G. C. Selfridge

400

Administrator, DMEA

December 17, 1952

Iron and Ferro-Alloy Division, DMEA

2738

Docket No. DMEA 2738 - Manganese
Jerold C. Beeley
Lost Apache Claim
Coconino County, Arizona

The subject application of October 10, 1952, was denied by the Field Team, Section IV, on November 18.

The Lost Apache claim, in Sec. 7, T. 13 N., R. 11 E., Coconino County, Arizona, is in the Long Valley mining district and is approximately 55 miles south of Winslow, Arizona. About 7 years ago a former locator, who later abandoned the claim, moved 500 to 600 tons of surface material with a bulldozer but could find no mineralized vein, outcrop, or bed. The ore consisted of float boulders of brilomelane with underlying sandstone and limestone in alternate beds.

Mr. Beeley was able to collect about 2 tons of 47 percent manganese boulders from the old workings. He estimated that with a $2,478.00 project he could: establish a temporary camp; borrow, rent, or buy mining equipment; turn over surface material in areas previously worked; cut a series of trenches; and drill some short diamond drill holes. He had done no work on the claim when the field examination was made on October 20, 1952.

The area where the manganese float boulders occur is about 200 by 300 feet. Much of this area was worked over by the early bulldozer and test pit operations. The claim does not show promise of yielding ore of acceptable grade.

The Field Team denied the application because the area was too limited and the chance of making a discovery was too small to justify Government participation. We concur in the denial, subject to the comment below:

It appears from the application and from the report of the two U. S. Bureau of Mines' engineers who made the field examination that the previous locator of the claim worked the surface over with a bulldozer but made no shipment, and consequently the 2 tons of float collected by the applicant represents the potential ore production from more than 500 tons of surface material. On the other hand, the covering memorandum from the Arizona-New Mexico Branch, Mining Division, Section IV, contains the following paragraph:

Most of the work presented in the publication seems to apply more to production than to [illegible] application [illegible] building. The [illegible] could be [illegible]

We have underlined the portion of the [illegible] publication which [illegible] however, [illegible] the reference to "plant operators" does [illegible]

George C. Selfridge

G. C. Selfridge, [illegible]

[illegible]

cc: [illegible]
[illegible]
[illegible]
[illegible]
G. C. Selfridge
M. D. Melcher, [illegible]
[illegible] Crittenden, [illegible]

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

224 New Customhouse
Denver 2, Colorado

November 18, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV 2 - 1952

Mr. Jerold C. Bosley
603 West Birch Ave.
Flagstaff, Arizona

Re: DMEA Docket 2738

Dear Mr. Bosley:

Reference is made to your application for Government aid in exploration work on the Lost Apache Claim.

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

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

Very truly yours,

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

Ogden Tweto
for A. H. Koschmann
Field Team, Region IV

HMC:oc
cc: Administrator (DMEA)
WRStorms
Subject
Chron.
AHKoschmann (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

WASHINGTON 25, D. C.

November 18, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2738 (Manganese) Jerold C. Bosley, Lost Apache Claim, Coconino County, Arizona

Enclosed are four copies of the final report on DMEA 2738, two copies of Form 3b, and a copy of the letter of denial to the applicant.

W. H. King
W. H. King

for Roden Trivett
A. H. Koschmann

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 24 1952

Form 3b detached in Docket & Control - BB - 11/24/52

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

November 18, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2738 (Manganese) Jerold C. Bosley, Lost Apache Claim, Coconino County, Arizona

Enclosed are nine copies of the final engineering report on DMEA 2738. The Survey did not participate.

The applicant requested $2,748 for trenching and diamond drilling.

The examining engineers believe the chances of hitting desired ore targets are very remote and they recommend that the application be denied.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
11-28-52
(date)

Arizona- ew Mexico Branch
xxxxxxxxxxxxxxxxxxxx

MI I DIVISIO
REGION IV

ovember 12, 1954

Memorandum

To : W. H. Kin, Denver, Colorado

From : Chief, Arizona-New Mexico Branch, Mining Div., Region IV

Subject : Final Report, Docket DRLA-2733, Lost Apache Manganese Claim, Lon Valley Mining District, Coconino County, Ariz.

Inclosed are original and 3 copies of the section on Summary, Conclusions and Recommendation, and the section on Engineering by C. A. Kumke and R. W. Apeton of the Bureau of Mines. A separate section on Geology will not be submitted by the Geological Survey.

The applicant for this loan located the Lost Apache claim in September but has done no work on the property to date, not even his location work. As the only manganese ore found has been float and as there seems little chance of finding appreciable amounts of ore, the examiners recommend that the application for an exploration loan be denied. I concur with their recommendations.

Most of the work proposed in the application would seem to apply more to production than to exploration, as applicant wants to uncover manganese-bearing boulders by bulldozing. The uncovered boulders then would be shipped as ore, as was done by past operators.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC: W. H. Kin (3)
R. F. Bride
DRLA-2733
JF

WRStorms:als

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA-2738, Lost Apache Manganese Claim

Long Valley Mining District

Coconino County, Arizona

Chas. A. Kumke, Mining Engineer
U. S. Bureau of Mines

R. W. Ageton, Mining Engineer
U. S. Bureau of Mines

November 1952

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By Chas. A. Kumke[1/] and R. W. Ageton[1/]

It was requested in October 1952 by the Operating Committee, Defense Minerals Exploration Administration, that the Field Team, Region IV, examine the Lost Apache manganese claim in Coconino County, Ariz. The applicant, Jerold C. Bosley of Flagstaff, Ariz., was asking for assistance under the Defense Production Act of 1950, as amended, in exploring his manganese prospect 25 road miles east of the Long Valley store and approximately 55 miles south of Winslow, Ariz.

Bosley proposed to establish a temporary camp, borrow, rent, or buy mining equipment to turn over the surface dirt in the area where manganese float boulders were found on the claim. He intended to follow up this operation by cutting a trench across this area and also by drilling a few short diamond drill holes. The applicant estimated the cost of this project at $2,478.00.

There is no mining equipment on the claim, nor has a camp been established.

On October 30, 1952, the claim was examined by Bureau of Mines engineers Chas. A. Kumke and R. W. Ageton. No work had been done on the claim by the present owner. During World War II, a former owner moved 500 to 600 tons of surface dirt with a bulldozer in an attempt to find ore in place, but no mineralized vein, outcrop or bed was found. In this turned-over dirt the present owner was able to collect about 2 tons of 47 percent manganese boulders.

1/ Mining Engineer, U. S. Bureau of Mines

The ore is psilomelane. The underlying rocks are sandstone and limestone, occurring in alternating beds. It would be difficult to outline a feasible plan for exploration, either by trenching or core drilling. The chance of hitting the desired ore targets would be too remote.

The area is too limited to warrant a project and the chance of making a discovery is not sufficiently promising to justify Government participation.

It is recommended that the application be denied.

DMEA-2738, LOST APACHE MANGANESE CLAIM
LONG VALLEY MINING DISTRICT
COCONINO COUNTY, ARIZONA

Engineering Report

By Chas. A. Kumke
Mining Engineer

and

R. W. Ageton
Mining Engineer
U. S. Bureau of Mines

November 1952

DMEA-2738, LOST APACHE MANGANESE CLAIM
LONG VALLEY MINING DISTRICT
COCONINO COUNTY, ARIZONA

CONTENTS

Engineering report	Page
Introduction	1
Acknowledgment	2
Location and accessibility	2
Physical features and climate	2
History and production	3
Ownership and extent	3
Description of deposit	4
Ore reserves	4
Proposed exploration	4
Conclusions	5
Recommendations	5

ILLUSTRATIONS

Figure		Following page
1	Location	2

INTRODUCTION

Under date of October 23, 1952, the Operating Committee, Defense Minerals Exploration Administration, requested that the Field Team, Region IV, make an examination of the Lost Apache manganese claim, Coconino County, Ariz. The applicant, Jerold C. Bosley, was requesting assistance from the Government under the Defense Production Act of 1950, as amended, to do exploration work estimated to cost $2,478.00.

On October 29, 1952, Chas. A. Kumke 1/ and Robert W. Ageton 1/ visited the Lost Apache property and examined the claim, particularly the area near the center of this claim where scattered manganese boulders appear as float. They also examined the better known and more extensive area some 14 miles to the west near Clints Wells where manganese float also occurs.

There was no mining equipment of any kind on hand and no attempt had been made to establish a camp. There was no water available on or near the claim. Water for camp or mining purposes would have to be hauled. No work had been done on the claim by the present owner.

Exploration work would have to start from scratch. The applicant proposed to rent or buy a small power shovel to uncover the veins or deposits if they existed. He also hoped to do some core drilling in an effort to locate the ore deposit. The applicant located the claim in September and applied for assistance in October. He stated that he was financially unable to perform any exploration work on his claim. If he were granted a loan, he intended to borrow his share of the money

---

1/ Mining Engineer, U. S. Bureau of Mines.

from his brother, Howard V. Bosley, or Mr. Al Stovall, a manganese operator formerly in the Globe, Ariz. district.

ACKNOWLEDGMENT

Acknowledgment is made to Jerold Bosley, the owner, for accompanying the engineers to the claim and over the surface showing.

LOCATION AND ACCESSIBILITY

The Lost Apache claim is situated in Sec. 7, T. 13 N., R. 11 E., Coconino County, Ariz., in what is known as the Battleground Ridge portion of the Long Valley mining district. Winslow, Ariz. is the nearest town and shipping point.

The property is reached by driving southeasterly for 18 miles from the Long Valley store over a well maintained logging road to Battleground Ridge, turning northeasterly for 6 miles along the ridge, then leaving the road by turning right (southerly) for 300 yards to the Lost Apache claim (fig. 1).

PHYSICAL FEATURES AND CLIMATE

An extensive pine forest stretches across the northern part of Arizona. It is referred to as the Mogollon forest and a large portion of this timbered area is a vast plateau that has an altitude of about 7,500 feet above sea level. The southern edge of this plateau is called the Mogollon Rim or just "the Rim" by the people who live under or below it on the slope that ultimately reaches the desert of southern Arizona.

From the attached location map (figure 1) it will be seen that the Lost Apache claim is on this plateau and only a few miles from the edge of the Rim. Due to the high elevation (7,500 feet) this area is apt

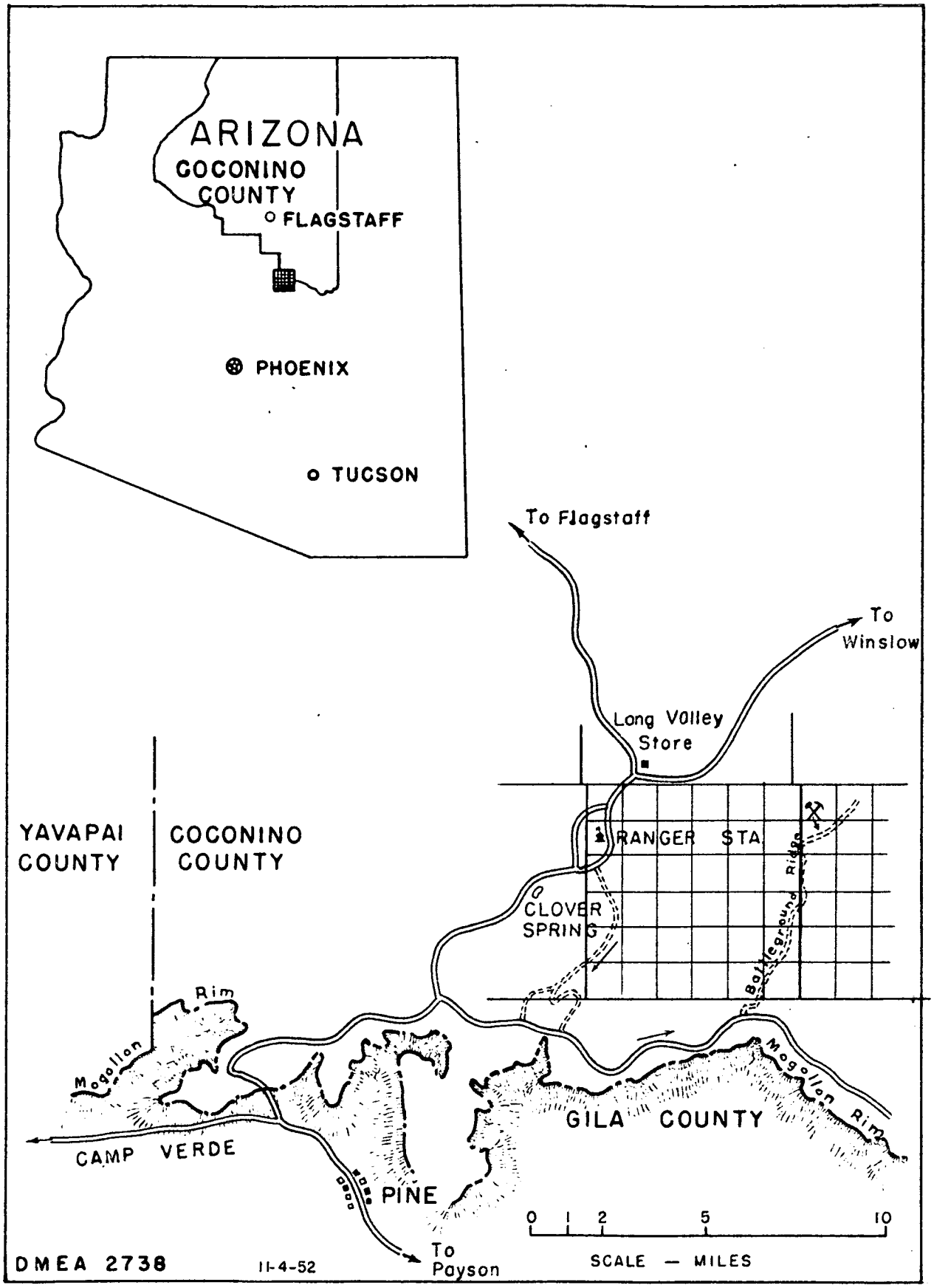

FIGURE I, LOCATION MAP, LOST APACHE MANGANESE CLAIM
COCONINO COUNTY, ARIZONA

to be inaccessible after the middle of October and stay that way until late spring on account of heavy snows. Occasionally an open winter alters conditions and some mining operations can be carried on through the winter season.

HISTORY AND PRODUCTION

No production has been recorded from the Lost Apache claim. It is probable that this claim has been held under another name in past years. There is evidence that some bulldozer work was done in an effort to turn up and expose manganese float boulders. Mr. Bosley, the present owner, stated that this dozer work enabled him to pick up almost 2 tons of high-grade manganese float which he trucked to his brother's operation at the Long Valley manganese 2 miles west of the Long Valley store. The examining engineers drove over to have a look at this small amount of ore. It is estimated that approximately 500 or 600 tons of surface material had been moved to expose about 2 tons of float boulders.

The present owner has performed no work whatever on this Lost Apache claim since he located the claim.

OWNERSHIP AND EXTENT

Jerold C. Bosley of Flagstaff, Ariz. is the sole owner of this property, which consists of one unpatented claim. This claim, called the Lost Apache, was located by the owner September 17, 1952 and was recorded in Book 36, Official Records, page 251, in Flagstaff, Ariz.

At the time of this examination, October 30, 1952, the location work had not been done by the owner.

DESCRIPTION OF DEPOSIT

There is no evidence of any vein or mineralized outcrop on the claim. Near the central portion of the claim, there is an area about 200 feet wide and 300 feet long where manganese float occurs. The float boulders are high-grade manganese. A sample by the engineers assayed 47.5 percent manganese, 2.3 percent silica, 3.8 percent iron, 0.08 percent phosphorus, 0.01 percent lead, 0.17 percent copper, and 0.05 percent zinc. These float boulders occur in the soil near the surface and sometimes in filled pockets.

The ore is psilomelane. The underlying rocks are sandstone and limestone occurring in alternating beds. No bedded deposits in the limestone have been uncovered.

ORE RESERVES

There are no measurable ore reserves.

PROPOSED EXPLORATION

The applicant proposed to rent or buy bulldozing and loading equipment to cut a deep trench across the float-carrying area and possibly to do 200 feet of core drilling in addition. His estimate of costs for this undertaking is listed as follows:

Core drilling (200 ft.), $5.00 per ft.	$ 1,000.00
Power shovel, $50.00 per day (4 days)	200.00
HD-5 skip loader, $50.00 per day (8 days)	400.00
Labor, supervision and consultants	300.00
Materials and supplies	93.00
Buildings and improvements	200.00
Miscellaneous	85.00
Owner's time (supervision)	200.00
Total cost	$ 2,478.00

In each item of the above list the amount of money would be inadequate.

CONCLUSIONS

No mineralized veins, outcrops, or beds have been found on the Lost Apache claim. There is an area near the center of the claim, 200 feet wide and about 300 feet long, where manganese float boulders of good grade can be found in the surface dirt. The present owner has performed no work on the claim. About 10 years ago a saw mill man, Mr. Jensen, turned over a good portion of the area where the manganese boulders were found with a dozer. He uncovered additional boulders but nowhere did he find a sign of a vein, deposit, or even a small pocket of ore. It would be difficult to outline a feasible plan for exploration either by trenching or core drilling. The chance of hitting the desired ore targets would be too remote.

The claim does not show promise of yielding ore of acceptable grade in sufficient quantity to improve minable reserves. From the traces of the dozer work, and a small amount of pit work done by Jensen some 10 years ago, it appears that he moved more than 500 tons of surface dirt to uncover about 2 tons of float boulders.

The area is too limited to warrant a project and the chance of making a discovery is not sufficiently promising to justify Government participation.

RECOMMENDATIONS

It is recommended that the application be denied.

FILE COPY
SURNAME:

Martin
Selfridge

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

Bed.

Administrator, DMEA

December 17, 1952

Iron and Ferro-Alloy Division, DMEA

Docket No. DMEA 2738 - Manganese
Jerold C. Bosley
Lost Apache Claim
Coconino County, Arizona

The subject application of October 12, 1952, was denied by the Field Team, Region IV, on November 18.

The Lost Apache claim, in Sec. 7, T. 13 N., R. 11 E., Coconino County, Arizona, is in the Long Valley Mining District and is approximately 55 miles south of Winslow, Arizona. About 7 years ago a former locator, who later abandoned the claim, moved 500 to 600 tons of surface material with a bulldozer but could find no mineralized vein, outcrop, or bed. The ore consisted of float boulders of psilomelane with underlying sandstone and limestone in alternate beds.

Mr. Bosley was able to collect about 2 tons of 47 percent manganese boulders from the old workings. He estimated that with a $2,478.00 project he could: establish a temporary camp; borrow, rent, or buy mining equipment; turn over surface material in area previously worked; cut a series of trenches; and drill some short diamond drill holes. He had done no work on the claim when the field examination was made on October 30, 1952.

The area where the manganese float boulders occur is about 200 by 300 feet. Much of this area was worked over by the early bulldozer and test pit operations. The claim does not show promise of yielding ore of acceptable grade.

The Field Team denied the application because the area was too limited and the chance of making a discovery was too small to justify Government participation. We concur in the denial, subject to the comment below:

It appears from the application and from the report of the two U. S. Bureau of Mines' engineers who made the field examination that the previous locator of the claim worked the surface over with a bulldozer but made no shipment, and consequently the 2 tons of float collected by the applicant represents the potential ore production from more than 500 tons of surface material. On the other hand, the covering memorandum from the Arizona-New Mexico Branch, Mining Division, Region IV, contains the following paragraph:

"Most of the work proposed in the application would seem to apply more to production than to exploration, as applicant wants to uncover manganese-bearing boulders by bulldozing. The uncovered boulders then would be shipped as ore, as was done by past operators."

We have underlined the portion of the above quotation which might seem to contradict the conclusion of the examining engineers that the former operator made no shipment. Our interpretation, however, is that the reference to "past operators" does not apply to the property reviewed herein.

George C. Selfridge

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

WSMartin:ls 12/17/52

CC: Docket
Admn. Read. File
Field Team, Reg. 4
W. S. Martin
G. C. Selfridge
N. B. Melcher, USBM
M. D. Crittenden, USGS

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Administrator, DMEA

DATE: December 17, 1952

FROM : Iron and Ferro-Alloy Division, DMEA

SUBJECT: Docket No. DMEA 2738 - Manganese
Jerold C. Bosley
Lost Apache Claim
Coconino County, Arizona

Noted
Com
HJ

The subject application of October 12, 1952, was denied by the Field Team, Region IV, on November 18.

The Lost Apache claim, in Sec. 7, T. 13 N., R. 11 E., Coconino County, Arizona, is in the Long Valley Mining District and is approximately 55 miles south of Winslow, Arizona. About 7 years ago a former locator, who later abandoned the claim, moved 500 to 600 tons of surface material with a bulldozer but could find no mineralized vein, outcrop, or bed. The ore consisted of float boulders of psilomelane with underlying sandstone and limestone in alternate beds.

Mr. Bosley was able to collect about 2 tons of 47 percent manganese boulders from the old workings. He estimated that with a $2,478.00 project he could: establish a temporary camp; borrow, rent, or buy mining equipment; turn over surface material in area previously worked; cut a series of trenches; and drill some short diamond drill holes. He had done no work on the claim when the field examination was made on October 30, 1952.

The area where the manganese float boulders occur is about 200 by 300 feet. Much of this area was worked over by the early bulldozer and test pit operations. The claim does not show promise of yielding ore of acceptable grade.

The Field Team denied the application because the area was too limited and the chance of making a discovery was too small to justify Government participation. We concur in the denial, subject to the comment below:

It appears from the application and from the report of the two U. S. Bureau of Mines' engineers who made the field examination that the previous locator of the claim worked the surface over with a bulldozer but made no shipment, and consequently the 2 tons of float collected by the applicant represents the potential ore production from more than 500 tons of surface material. On the other hand, the covering memorandum from the Arizona-New Mexico Branch, Mining Division, Region IV, contains the following paragraph:

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We have underlined the portion of the above quotation which might seem to contradict the conclusion of the examining engineers that the former operator made no shipment. Our interpretation, however, is that the reference to "past operators" does not apply to the property reviewed herein.

G. C. Selfridge

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

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

224 New Custemhouse
Denver 2, Colorado

November 18, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2738 (Manganese) Jerold C. Bosley, Lost Apache Claim, Coconino County, Arizona

Enclosed are four copies of the final report on DMEA 2738, two copies of Form 3b, and a copy of the letter of denial to the applicant.

W. H. King
W. H. King

Ogden Tweto
for A. H. Koschmann

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 24 1952

COPY

224 New Customhouse
Denver 2, Colorado

November 18, 1952

Mr. Jerold C. Bosley
603 West Birch Ave.
Flagstaff, Arizona

Re: DMEA Docket 2738

Dear Mr. Bosley:

Reference is made to your application for Government aid in exploration work on the Lost Apache Claim.

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

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

Very truly yours,

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

/s/ Ogden Tweto for
A. H. Koschmann
Field Team, Region IV

HMC:oc
cc: Administrator (DMEA)
WRStorms
Subject
Chron.
AHKoschmann (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

November 18, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2738 (Manganese) Jerald C. Bailey, Lost Apache Claim, Greenlee County, Arizona

Enclosed are nine copies of the final engineering report on DMEA 2738. The Survey did not participate.

The applicant requested $8,748 for trenching and diamond drilling.

The examining engineers believe the chances of hitting desired ore targets are very remote and they recommend that the application be denied.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
11-28-52
(date)

rizona-New Mexico Br[illegible]

[illegible]

[illegible]

[illegible]ember [illegible], 19[illegible]

[illegible]

To [illegible], Denver, Colorado

From : Chief, Arizona-New Mexico Branch, [illegible]

Subject : Final Report, Docket [illegible]-72, [illegible] Manganese [illegible] District, [illegible] County, Ariz.

Enclosed are [illegible] copies of [illegible] of [illegible] area of [illegible]. A separate report [illegible] will not be submitted by the Geological Survey.

The applicant for this [illegible] September [illegible] has done no work on the property to date, [illegible] location work. As the only manganese ore found has been float and as there seems little chance of finding appreciable amounts of ore, the examiners recommend that the application for an exploration loan be denied. I concur with their recommendation.

[illegible]

[illegible]

Walter R. Storms

[illegible]

[illegible]

[illegible]

[illegible]
[illegible]
[illegible]

[illegible]

[illegible]
[illegible]

[illegible]-673, [illegible] [illegible]

[illegible] Valley [illegible] District

[illegible] County, Arizona

[illegible], [illegible], [illegible] Engineer
[illegible] Bureau of Mines

[illegible], [illegible], [illegible]
[illegible] Bureau of Mines

[illegible]

[illegible]

By Chas. A. Kunke and [illegible] [illegible] [1/] [2/]

It was requested in October 1954 by the Operations Committee, Defense Minerals Exploration Administration, that the Field Test, Region IV, examine the West Apache manganese claim in Navajo County, Ariz. The applicant, Gerald [illegible] Bailey of Flagstaff, Ariz., was asking for assistance under the Defense Production Act of 1950, as amended, in exploring his manganese prospect 45 road miles east of the [illegible] Valley store and approximately 55 miles south of Winslow, Ariz.

Bailey proposed to establish a temporary camp, borrow, rent, or buy mining equipment to turn over the surface dirt in the area where manganese float boulders were found on the claim. He intended to follow up this operation by cutting a trench across this area and also by drilling a few short diamond drill holes. The applicant estimated the cost of this project at $[illegible],470.00.

There is no mining equipment on the claim, nor was a camp ever established.

On October 2[illegible], 1954, the claim was examined by [illegible] of Mines engineers Chas. A. Kunke and R. [illegible] [illegible]. No work had been done on the claim by the present owner. During [illegible] 21, a former owner moved 300 to [illegible] tons of surface dirt with a bulldozer in an attempt to find ore in place, but no mineralized veins, outcrop or bed was found. In this turned-over dirt the present owner was able to collect about a tons of 47 percent manganese boulders.

1/ Mining Engineer, [illegible] Bureau of Mines

The ore is pellicular. The underlying rocks are sandstone and limestone, occurring in alternating beds. It would be difficult to outline a feasible plan for exploration, either by trenching or core drilling. The chance of hitting the desired ore targets would be too remote.

The area is too limited to warrant a project and the chance of making a discovery is not sufficiently promising to justify Government participation.

It is recommended that the application be denied.

[illegible]-273[illegible], [illegible]
[illegible]
[illegible], [illegible]

Engineering Report

by Chas. A. Kunke
Mining Engineer

and

[illegible]
Mining Engineer
U. S. Bureau of Mines

October [illegible]

[illegible]733, [illegible] APACHE [illegible]
[illegible] VALLEY MINING DISTRICT
COCHISE COUNTY, ARIZONA

CONTENTS

Engineering report	Page
Introduction	1
Acknowledgment	2
Location and accessibility	2
Physical features and climate	2
History and production	3
Ownership and extent	3
Description of deposit	4
Ore reserves	4
Proposed exploration	4
Conclusions	5
Recommendations	5

ILLUSTRATIONS

Figure	Following page
1 Location	2

INTRODUCTION

Under date of October 23, 1952, the Operating Committee, Defense Minerals Exploration Administration, requested that the Field Team, Region IV, make an examination of the Lost Apache manganese claim, Cochise County, Ariz. The applicant, Jerold C. Cosley, was requesting assistance from the Government under the Defense Production Act of 1950, as amended, to do exploration work estimated to cost $2,475.00.

On October 29, 1952, Chas. A. Anske[1/] and Robert A. Peton[1/] visited the Lost Apache property and examined the claim, particularly the area near the center of this claim where scattered manganese boulders appear as float. They also examined the better known and more extensive area some 14 miles to the west near Clints Well where manganese float also occurs.

There was no mining equipment of any kind on hand and no attempt had been made to establish a camp. There was no water available on or near the claim. Water for camp or mining purposes would have to be hauled. No work had been done on the claim by the present owner.

Exploration work would have to start from scratch. The applicant proposed to rent or buy a small power shovel to uncover the veins or deposits if they existed. He also hoped to do some core drilling in an effort to locate the ore deposit. The applicant located the claim in September and applied for assistance in October. He stated that he was financially unable to perform any exploration work on his claim. If he were granted a loan, he intended to secure his share of the money

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1/ Mining Engineer, U. S. Bureau of Mines.

from his brother, Kenneth. Cosley, or Mr. M. Stovall, a mining operator formerly in the Globe, Ariz. district.

ACKNOWLEDGMENT

Acknowledgment is made to Jerold Cosley, the owner, for accompanying the engineers to the claim and over the surface showing.

LOCATION AND ACCESSIBILITY

The Lost Apache claim is situated in Sec. 7, T. 13 N., R. 11 E., Coconino County, Ariz., in what is known as the Battleground Ridge portion of the Long Valley mining district. Winslow, Ariz. is the nearest town and shipping point.

The property is reached by driving southeasterly for 11 miles from the Long Valley store over a well maintained logging road to Battleground Ridge, turning northeasterly for 6 miles along the ridge, then leaving the road by turning right (southerly) for 300 yards to the Lost Apache claim (fig. 1).

TOPOGRAPHY AND CLIMATE

An extensive pine forest stretches across the northern part of Arizona. It is referred to as the Coconino forest and a large portion of this timbered area is a vast plateau that has an altitude of about 7,500 feet above sea level. The southern edge of this plateau is called the Mogollon Rim or just "the Rim" by the people who live under or below it on the slope that ultimately reaches the desert of southern Arizona.

From the enlarged location map (figure 2) it will be seen that the Lost Apache claim is on this plateau and only a few miles from the edge of the Rim. Due to the high elevation (7,500 feet) this area is apt

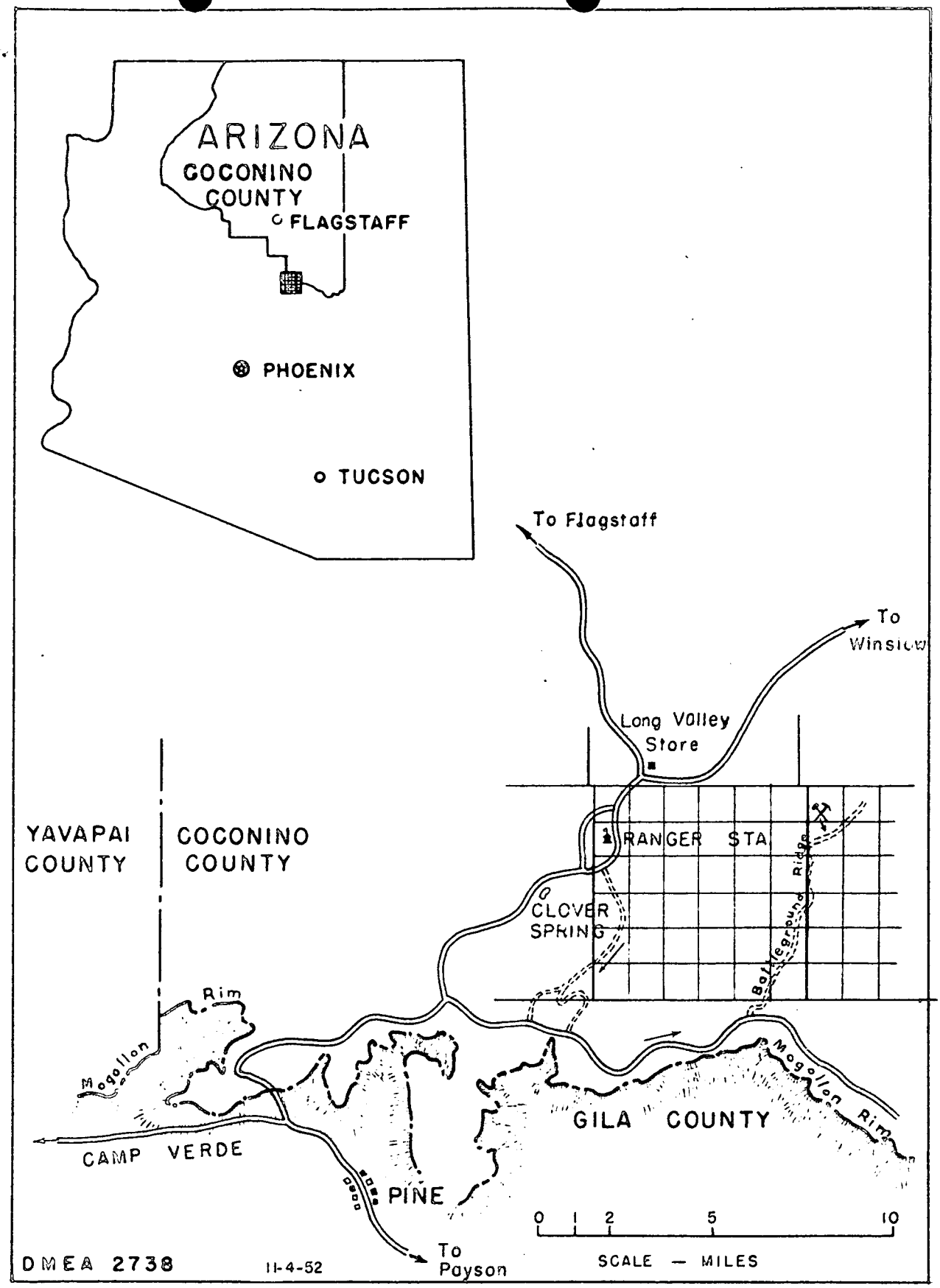

FIGURE I, LOCATION MAP, LOST APACHE MANGANESE CLAIM
COCONINO COUNTY, ARIZONA

to be inaccessible after the middle of October and May, but may until late spring on account of deep snows. Consequently, an open winter riters conditions and some light operations can be carried on during the winter season.

[illegible]

Information has been received from the last Space claim. It is probable that this claim has been held under another name in past years. There is evidence that some placer work was done in an effort to work up and expose manganese float boulders. Mr. [illegible], the present owner, stated that this placer work consisted in picking up almost a ton of high-grade manganese float which he traced to the brother's operation at the Iron Valley, manganese 2 miles west of the Iron Valley, store. The examining engineers drove over to take a look at this small amount of ore. It is estimated that approximately [illegible] tons of surface material had been moved to expose about a ton of float boulders.

The present owner has performed no work whatever on this last Space claim since he located the claim.

[illegible]

Jordan [illegible], of Flagstaff, Ariz. is the sole owner of this property, which consists of one unpatented claim. This claim, called the Last Space, was located by the owner [illegible], and was recorded in Book [illegible], Official Records, page [illegible], in the [illegible], Ariz.

At the time of this examination, October [illegible], [illegible], the location notice was not found [illegible] by the owner.

DESCRIPTION OF DEPOSIT

There is no evidence of any vein or mineralized outcrop on the claim. Near the central portion of the claim, there is an area about 200 feet wide and 300 feet long where manganese float occurs. The float boulders are high-grade manganese. A sample by the engineers assayed 47.5 percent manganese, 2.3 percent silica, 3.8 percent iron, 0.04 percent phosphorus, 0.01 percent lead, 0.17 percent copper, and 0.05 percent zinc. These float boulders occur in the soil near the surface and sometimes in filled pockets.

The ore is psilomelane. The underlying rocks are sandstone and limestone occurring in alternating beds. No bedded deposits in the limestone have been uncovered.

ORE RESERVES

There are no measurable ore reserves.

PROPOSED EXPLORATION

The applicant proposed to rent or buy bulldozing and digging equipment to cut a deep trench across the float-carrying area and possibly to do 200 feet of core drilling in addition. His estimate of costs for this undertaking is listed as follows:

Core drilling (200 ft), $5.00 per ft.	$ 1,000.00
Power shovel, 50.00 per day (4 days)	200.00
Rent skip loader, 50.00 per day (8 days)	400.00
Labor, supervision and consultants	300.00
Materials and supplies	93.00
Buildings and improvements	[illegible]
Miscellaneous	[illegible]
Lawyer's fees (supervision)	[illegible]
Total cost	[illegible]

A comparison of the above list the amount of money would be inadequate.

[illegible]

No mineralized veins, outcrops, or beds have been found on the Last Chance claim. There is an area near the center of the claim, [illegible] feet wide and about [illegible] feet long, where manganese float boulders of good grade can be found in the surface dirt. The present owner has performed no work on the claim. About 10 years ago a saw mill man, Mr. Jensen, turned over a good portion of the area where the manganese boulders were found with a dozer. He uncovered additional boulders but nowhere did he find a sign of a vein, deposit, or even a small pocket of ore. It would be difficult to outline a feasible plan for exploration either by trenching or core drilling. The chance of hitting the desired ore targets would be too remote.

The claim does not show promise of yielding ore of acceptable grade in sufficient quantity to improve minable reserves. From the traces of the dozer work, and a small amount of pit work done by Jensen some 10 years ago, it appears that he moved more than [illegible] tons of surface dirt to uncover about [illegible] tons of float boulders.

The area is too limited to warrant a project and the chance of making a discovery is not sufficiently promising to justify government participation.

RECOMMENDATIONS

It is recommended that the application be denied.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. dmea 2738
Metal or Mineral
Date Received 10-20-52
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: JEROLD C. BOSLEY
603 W. Birch Ave.
Flagstaff, Arizona

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Lode Mining Claim "Lost Apache" located approx. 12 mi. East of Clints Well in the Long Valley Mining district of Coconino County, State of Arizona ~~from~~ on Battleground Ridge about 300 yds. from the Sect. corner 18-12 in a NW direct. loc. T13N--R11E Sect. 7)(7 on U.S. government forest land.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Unpatented Lode Mining Claim located and claimed by me on 17th of Sept. 1952.

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

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Unpatented claim "Lost Apache" location given in item #3 above. No. 2423 Recorded in Book 36 Page 251 Official Red. Flagstaff, Ariz.

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. none

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

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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16—66551-1

5. *The exploration project.*—(State the mineral or minerals for which you to explore

MANGANESE

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

(*c*) The work will start within 60 days and be completed within 12 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated October 12th, 195 2

Jerold C. Bosley
(Applicant)

By Jerold C. Bosley
603 W. Birch
Flagstaff, Arizona

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

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

SEPARATE PAPER

References:

4. Physical Description-- There has been some minor bulldozer operations about 7 years ago that uncovered some high grade float ore. This was done by a sawmill owner who had a sawmill there and was a previous claimant, but has done no assessment work for several years now. I took up this claim Sept 17th, 1952.

(c) The claim is sandstone and limestone occuring near igneous rock formations. The only ore uncovered so far has been surface float that assayed 51% manganese with 5.6 iron the other impurities such as silica, alumina, lead, zinc, and phosphorus are below the percentages required by the mills and the government manganese purchasing program. An assay on the float ore is enclosed. No veins or deposits have been discovered that could lead to mining on a commercial and profitable scale. Hence, this application.

(d) The claim is located about 200 yds. off a good county forest road. It lies on a hill and the water drainage is excellent. This forest road was also a road to the old sawmill that was located there several years ago-- the road has good drainage and is bedded on sandstone, limestone and igneous rocks. Nearest rail terminal is Winslow, Arizona. The government will pay the freight f.o.b. car on manganese assaying 40% and better at any near rail terminal. A main county serviced road lies within 12 miles and there are residences at Long Valley Store 12 miles from the claim and on this county road.

(e) There is plenty of manpower available in the nearby towns such as Winslow 38 miles, Flagstaff 72 miles. Materials, supplies & equipment in good supply at Flagstaff, Prescott, an old mining center, and Phoenix the capital. Lots of Water at a portable manganese processing mill located now at Mormon Lake 42 miles away owned by my brother, Howard Bosley and Al Stovall of Phoenix. No electric power avail.

5. The exploration project-- A s stated before there has been some minor bulldozer work on the claim that merely uncovered the high grade float ore. No veins or deposits have been located of any merit or value. The bulldozer work was done by the previous claimant a sawmill man ignorant in the ways of mining and appears to have covered up more valuable signs and possible veins than he uncovered. We removed some of the float ore for testing and assaying ourselves. There is ~~xxxx~~ much float ore left--revealed by the rains and erosion, however no veins or deposits are evident. I propose to rent or buy a small power shovel, if granted a loan, and with the help of competent mining engineer uncover the veins or deposit if it exists. Some core drilling will be necessary in the beginning to try to locate the main veins or deposit. My brother, Howard V. Bosley of Flagstaff has leased several valuable claims at Long Valley 12 miles away and is now carrying on extensive mining operations there. He and Mr. Al Stovall of Phoenix have set up a portable manganese processing mill at Mormon Lake 42 miles away and are now processing about 200 yds. of manganese bearing earth there daily. I can rent equipment from them to carry on the exploration project and can hire their help and know how on this project.

5. The exploration project--(continued)

These men have been in the manganese mining business for the last 7 years and are wise in the ways of manganese mining. I have not showed them my claim, but I know I can borrow the necessary cash and equipment to carry out this project if granted a government exploration loan.

6. Estimate of costs--

(a) Independent contracts--	
Core drilling - 200 ft. req. @ $5.00 per foot.....	$ 1,000.00
Power Shovel Drifting @ $50.00 day- 4 days.....	200.00
HD-5 Skip Loader @ $50.00 per day - 8 days.....	400.00
(b) Labor, supervision, consultants--	
Power Shovel operator @ $25.00 day- 4 days.....	100.00
Mining Engineer or Geologic consultant-flat rate....	200.00
(c) Operating Materials & Supplies--	
Dynamite.....	35.00
Gasoline for the core drilling equipment and Power Shovel.....	48.00
Oil for same equipment.....	10.00
(d) Operating equipment--	
Rented and contracted for at rates listed above under item (a).	
(e) Rehabilitation and repairs. -none-	
(f) New buildings, improvements, installations.	
2000 ft. of lumber to construct a cabin and shed for the men and equipment while operating.....	200.00
(g) Miscellaneous--	
Analytical work.....	20.00
Accounting & bookkeeping.....	25.00
Employer's liability insurance.....	15.00
Payroll taxes.....	25.00
(h) Contingencies--	
Estimate of my own time and costs to me for transportation and etc.....	200.00
Total cost	2278.00

Iam prepared to furnish 25% of the total cost of this explorations project by cash that I can borrow either from my brother, Howard V. Bosley or Mr. Al Stovall of Phoenix who is very interested in developing the manganese deposits in this part of the country, because of his own investments here and the large outlay of cash in his manganese processing mill at Mormon Lake, Arizona.

Jerold C. Bosley

Jerold C. Bosley

Mining Division
Date Rec'd

OCT 1 1952

BUREAU OF MINES
Denver, Colorado