

HISTORY AND PRODUCTION

This property was examined by a geologist of the U. S. Geological Survey in 1941.

There is no record of past production.

OWNERSHIP AND EXTENT

The Panco Manganese Company, a partnership between C. N. Bell, II, of Golden, D. V. Watrous, of Idaho Springs, and E. Biemas, of Snowmass, Colo., owns the ten unpatented, standard mining claims—Maria Nos. 1 to 9, inclusive, and the Claudine—covering the exposures. They are located north and northwest of Snowmass, Colo., in secs. 21 and 22, T. 8 S., R. 86 W., Pitkin County, Colo.

DESCRIPTION OF THE DEPOSITS

Manganese oxides, chiefly braunite, psilomelane, and pyrolusite, occur as binders cementing ferruginous sandstones and grits to form medium- to fine-grained conglomerates with varying degrees of enrichment at several exposures along the steep northeast slope of the Roaring Fork fault valley, at an altitude of about 7,300 feet. A small portion of the manganese occurs as high-grade botryoids and and porous masses within the enriched zone and can be sorted. All manganese ore examined was extremely siliceous.

Six short adits, one trench, and several small pits have exposed the discontinuous manganese concentrations over 0.7 of a mile. The adits have cut through the manganese zones and prove their limited horizontal extent. An examination of hillside exposures and float for over a mile indicates that the deposits are not continuous or of any considerable extent.

Several small stockpiles and adit dumps contain about 20 tons of ore, partly as small botryoids, but chiefly as fine- to medium-grained conglomerate and sandstone cemented by manganese oxides.

The better grade of sorted ore assays about 39 percent with some botryoid specimens assaying up to 57 percent manganese. A sample from the trench and adit at location A, figure 2, assayed 18 percent and a representative grab sample from location B assayed about 24 percent manganese, respectively.

MINABLE ORE RESERVES

It is estimated that ore reserves from this property will total about 500 tons of very siliceous ore assaying about 22 percent manganese.

PRESENT STATUS

The Panco Manganese property is inactive except for required assessment work, and mine workings are reached with difficulty over a steep and narrow trail. The two manganese exposures A and B, figure 2, are developed by six short adits, one trench, and several small, shallow pits accessible for examination. About 20 tons of low-grade manganese ore is collected in dumps at the various adit portals.

PROJECT PROPOSAL AND COSTS

The applicants propose to explore the manganese exposures at A and B (fig. 2) on their property by diamond drilling at a total cost of $30,000.00. It should be noted that the area under consideration for exploration is incorrectly located on the map submitted by the applicants.

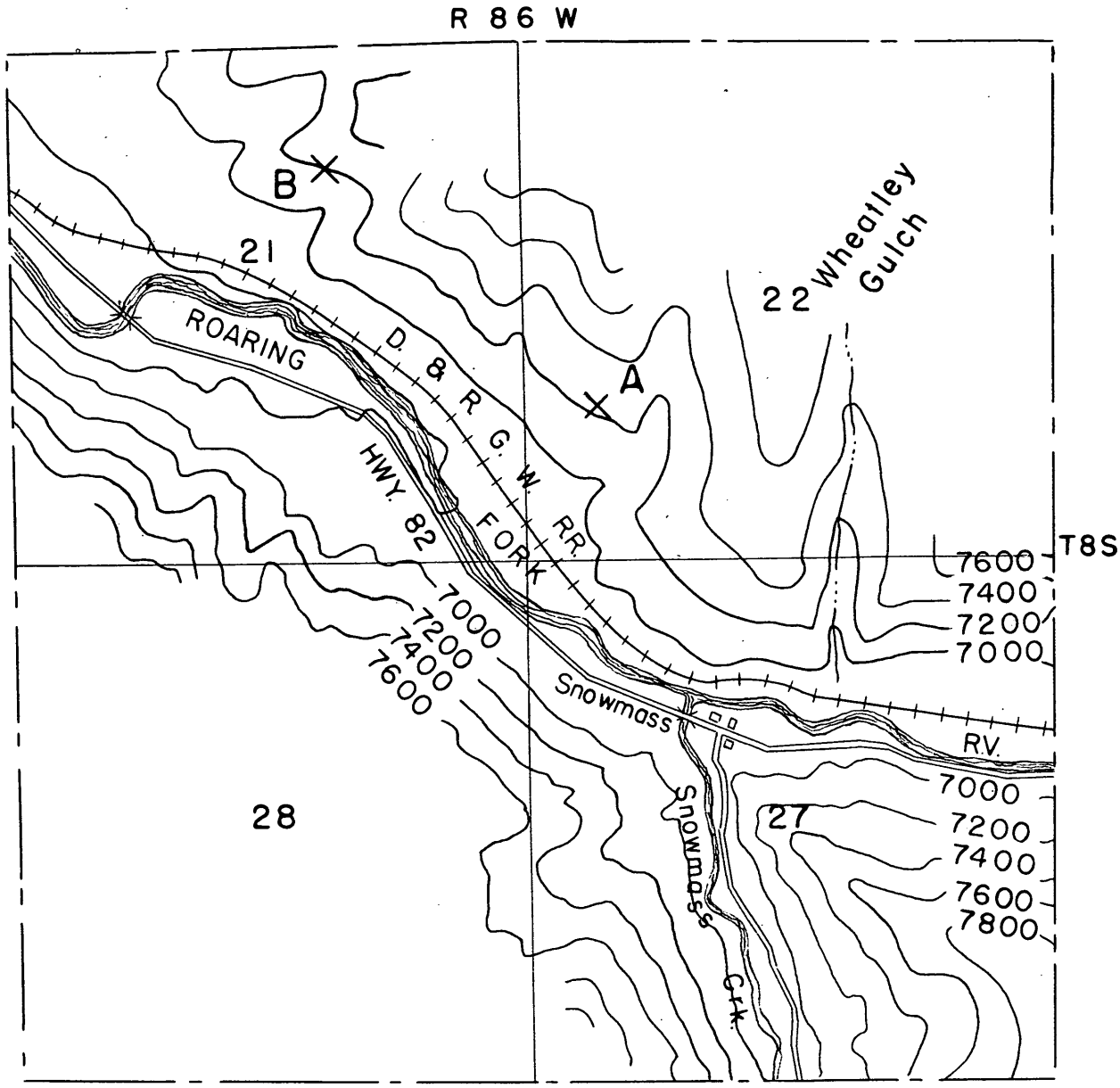
CONCLUSIONS

The Panco Manganese property has two exposures of manganese ore about 0.7 of a mile apart, on the northwest slope of Roaring Fork valley. Manganese ore, predominantly psilomelane, pyrolusite, and braunite, occurs as botryoids and the binder converting ferruginous sandstone and grits to fine- and medium-grained conglomerate. The ore will assay an average of about 22 percent and very closely sorted ore will assay as much as 39 percent manganese. Not over 500 tons of very siliceous ore averaging 22 percent manganese is expected from the deposits.

Present development and surface reconnaissance indicate that these deposits are discontinuous, very small, and highly siliceous.

RECOMMENDATIONS

It is recommended that the request for an exploration loan of $30,000.00, under Defense Minerals Administration Docket 1477X, be denied.



LEGEND

A - B MANGANESE EXPOSURES

0 2000 4000

Scale of Feet

COPIED FROM USGS TOPOGRAPHIC MAP
ROARING FORK SH. 2

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 2 DMA 1477X

PANCO MANGANESE PROPERTY

PITKIN COUNTY, COLO.

ENGR	DATE
TRACED RCD 10-51	
CHECKED	

Fig. 2 PANCO MANGANESE DEPOSITS PITKIN CO., COLO. DMA 1477X

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

224 New Customhouse
Denver 2, Colorado

November 2, 1951

Mr. Charles N. Bell, II
R. R. #1, Box 248
Stonehenge
Golden, Colorado

Re: DMA Docket 1477X

Dear Mr. Bell:

Your application for a loan to explore the Panco Manganese Deposit Mine has been reviewed by the Defense Minerals Administration. We have a report of a field examination made on your property to help us in judging your application.

On the basis of this report, we must conclude that the chances of finding any significant new tonnage of manganese ore by the exploration you propose are not favorable. The manganese at the Panco deposits occurs only as cement in very small, discontinuous, highly siliceous veins cutting medium grained sandstone. Under these circumstances, the expenditure of Government funds for exploration is unwarranted. We regret therefore, that your application must be declined.

We wish to thank you for bringing the property to our attention.

Very truly yours,

Paul T. Allsman for
J. H. East, Jr.
Executive Officer
DMA Field Team, Region IV

cc: John M. Smith, Acting Chief
Administrative Management Division

To	Initials	Date
210		

340 FILE COPY
SURNAME:

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

Holderer
Lyon
Mittendorf

OCT 1 1951

In reply please refer to
DMA 14771, Manganese

My dear Senators Johnson and Millikin:

This is in reply to your joint letter, dated September 24, 1951, relative to the application for an exploration loan of Charles S. Bell, Route 1, Box 248, Stonehenge, Golden, Colorado.

Mr. Bell's application was referred to our field team for an examination on September 14, and it may be several weeks before they are able to submit a report.

We will be glad to advise you of the action that will be taken.

Sincerely yours,

C. O. Mittendorf (J.N.)

Acting Administrator

S.F.
10-1

Hon. Ed C. Johnson
United States Senate
Washington 25, D. C.

Hon. Eugene D. Millikin
United States Senate
Washington 25, D. C.

TJBallard:dgs
Sep 27, 1951

CC: Adm. Reading File
Repts and Recs Unit
Deputy Administrator
Mr. Lyon
Mr. Holderer

UNITED STATES SENATE
COMMITTEE ON FINANCE
September 24, 1951

Dr. W. C. Schroeder
Administrator
Defense Minerals Administration
Room 4428
New Interior Building
Washington, D. C.

Dear Dr. Schroeder:

Mr. Charles N. Bell, II, Rural Route 1, Box 248, Stonehenge, Golden, Colorado, has written in regard to DMA - 1477-X in connection with an exploration loan for the Panco Manganese Prospect, Snowmass, Colorado.

We will appreciate your kind consideration of Mr. Bell's application and of being advised of your decision in this matter.

Very sincerely yours,

/s/ Ed C. Johnson, U.S.S.

/s/ Eugene D. Millikin, U.S.S.

COPY

WALTER F. GEORGE, GA., CHAIRMAN
TOM CONNALLY, TEX.
HARRY FLOOD BYRD, VA.
EDWIN C. JOHNSON, COLO.
CLYDE R. HOEY, N. C.
ROBERT S. KERR, OKLA.
J. ALLEN FREAR, JR., DEL.
EUGENE D. MILLIKIN, COLO.
ROBERT A. TAFT, OHIO
HUGH BUTLER, NEBR.
OWEN BREWSTER, MAINE
EDWARD MARTIN, PA.
JOHN J. WILLIAMS, DEL.
ELIZABETH B. SPRINGER, CHIEF CLERK

United States Senate

COMMITTEE ON FINANCE

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.
SEP 26 8 45 AM '51

September 24, 1951

SEP 26 1951
Rec'd by
Mr. Hoeferer

OFFICIAL FILE COPY

To	Initials	Date
340	CC	9-26

Dr. W. C. Schroeder
Administrator
Defense Minerals Administration
Room 4428
New Interior Building
Washington, D. C.

Dear Dr. Schroeder:

Mr. Charles N. Bell, II, Rural Route 1, Box 248, Stonehenge, Golden, Colorado, has written in regard to DMA - 1477-X in connection with an exploration loan for the Panco Manganese Prospect, Snowmass, Colorado.

We will appreciate your kind consideration of Mr. Bell's application and of being advised of your decision in this matter.

Very sincerely yours,

Ed C. Johnson

Ed C. Johnson, U.S.S.

Eugene D. Millikin, U.S.S.

WALTER F. GEORGE, GA., CHAIRMAN
TOM CONNALLY, TEX.
HARRY FLOOD BYRD, VA.
EDWIN C. JOHNSON, COLO.
ELVIS R. HOEY, N.C.
ROBERT S. KERR, OKLA.
J. ALLEN FREAR, JR., DEL.
EUGENE D. MILLIKIN, COLO.
ROBERT A. TAFT, OHIO
HUGH BUTLER, NEBR.
OWEN BREWSTER, MAINE
EDWARD MARTIN, PA.
JOHN J. WILLIAMS, DEL.
ELIZABETH B. SPRINGER, CHIEF CLERK

United States Senate

COMMITTEE ON FINANCE

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.
SEP 26 8 45 AM '51

, 195 1

Dr. W. J. Schroeder
Administrator
Defense Minerals Administration
Room 4420
New Interior Building
Washington, D. C.

Haldeman
9-26-51

Dear Dr. Schroeder:

Mr. Charles N. Bell, II, care Route 1, Box 248, Stonemings, Gulden, Colorado, has written in regard to DMA - 1477-A in connection with an exploration loan for the Pando Manganese Prospect, Snowmass, Colorado.

We will appreciate your kind consideration of Mr. Bell's application and on being advised of your decision in this matter.

Very sincerely yours,

Ed C. Johnson

Ed C. Johnson, U.S.S.

Eugene D. Millikin, U.S.S.

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

FILE COPY
SURNAME:

Hoffman
Jacoby
Prettenden
Richard
Thayer
Moon

SEP 14 1951

a.E.C

Mr. Charles N. Bell II
R. R. #1, Box 248
Stonehenge
Golden, Colorado

In reply please refer to
DMA-1477X

Dear Mr. Bell:

Your application has been referred to the field for additional information. We suggest that you contact Mr. J. H. East, Jr., 224 New Customhouse Building, Denver, Colorado, and offer him whatever assistance he may require.

Very truly yours,

SIGNED

Tom Lyon, Director
Supply Division

9/14

CHJacoby:ec
Sept. 5/51

CC: Adm. Reading File
DMA Docket File
Mr. Holderer
Field Region IV
~~XXXXXXXXXX~~ Mr. Melcher
Mr. Crattenden

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

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

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. 1477A

Commodity Manganese

Applicant Charles W. Bell II

Please expedite the consideration of this application with particular reference to the points raised in the attached "Review".

Very truly yours,

Tom Lyon, Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1772

Commodity Manganese

Total Amount 40,000

Govt. Participation 75%

1. Name and Address of Applicant Charles N Bell II
RR #1 Box 245, Standhope, Gilpin, Colo.

2. Location of Property 1 Mile NE Sacramento, Colo.

3. Mineral or metal 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

b) Poor

c) None

d) Don't know—needs field examination ✓

e) Is there an alternative and favorable project?
(If so, attach an explanation)

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

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

Does the lease have sufficient time to run to cover a future productive period?

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? _____

b) MF-202 _____

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

a) Available manpower Yes

b) Equipment and supplies Yes
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes

_____

Is a field check needed on this point? No.

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? Yes

If not, are there sufficient data given so that you can describe the project? _____ If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? Yes

_____

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

If not, what part of it is? _____

_____

_____

_____

Is this part a worthwhile exploration project? ? Need Field Check

d) Are the cost estimates detailed? [illegible] OK

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? Yes If so, attach a draft. MS. 43

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant?

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

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

c) Is a field check needed? No

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? Yes If so, attach a draft.

c) Are rents and charges reasonable? Yes

d) Is a field check needed? No

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

a) Are there sufficient data? Yes

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? No

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 question? Check on merits of property; and suggest drilling be done in two or three steps — Drilling results determining program continuation

Reviewed by: C.H. Jacoby
G.B. Holderer

Date 1/3/51

INT.-DUP. SEC., WASH., D.C. 99009

Please return to
3624

SEP 14 1951

Mr. Charles W. Bell II
R. R. #1, Box 248
Stonehenge
Golden, Colorado

In reply please refer to
DMA-1477X

Dear Mr. Bell:

Your application has been referred to the field for additional information. We suggest that you contract Mr. J. H. East, Jr., 224 New Customhouse Building, Denver, Colorado, and offer him whatever assistance he may require.

Very truly yours,

SIGNED
Tom Lyon, Director
Supply Division

CHJacoby:ec
Sept. 5/51

CC: Adm. Reading File
DMA Docket File
Mr. Holderer
Field Region IV
XXXXXXXXXX Mr. Melcher
Mr. Crittenden

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1477X

Commodity Manganese

Total Amount $30,000

Govt. Participation 75%

1. Name and Address of Applicant Charles N Bell II
R.R. #1 Box 248, Stonehenge, Golden, Colo.

2. Location of Property 1 Mile NE Snowmass, Colo.

3. Mineral or metal 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

b) Poor

c) None

d) Don't know—needs field examination ✓

e) Is there an alternative and favorable project?
(If so, attach an explanation)

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

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

Does the lease have sufficient time to run to cover a future

productive period?

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? _____

b) MF-202 _____

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

a) Available manpower Yes

b) Equipment and supplies Yes
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? Yes

If not, are there sufficient data given so that you can describe the project? _____ If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? Yes

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

If not, what part of it is? _____

Is this part a worthwhile exploration project? ? Need Field Check

d) Are the cost estimates detailed? Should include bookkeeping otherwise O.K

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? Yes If so, attach a draft. MF. 103

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant? _____

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

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

c) Is a field check needed? No

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? Yes If so, attach a draft.

c) Are rents and charges reasonable? Yes

d) Is a field check needed? No

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

a) Are there sufficient data? Yes

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? No

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 question? Check on merits of property; and suggest drilling be done in two or three steps — Drilling results determining program continuation

Reviewed by: C. H. Jacoby

Date 9/3/51

INT.-DUP. SEC., WASH., D.C. 99009

FILE COPY
SURNAME:

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

SEP 4 1951

W.E.C.

Selfridge

Mr. Charles N. Bell, II
R. R. No.1 Box 248
Stonehenge
Golden, Colorado

In reply please refer to
DMA-1477X Manganese

Dear Mr. Bell:

This is to inform you that we received the items mentioned in your letter of August 21, 1951.

Thank you for sending them promptly.

Very truly yours,

SIGNED

George C. Selfridge
Acting Chief, Manganese Branch

DF 9/4

GCSelfridge:ll
August 31, 1951
CC:
Files
Adm. Reading File
Reports and Records Unit
Mr. Holderer

SEP 4 1951

Mr. Charles W. Bell, II
R. R. No.1 Box 248
Stonehenge
Golden, Colorado

In reply please refer to
DMA-1477XManganese

Dear Mr. Bell:

This is to inform you that we received the items mentioned in your letter of August 21, 1951.

Thank you for sending them promptly.

Very truly yours,

SIGNED

George C. Selfridge
Acting Chief, Manganese Branch

GCSelfridge:ll
August 31, 1951
CC:
Files
Adm. Reading File
Reports and Records Unit
Mr. Holderer

CHARLES N. BELL

R.R. #1 - Box 248
Stonehenge
Golden, Colorado
August 21, 1951

Mr. George B. Holderer, Chief
Manganese Branch
Defence Minerals Administration
United States Department of the Interior
Washington 25, D. C.

Subject: DMA-1477-X-Manganese

Dear Mr. Holderer:

Did you receive my letter of July 30, 1951, along with one contour map, two rough sketches and three assay certificates ?

Two letters from my address having been lost in the last three months, it occured to me that this may have happened again. Please notify me and I can send duplicates.

Very truly yours,

Charles N. Bell II

Charles N. Bell II

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 24 1951

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 8-24-51

REFERRED TO:
AUG 27 1951
Recd by
Mr. Holderer

1. Code 340
2.
3.
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	✓ Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: .....

Check (X) before the items needing attention.

Adams
Initials of sender.
A. E. C.

GPO 16—63815-1

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : G. B. Holderer DATE: August 29, 1951

FROM : M. D. Crittenden

SUBJECT: DMA-1477 X C. N. Bell II, Panco manganese deposit, Colorado

The new information submitted by the applicant indicates that the Panco deposit, Pitkin County, Colorado is on the same breccia zone, east of Snowmass that was examined by the Geological Survey in September 1941. The deposit consists of grit and sandstone beds impregnated with manganese oxides, and appears to average about 15% Mn. The ore zone was observed to be 1-5' in width and was exposed along the strike for about 500 feet. It was followed in a trench to a depth of 10' but was pinching downward. Ore reserves were inferred to be perhaps 1000 tons @ 15% Mn.

Under these circumstances, the prospects for extensive discoveries in this area can only be regarded as poor. There is almost no probability that the deposit warrants the deep drilling proposed. A small amount of surface is all I would approve, and field examination may indicate that any exploration is impractical.

G. B. Holderer

August 29, 1951

M. D. Crittenden

DMA-1477 X C. N. Bell II, Panco manganese deposit, Colorado

The new information submitted by the applicant indicates that the Panco deposit, Pitkin County, Colorado is on the same breccia zone, east of Snowmass that was examined by the Geological Survey in September 1941. The deposit consists of grit and sandstone beds impregnated with manganese oxides, and appears to average about 15% Mn. The ore zone was observed to be 1-5' in width and was exposed along the strike for about 500 feet. It was followed in a trench to a depth of 10' but was pinching downward. Ore reserves were inferred to be perhaps 1000 tons @ 15% Mn.

Under these circumstances, the prospects for extensive discoveries in this area can only be regarded as poor. There is almost no probability that the deposit warrants the deep drilling proposed. A small amount of surface is all I would approve, and field examination may indicate that any exploration is impractical.

MDCrittenden:gt

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 9-5-51

REFERRED TO:

SEP 5 1951
Rec'd by
Mr. Holden

1. Code 340
2.
3.
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	✓ Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS:

Check (X) before the items needing attention.

Adams
A. E. C.
Initials of sender.

GPO 16—63815-1

340

R.R. #1 - Box 248
Stonehenge
Golden, Colorado
August 29, 1951

Mr. W. C. Schroeder, Acting Administrator
Defense Minerals Administration
Interior Building
Washington, D. C.

Subject:
DMA - 1477 - X - Manganese

Dear Mr. Schroeder;

To acquaint you with this matter, I will quote part of a letter written by Mr. George B. Holderer, Chief, Manganese Branch, dated July 16, 1951:

"Review of your application for an exploration loan to diamond drill the Panco Manganese property suggests that additional information is needed before a decision can be reached. Will you please furnish the following information in quadruplicate:"

He asked for a sketch showing outcrop, location of cuts, location of recent samples, location of proposed holes, rough cross sections, assay certificates. These were sent by me along with a letter dated July 30, 1951.

Receipt of this information has not been received. I sent a post card August 11, a letter August 16, and an air-mail letter August 21, and have had no reply.

Mr. Jack East of the Unites States Bureau of Mines in Denver, Colorado, suggested that I write to you in regard to this matter, and let me know whether or not the loan will granted.

Very truly yours,

Charles N. Bell II

Charles N. Bell II

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
SEP 4 2 23 PM '51

Index to Field Team

DMA-1477X Manganese

1. 1 copy letter to Holderer from Bell 7/30/51
2. 1 copy Geologic cross sections
3. 1 copy Tapagraphic map showing outcrops
4. 1 copy Assay by Briback
5. 1 copy Assay by Sweet
6. ~~1 copy Assay by Briback~~ 5/23/51
7. 1 copy Letter to Bell from Holderer 7/16/51
8. 1 copy MF-103 with attached answers
9. 1 copy letter to Bell from Stroble 6/8/51
10. 1 copy Map of Area

9/5/51

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

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

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. 1477X

Commodity Manganese

Applicant Charles W. Bell II

Please expedite the consideration of this application with particular reference to the points raised in the attached "Review".

Very truly yours,

Tom Lyon, Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

FILE COPY
SURNAME:

Holderer
Selfridge

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

July 16, 1951

Mr. Charles M. Bell II
R. R. #1 - Box 248
Stonehenge
Golden, Colorado

In reply please refer to:
DMA-1477-X -- Manganese

Dear Mr. Bell:

Review of your application for an exploration loan to diamond drill the Panco Manganese property suggests that additional information is needed before a decision can be reached. Will you please furnish the following information in quadruplicate:

1. An areal map or sketch showing the outcrop, location of open cuts, location of recent samples with them, assay values and location of proposed diamond drill holes. A few rough cross sections would aid in visualizing the drilling program.

2. Assay certificates or copies thereof of the samples. If not available, single copies will suffice in lieu of four copies.

Very truly yours,

George B. Holderer

gsm

George B. Holderer
Chief, Manganese Branch

GCSelfridge:awj

cc:File
Adm. Reading File
Reports & Records Unit
Mr. Holderer

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : George B. Holderer DATE: July 6, 1951

FROM : M. D. Crittenden

SUBJECT: DMA-1477 X

Exploration proposal for $30,000 equivalent to Government's share of $22,500. Assuming a value for the ore of $10.00, which is probably high, the maximum rate of amortization would be 50¢ per ton. At this rate the deposit would have to yield approximately 50,000 tons to pay off. The chances of such large production are almost negligible. 1000-2000 tons is possible but unlikely.

Applicant must submit (1) recent assays to indicate potential value, (2) map of area showing outcrop, location of samples, proposed drilling.

George B. Holderer July 6, 1951

M. D. Crittenden

DMA-1477 X

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Applicant must submit (1) recent assays to indicate potential value, (2) map of area showing outcrop, location of samples, proposed drilling.

MDCrittenden:gt

FILE COPY
SURNAME:

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

June 8, 1951

Mr. Charles N. Bell, II
R. R. #1 - Box 248
Golden, Colorado

Subject: DMA-1477X
Re: Exploration Loan
Panco Manganese Property

My dear Mr. Bell:

Receipt is acknowledged of your application and attachments of May 25, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1477X and was referred to Mr. F. E. Bradley, Chief, Manganese Branch on June 6, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1477X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:js
cc: Strobel-2
Files
Bradley
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-1477 X

Date received 6/4/51

Participation

Bell, Chas N.
Watrous, Douglas V.
Bionaz, Eckhart

Name and address of applicant

Date May 21-51

Leonard H Blysted 802 Highland Ave Boulder Colo

FILL IN THIS BLOCK

Date of application May 21 51

Estimated cost 5000,00

Mineral or metal Tungsten

Percentage of Government participation 375,00

Location of mine Sugar Loaf Dist

Township No 1 N-Range 71W West of Sixth P.M

Date of filing MF-100 May 21-51

DMA Docket Number, if available

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? Indivual

*2. If a partnership, state names and addresses of partners.

*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. Several years-self

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

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.

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.

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)? Sufficient to pay my share of cost

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

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. Section 71 W East of the sixth P.M.

(*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. Load

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

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

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

*14. Describe any existing usable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. Truck - Nederland

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

*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. Tungsten all around

(*b*) State briefly the known history and production of adjoining and neighboring properties.

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

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

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Drift and Sink- 2 Months

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.

THE REQUIREMENTS AND COSTS

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. prevailing wage

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent. Truck

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work. 35.00

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for 5000.00

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.

(Name of company)	By Leonard M Bystad (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

Form MF-103
(April 1951)

U. DEPARTMENT OF THE INTER R

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 1477X

Date received 6-1-51

Participation

Charles W. Bell II
R.R. #1 - Box 248
Stonehenge
Golden, Colorado

Douglass V. Patrous
606 Colorado Avenue
Idaho Springs, Colo.

Ebhart Bionaz
Silver Plume, Colo.

Name and address of applicant

Date May 25, 1951

FILL IN THIS BLOCK

Date of application May 25, 1951

Estimated cost 680,000

Mineral or metal Manganese

Percentage of Government participation 75

Location of mine Sherman, Colorado

Date of filing MF-100

DMA Docket Number, if available

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?
*2. If a partnership, state names and addresses of partners.
*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.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

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.
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)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

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.
    (*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.
*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.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
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.
15. State in detail how the ore could be shipped and how and where milled.
*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.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    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.

THE REQUIREMENTS AND COSTS

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.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
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.

(Name of company)	By Charles N Ball II (Signature of authorized official)
25 May 1951 (Date)	Douglas V. Watrous (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

THE APPLICANT

1. Partnership
2. Same as above
3.
4. Charles N. Bell II - 14 years mine superintendent The King Lease, Inc. Camp Bird Mine, Ouray, Colorado.
   Douglass V. Watrous - Engineer of mines - 16 years operating experience.
   Ebhart Bionaz - 12 years' experience practical mining.

5. Owner
6. None
7.
8. New discovery
9. $7500.00, which is sufficient to cover applicants part of cost.

10a & b. Maria Mine No. 7 Lode described as follows: Beginning at corner No. 1 which is Government corner between Tracts 66, 67 and 68 and Section 22 in Township 8 South, Range 88 West, 6th P.M.; thence Easterly 600 feet to corner No. 2; thence, Northerly 1500 feet to Corner No. 3; thence, Westerly 600 feet to Corner No. 4; thence, Southerly 1500 feet to Corner No. 1, the place of beginning. Also the following Lode claims which join the above claim: Maria Mine No. 8, 9, 1, 2, 3, 4, 5 and 6, and the Claudine, all recorded in Book 165, Pages 142 to 145 in the Pitkin County Courthouse.

11. Panco Manganese property.
12. One mile Northwest of Snowmass, Colorado, and within 1000 feet of the Rio Grande Railroad and within 2000 feet of paved state highway No. 82.
13. The Roaring Fork River is within 1500 feet of the property and contains a more than ample water supply.
14. No equipment or buildings.
15. The ore could be concentrated on the property, loaded at a railroad siding to be constructed on the property and shipped to the C.F.&I. Steel Mill at Pueblo, Colorado. (Indications show that a good part of this ore may not have to be concentrated).
16. (a) Previous exploration consists of several open cuts to determine the thickness and horizontal extent of thevein outcrop. These cuts show the vein to lay in a furrugenous sandstone bed, dipping about thirty degrees in a Northerly direction. The vein, where exposed, varies from two to eight feet in thickness. The open cuts were made by the father of one of the present owners as a prospecting venture, and there has been no production from the property.
16. (b) No known Neighboring properties, and we can find no reference to this property in any private or Government reports.
16. (c) See 16 (b).
17. Not in production.
18. (a) The ore appears to be pyrolusite deposited between the bedding planes of furrugenous sandstone. The vein outcrop can be traced for more than a mile. There appeared to be more than one bedding of this deposit in this sandstone series. The vein was observed to be as narrow as two feet, and one cut showed what appeared to be a kidney of ore eight feet thick and of unknown horizontal and vertical dimensions.

18. (b) Recent assays show the ore runs from twenty to sixty percent manganese and well below tolerable limits on sulphur and phosphurous.
18 (c) No estimates until further exploration.
19.

THE EXPLORATION

20. Manganese. (bedded deposit)
21. We propost to diamond drill the property to determine the average thickness and extent of the deposit, and also to determine the possibility of additional underlying or overlying beds. It is estimated that forty to fifty holes from 100 to 500 feet in depth will prove or disprove the property, and that the time required for this work will be about eight months.
22. The deposits appear to be sedimentary in origin and, due to the extent and varying thickness of the outcrop, it seems reasonable to believe the deposit may be of great size and could certainly be of commercial value. The underlying and overlying beds noted and theorized are also of great interest.

THE REQUIREMENTS AND COSTS

23. (a) One core driller at $2.50 per hour. Two helpers at $1.75 per hour each.
(b) One superviser at $500.00 per month.
(c) No existing facilities.
(d) One 14 x 14 foot tent, $250.00.
(e) See (f).
(f) Rental of diamond drill and rods, $500.00 per month. Rental of small truck, $150.00 per month.
(g) Operator owns no equipment.
(h) Cost of bits, $4000.00.
(i) Gasoline, $200.00 per month. Assaying, $2000.00 total. Bulldozing, $1000.00 total.
24. After the project is approved the project could be started within two weeks' time, and take eight months to complete. A total of $30,000 is contemplated to be spent.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 1 - 1951
LANDON F. STROBEL
Executive Secretary

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 1477X

Date received 6-1-51

Participation

Charles N. Bell II
R.R. #1 - Box 248
Stonehenge
Golden, Colorado

Douglass V. Watrous
606 Colorado Avenue
Idaho Springs, Colo.

Ebhart Bionaz
Silver Plume, Colo.

Name and address of applicant

Date May 25, 1951

FILL IN THIS BLOCK

Date of application May 25, 1951

Estimated cost $30,000

Mineral or metal Manganese

Percentage of Government participation 75

Location of mine Snowmass, Colorado

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

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16—64067-1

THE PROPERTY

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    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.
15. State in detail how the ore could be shipped and how and where milled.
*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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19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

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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 Charles N. Bell II
(Signature of authorized official)

(Name of company)

25 May 1951
(Date)

Douglas T. Watson
(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

THE APPLICANT

1. Partnership
2. Same as above
3.
4. Charles H. Bell II - 14 years mine superintendent The King Lease, Inc. Camp Bird Mine, Ouray, Colorado.
Douglass V. Patrous - Engineer of mines - 16 years operating experience.
Ebhart Bionaz - 12 years' experience practical mining.

5. Owner
6. None
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8. New discovery
9. $7500.00, which is sufficient to cover applicants part of cost.
10a & b. Maria Mine No. 7 Lode described as follows: Beginning at corner No. 1 which is Government corner between Tracts 66, 67 and 68 and Section 32 in Township 8 South, Range 88 West, 6th P.M.; thence Easterly 600 feet to corner No. 2; thence, Northerly 1500 feet to Corner No. 3; thence, Westerly 600 feet to Corner No. 4; thence, Southerly 1500 feet to Corner No. 1, the place of beginning. Also the following Lode claims which join the above claim: Maria Mine No. 8, 9, 1, 2, 3, 4, 5 and 6, and the Claudine, all recorded in Book 165, Pages 142 to 145 in the Pitkin County Courthouse.
11. Panco Manganese property.
12. One mile Northwest of Snowmass, Colorado, and within 1000 feet of the Rio Grande Railroad and within 2000 feet of paved state highway No. 82.
13. The Roaring Fork River is within 1500 feet of the property and contains a more than ample water supply.
14. No equipment or buildings.
15. The ore could be concentrated on the property, loaded at a railroad siding to be constructed on the property and shipped to the C.F.&I. Steel Mill at Pueblo, Colorado. (Indications show that a good part of this ore may not have to be concentrated).
16. (a) Previous exploration consists of several open cuts to determine the thickness and horizontal extent of thevein outcrop. These cuts show the vein to lay in a furrugenous sandstone bed, dipping about thirty degrees in a Northerly direction. The vein, where exposed, varies from two to eight feet in thickness. The open cuts were made by the father of one of the present owners as a prospecting venture, and there has been no production from the property.
16. (b) No known Neighboring properties, and we can find no reference to this property in any private or Government reports.
16. (c) See 16 (b).
17. Not in production.
18. (a) The ore appears to be pyrolusite deposited between the bedding planes of furrugenous sandstone. The vein outcrop can be traced for more than a mile. There appeared to be more than one bedding of this deposit in this sandstone series. The vein was observed to be as narrow as two feet, and one cut showed what appeared to be a kidney of ore eight feet thick and of unknown horizontal and vertical dimensions.

18. (b) Recent assays show the ore runs from twenty to sixty percent manganese and well below tolerable limits on sulphur and phosphurous.
18 (c) No estimates until further exploration.
19.

THE EXPLORATION

20. Manganese. (bedded deposit)
21. We propost to diamond drill the property to determine the average thickness and extent of the deposit, and also to determine the possibility of additional underlying or overlying beds. It is estimated that forty to fifty holes from 100 to 500 feet in depth will prove or disprove the property, and that the time required for this work will be about eight months.
22. The deposits appear to be sedimentary in origin and, due to the extent and varying thickness of the outcrop, it seems reasonable to believe the deposit may be of great size and could certainly be of commercial value. The underlying and overlying beds noted and theorized are also of great interest.

THE REQUIREMENTS AND COSTS

23. (a) One core driller at $2.50 per hour. Two helpers at $1.75 per hour each.
(b) One superviser at $500.00 per month.
(c) No existing facilities.
(d) One 14 x 14 foot tent, $250.00.
(e) See (f).
(f) Rental of diamond drill and rods, $500.00 per month. Rental of small truck, $150.00 per month.
(g) Operator owns no equipment.
(h) Cost of bits, $4000.00.
(i) Gasoline, $200.00 per month. Assaying, $2000.00 total. Bulldozing, $1000.00 total.
24. After the project is approved the project could be started within two weeks' time, and take eight months to complete. A total of $30,000 is contemplated to be spent.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 1 - 1951
LANDON F. STROBEL
Executive Secretary

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 1477 X

Date received 6-1-51

Participation

Charles N. Bell II
R.R. #1 - Box 248
Stonehenge
Golden, Colorado

Douglass V. Watrous
606 Colorado Avenue
Idaho Springs, Colo.

Ebhart Bionaz
Silver Plume, Colo.

Name and address of applicant

Date May 25, 1951

FILL IN THIS BLOCK

Date of application May 25, 1951

Estimated cost $30,000

Mineral or metal Manganese

Percentage of Government participation 75

Location of mine Snowmass, Colorado

Date of filing MF-100

DMA Docket Number, if available

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?
*2. If a partnership, state names and addresses of partners.
*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.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

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.
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)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

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.
    (*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.
*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.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
    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.
15. State in detail how the ore could be shipped and how and where milled.
*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.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    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.

THE REQUIREMENTS AND COSTS

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.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
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.

(Name of company)	By Charles N Ball II (Signature of authorized official)
25 May 1951 (Date)	Douglas V Watrous (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

THE APPLICANT

1. Partnership
2. Same as above
3.
4. Charles N. Bell II - 14 years mine superintendent The King Lease, Inc. Camp Bird Mine, Ouray, Colorado.
Douglass V. Patrous - Engineer of mines - 16 years operating experience.
Hobart Bionas - 12 years' experience practical mining.

5. Owner
6. None
7.
8. New discovery
9. $7500.00, which is sufficient to cover applicants part of cost.
10a & b. Maria Mine No. 7 Lode described as follows: Beginning at corner No. 1 which is Government corner between Tracts 66, 67 and 68 and Section 32 in Township 8 South, Range 88 West, 6th P.M.; thence Easterly 600 feet to corner No. 2; thence, Northerly 1500 feet to Corner No. 3; thence, Westerly 600 feet to Corner No. 4; thence, Southerly 1500 feet to Corner No. 1, the place of beginning. Also the following Lode claims which join the above claim: Maria Mine No. 8, 9, 1, 2, 3, 4, 5 and 6, and the Claudine, all recorded in Book 165, Pages 142 to 145 in the Pitkin County Courthouse.
11. Yenco Manganese property.
12. One mile Northwest of Snowmass, Colorado, and within 1000 feet of the Rio Grande Railroad and within 2000 feet of paved state highway No. 82.
13. The Roaring Fork River is within 1500 feet of the property and contains a more than ample water supply.
14. No equipment or buildings.
15. The ore could be concentrated on the property, loaded at a railroad siding to be constructed on the property and shipped to the C.F.&I. Steel Mill at Pueblo, Colorado. (Indications show that a good part of this ore may not have to be concentrated).
16. (a) Previous exploration consists of several open cuts to determine the thickness and horizontal extent of thevein outcrop. These cuts show the vein to lay in a furrugenous sandstone bed, dipping about thirty degrees in a Northerly direction. The vein, where exposed, varies from two to eight feet in thickness. The open cuts were made by the father of one of the present owners as a prospecting venture, and there has been no production from the property.
16. (b) No known Neighboring properties, and we can find no reference to this property in any private or Government reports.
16. (c) See 16 (b).
17. Not in production.
18. (a) The ore appears to be pyrolusite deposited between the bedding planes of furrugenous sandstone. The vein outcrop can be traced for more than a mile. There appeared to be more than one bedding of this deposit in this sandstone series. The vein was observed to be as narrow as two feet, and one cut showed what appeared to be a kidney of ore eight feet thick and of unkno n horizontal and vertical dimensions.

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