FILE COPY
SURNAME: 400

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

Hopkins
Martin

November 12, 1953

MEMORANDUM

To: Administrator

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application by Field Team Region IV
Docket No. DMEA-3150, Manganese
John N. Montoya, Applicant
Ryan Hill and White Hill No. 2 Claims
Socorro County, New Mexico

The applicant requested exploration assistance in the amount of $33,000.00 to explore for manganese on the Ryan Hill and White Hill No. 2 claims, Socorro County, New Mexico. It was proposed to explore 2 prospects, situated about 10 miles apart, by means of an adit and inclined shaft.

At the Ryan Hill prospect a mineralized fault zone which cuts a thick series of rhyolitic rocks is exposed for a strike length of about 100 feet.

A shallow cut and a 22 degree inclined shaft, 20 feet deep expose a zone 11 feet long and 3½ feet wide intensely impregnated with black manganese oxides. It is estimated that from 5 to 10 tons of ore containing 20-25 percent manganese are present in this zone.

The fault zone is prospected along its strike with several shallow pits and trenches that have exposed superficial layers of manganese, thin stringers and veinlets of manganese and iron oxides. About two tons of 10 percent manganese ore are estimated for the most favorable exposure.

The White Hill area is underlain with volcanic tuffs estimated to be 200 feet thick. These are overlain by a rhyolite flow a few tens of feet thick. At the base of the flow is a zone of volcanic glass which is a few feet thick.

The White Hill No. 2 prospect explores two intersecting faults that do not contain any valuable minerals.

R. C. G.
11-12-53

The examining engineer concluded that these two prospects have been adequately explored with negative results, and further exploration is not warranted. Neither the Ryan Hill nor White Hill No. 2 prospect reveals any geological evidence to indicate that significant amounts of ore would be discovered by additional exploration; therefore it was recommended that application Docket No. DMEA 3150 be denied.

We concur in the denial.

W. S. Martin, Chief
Iron and Ferro Alloys Division

JHOPKINS:foc
11-12-53
cc: Docket
Code 400
Admr. Reading File

November 12, 1953

MEMORANDUM

To: Administrator

From: Iron and [illegible]-Alloys Division, D[illegible]

Subject: Denial of [illegible]plication by Field Tea[illegible] Region IV
Docket No. [illegible]A-3150, Manganese
John M. Mon[illegible]toya, Applicant
Ryan Hill and [illegible] White Hill No. 2 Claims
Socorro County, New Mexico

The applicant requested exploration assistance in the amount of $33,000.00 to explore for manganese on the Ryan Hill and White Hill No. 2 claims, Socorro County, New Mexico. It was proposed to explore 2 prospects, situated about 10 miles apart, by means of an adit and inclined shaft.

At the Ryan Hill prospect a mineralized fault zone which cuts a thick section of rhyolitic rocks is exposed for a strike length of about 100 feet.

A shallow cut and a 22 degree inclined shaft, 20 feet deep expose a zone 11 feet long and 3½ feet wide internally impregnated with black manganese oxides. It is estimated that from 5 to 10 tons of ore containing 20-25 percent manganese are present in this zone.

The fault zone is prospected along its strike with several shallow pits and trenches that have exposed superficial layers of manganese, thin stringers and veinlets of manganese and iron oxides. About two tons of 10 percent manganese ore are estimated for the most favorable exposure.

The White Hill area is underlain with volcanic tuffs estimated to be 200 feet thick. These are overlain by a rhyolite flow a few tens of feet thick. At the base of the flow is a zone of volcanic glass which is a few feet thick.

The White Hill No. 2 prospect explores two intersecting faults that do not contain any valuable minerals.

The examining engineer concluded that these two prospects have been adequately explored with negative results, and further exploration is not warranted. Neither the Ryan Hill nor White Hill No. 2 prospect reveals any geological evidence to indicate that significant amounts of ore would be discovered by additional exploration; therefore it was recommended that application Docket No. DMEA 3150 be denied.

We concur in the denial.

W. S. Martin, Chief
Iron and Ferro Alloys Division

JHOPKINS:foc
11-12-53
cc: Docket
Code 400
Admr. Reading File

November 12, 1953

MEMORANDUM

To: Administrator

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application by Field Team Region IV
Docket No. DMEA-3350, Manganese
John M. Montoya, Applicant
Ryan Hill and White Hill No. 2 Claims
Socorro County, New Mexico

The applicant requested exploration assistance in the amount of $31,000.00 to explore for manganese on the Ryan Hill and White Hill No. 2 claims, Socorro County, New Mexico. It was proposed to explore 2 prospects, situated about 10 miles apart, by means of an adit and inclined shaft.

At the Ryan Hill prospect a mineralized fault zone which cuts a thick series of rhyolitic rocks is exposed for a strike length of about 300 feet.

A shallow cut and a 22 degree inclined shaft, 20 feet deep expose a zone 11 feet long and 3½ feet wide intensely impregnated with black manganese oxides. It is estimated that from 5 to 10 tons of ore containing 20-25 percent manganese are present in this zone.

The fault zone is prospected along its strike with several shallow pits and trenches that have exposed superficial layers of manganese, thin stringers and veinlets of manganese and iron oxides. About two tons of 10 percent manganese ore are estimated for the most favorable exposures.

The White Hill area is underlain with volcanic tuffs estimated to be 200 feet thick. These are overlain by a rhyolite flow a few tens of feet thick. At the base of the flow is a zone of volcanic glass which is a few feet thick.

The White Hill No. 2 prospect explores two intersecting faults that do not contain any valuable minerals.

The examining engineer concluded that these two prospects have been adequately explored with negative results, and further exploration is not warranted. Neither the Ryan Hill nor White Hill No. 2 prospects reveals any geological evidence to indicate that significant amounts of ore would be discovered by additional exploration; therefore it was recommended that application Docket No. IMSA 3150 be denied.

We concur in the denial.

W. S. Martin, Chief
Iron and Ferro Alloys Division

JHOPKINS:foc
11-12-53
cc: Docket
Code 400
Admr. Reading File

November 12, 1953

MEMORANDUM

To: Administrator

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application by Field Team Region IV
Docket No. DMEA-3150, Manganese
John H. Monkeys, Applicant
Ryan Hill and White Hill No. 2 Claims
Socorro County, New Mexico

The applicant requested exploration assistance in the amount of $33,000.00 to explore for manganese on the Ryan Hill and White Hill No. 2 claims, Socorro County, New Mexico. It was proposed to explore 2 prospects, situated about 10 miles apart, by means of an adit and inclined shaft.

At the Ryan Hill prospect a mineralized fault zone which cuts a thick series of rhyolitic rocks is exposed for a strike length of about 100 feet.

A shallow cut and a 22 degree inclined shaft, 20 feet deep expose a zone 11 feet long and 3½ feet wide intensely impregnated with black manganese oxides. It is estimated that from 5 to 10 tons of ore containing 20-25 percent manganese are present in this zone.

The fault zone is prospected along its strike with several shallow pits and trenches that have exposed superficial layers of manganese, thin stringers and veinlets of manganese and iron oxides. About two tons of 10 percent manganese ore are estimated for the most favorable exposure.

The White Hill area is underlain with volcanic tuffs estimated to be 200 feet thick. These are overlain by a rhyolite flow a few tens of feet thick. At the base of the flow is a zone of volcanic glass which is a few feet thick.

The White Hill No. 2 prospect explores two intersecting faults that do not contain any valuable minerals.

The examining engineer concluded that these two prospects have been adequately explored with negative results, and further exploration is not warranted. Neither the Ryan Hill nor White Hill No. 2 prospect reveals any geological evidence to indicate that significant amounts of ore would be discovered by additional exploration; therefore it was recommended that application Docket No. DMA 3150 be denied.

We concur in the denial.

W. S. Martin, Chief
Iron and Ferro Alloys Division

JHOPKINS:foc
11-12-53
cc: Docket
Code 400
Admr. Reading File

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Com

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

November 12, 1953

MEMORANDUM

To: Administrator

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application by Field Team Region IV
Docket No. DMEA-3150, Manganese
John N. Montoya, Applicant
Ryan Hill and White Hill No. 2 Claims
Socorro County, New Mexico

The applicant requested exploration assistance in the amount of $33,000.00 to explore for manganese on the Ryan Hill and White Hill No. 2 claims, Socorro County, New Mexico. It was proposed to explore 2 prospects, situated about 10 miles apart, by means of an adit and inclined shaft.

At the Ryan Hill prospect a mineralized fault zone which cuts a thick series of rhyolitic rocks is exposed for a strike length of about 100 feet.

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The fault zone is prospected along its strike with several shallow pits and trenches that have exposed superficial layers of manganese, thin stringers and veinlets of manganese and iron oxides. About two tons of 10 percent manganese ore are estimated for the most favorable exposure.

The White Hill area is underlain with volcanic tuffs estimated to be 200 feet thick. These are overlain by a rhyolite flow a few tens of feet thick. At the base of the flow is a zone of volcanic glass which is a few feet thick.

The White Hill No. 2 prospect explores two intersecting faults that do not contain any valuable minerals.

The examining engineer concluded that these two prospects have been adequately explored with negative results, and further exploration is not warranted. Neither the Ryan Hill nor White Hill No. 2 prospect reveals any geological evidence to indicate that significant amounts of ore would be discovered by additional exploration; therefore it was recommended that application Docket No. DMEA 3150 be denied.

Samples letters attached

We concur in the denial.

W S Martin

W. S. Martin, Chief
Iron and Ferro Alloys Division

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

224 New Customhouse
Denver 2, Colorado

October 12, 1953.

WSM

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Geologic Report of Examination - DMEA Docket 3150 (Manganese), John N. Montoya, Ryan Hill and White Hill #2, Socorro County, New Mexico.

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

John F. Shaw
For W. H. King

A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
10-23-53
(date)

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

224 New Customhouse
Denver 2, Colorado

October 12, 1953.

Mr. John W. Montoya
P. O. Box 295
San Antonio, New Mexico

Re: Docket DMEA-3150

Dear Mr. Montoya:

Reference is made to your application for Government aid on the Ryan Hill and White Hill #2 claims.

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

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

Very truly yours,

John F. Shaw
John F. Shaw
For W. H. King
Field Team, Region IV

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

HMC:cwm

cc: Docket
Administrator, DMEA
WRStorms
AFShride
AHKoschmann (2)
Chron.

Reviewed by
DMEA OPERATING COMMITTEE
10-23-53
(date)

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

September 30, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3150, Ryan Hill and White Hill No. 2 Claims (manganese), Socorro, New Mexico

Enclosed are 9 copies of the geologic report by John N. Falck of the U. S. Geological Survey covering the above docket.

It has been recommended that the loan be denied.

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

Enclosure (9)

Reviewed by
DMEA OPERATING COMMITTEE
10-23-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 4126, University Station
Tucson 5, Arizona

September 28, 1953

Memorandum

To: Field Team Region IV
(Through A. H. Koschmann)

From: John N. Faick

Subject: DMEA 3150, Ryan Hill and White Hill No. 2 Claims (Manganese), Socorro, New Mexico

Enclosed are the original and 8 copies of a report on the examination of the above prospect by John N. Faick of the U. S. Geological Survey. John N. Haynes, Engineer, U. S. Bureau of Mines, assisted in making the examination but will not submit a separate report because he has been assigned to other duties.

Two prospects, several miles apart, were examined in connection with this application. One prospect contained a few tons of low-grade manganese ore; the other was essentially unmineralized. Both prospects adequately explored the geological structures upon which the prospecting was done, and further exploration is unjustified.

It is unlikely that either of these prospects will ever produce significant amounts of strategic minerals; therefore it is recommended that the application for Government assistance be denied.

John N. Faick
Geologist

Reviewed by
DMEA OPERATING COMMITTEE
10-23-53
(date)

RYAN HILL AND WHITE HILL NO. 2 CLAIMS
(Manganese)
SOCORRO, NEW MEXICO

JOHN N. MONTOYA, APPLICANT

DMEA 3150

by

JOHN N. FAICK
GEOLOGIST, U. S. GEOLOGICAL SURVEY

Reviewed by
DMEA OPERATING COMMITTEE

10-23-53
(date)

RYAN HILL AND WHITE HILL NO. 2 CLAIMS
(MANGANESE)
SOCORRO COUNTY, NEW MEXICO

DMEA 3150

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INTRODUCTION

The Ryan Hill and White Hill No. 2 claims, Socorro, New Mexico, were examined in connection with a request for Government exploration assistance. The application was submitted to the Defense Minerals Exploration Administration by Mr. John N. Montoya of San Antonio, New Mexico. The application requested assistance for exploration estimated to cost $33,000. It was proposed to explore 2 prospects, situated several miles apart, by means of an adit and an inclined shaft. These two prospects are unpatented locations which were made by the applicant in 1952.

The properties were examined September 22, 1953, by the writer of this report, John N. Faick of the U. S. Geological Survey, and John Haynes of the U. S. Bureau of Mines. A separate report by the Bureau of Mines will not be prepared. The examiners were guided to the prospect by the applicant.

LOCATION, TOPOGRAPHY AND CLIMATE

The prospects are situated in the eastern foothills of the Magdalena Mountains and are a few miles west of San Antonio, New Mexico. The Ryan Hill prospect may be reached by driving south from San Antonio along U. S. Highway 85, a distance of 17 miles to the San Marcial crossroad. This road is followed westerly

14 miles to the Ryan Hill (also Geanero) ranch, an unoccupied unit of the Torreon ranch. The Ryan Hill prospect is N. 25° W. about 3000 feet from this abandoned ranch house and is about 100 feet south of the bottom of Ryan Hill Canyon.

The White Hill No. 2 prospect is about 10 miles by ranch road easterly of the Ryan Hill prospect and lies a couple hundred feet south of Walnut canyon. The White Hill prospect may be easily reached over 6 miles of fair ranch road extending westerly from San Antonio.

The Ryan Hill prospect lies about 1½ miles east of the Buena Vista claims, DMEA 2651, which was examined by this writer October 27, 1952.

The applicant reports that the Ryan Hill claim is in Section 1, T. 5 S., R. 3 W. and the White Hill No. 2 claim is in Section 32, T. 4 S., R. 1 E.

The claims are situated at an altitude of 5000 to 6000 feet in an area of moderate relief and sparse vegetation. Rainfall is estimated at about 15 inches per year and there are a few permanent springs in the area.

RYAN HILL PROSPECT

At the Ryan Hill prospect a mineralized fault zone, which cuts a thick series of rhyolitic rocks, is exposed for a

strike length of about 100 feet. This fault strikes about N. 52° W. and dips about 75 degrees southwest. The southeast end of the explored part of the fault was prospected by a shallow cut from which a 22 degree inclined shaft was driven about 20 feet. The surface cut exposed a zone about 11 feet long and 3½ feet wide which is intensely impregnated with black manganese oxides. These form a thin zone that extends to a depth of about 2 feet; however, a vein of similar material, about 3 inches wide, is exposed along the hanging wall side of the fault, and this vein extends to the bottom of the inclined shaft. It is estimated that from 5 to 10 tons of ore containing about 20-25 percent manganese are present in the zone.

About 15 feet southeast of the shaft a shallow trench (now filled) which was dug across the fault zone exposed altered and iron-stained rhyolite but found no manganese. There is no surface indication of manganese mineralization extending southeast from the shaft and open cut.

Northwest of the shaft very small amounts of manganese are found along the fault zone for a distance of about 100 feet, beyond which neither the fault nor the manganese oxides could be found. At the north end of the mineralized zone a small pit about 3 feet deep has prospected the weakly mineralized zones. In this

pit thin stringers and veinlets of manganese and iron-oxides cement moderately brecciated rhyolite. The manganese occurs as a surficial layer only 2 or 3 feet thick, and about 2 feet wide, and is estimated to contain only about 10 percent manganese. Only a couple of tons of low-grade ore are present at this pit.

The Ryan Hill prospect has been found by prospecting to be very small and to contain only a few tons of manganese ore. The prospect has been adequately explored, and further exploration is not justified.

WHITE HILL PROSPECT

The White Hill prospect is situated in Sec. 32, T. 4 S., R. 1 E. and is a few hundred feet south of Walnut Canyon. This area is underlain by volcanic tuffs that are estimated to be at least 200 feet thick. These are overlain by a rhyolite flow a few tens of feet thick. At the base of the flow is a zone of black perlitic volcanic glass which is a few feet thick in the several places where it is exposed. The bedded or banded flow rocks strike northerly and dip easterly from 20 to 30 degrees.

The White Hill prospect is situated at the base of the rhyolite flow near the east edge of the outcrop of tuff. This prospect explores two intersecting faults, the total displacement of which is several feet. Both faults strike almost north, and respectively dip 40 and 55 degrees east. The effect of these faults

is to leave wedge-like masses of perlite and tuff, a few feet wide, between walls of rhyolite. Alteration, which is probably due to surface weathering has altered the rhyolite on the west side to kaolinitic material. Other areas in the same general vicinity have also been strongly altered by weathering.

Although the applicant reported the presence of several metallic minerals none were found by the examiners. The prospect appears to be worthless as it does not contain valuable minerals. If the deposit were favorably situated it is possible that the tuff, and possibly the perlite, could be used commercially.

CONCLUSIONS AND RECOMMENDATIONS

The Ryan Hill prospect explores a fault zone in rhyolite for a strike length of about 100 feet. Small amounts of manganese oxides occur along this fault, but apparently do not extend beyond the area prospected. It is possible that from 5 to 10 tons of ore containing from 20 to 25 percent manganese could be produced from this prospect. The ore is a product of concentration by surface agencies and only extends to very shallow depths. The deposit is adequately explored by 2 pits and a shallow shaft and further exploration is not warranted.

The White Hill prospect explores a fault zone in rhyolite, and wedge-shaped blocks of tuff and perlitic material between the

fault walls, which are only a few feet apart. One wall of the rhyolite is altered to a clay-like material. There are no visible metallic minerals present; therefore further work at the prospect is not justified.

Neither the Ryan Hill nor White Hill prospects reveal any geological evidence to indicate that significant amounts of ore would be discovered by additional exploration; therefore it is recommended that this application, DMEA 3150, be denied.

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

224 New Customhouse
Denver 2, Colorado

October 12, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Geologic Report of Examination - DMEA Docket 3150 (Manganese), John M. Montoya, Ryan Mill and White Mill #2, Socorro County, New Mexico.

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

John F. Shaw
John F. Shaw
For W. E. King

A. H. Koschmann
A. H. Koschmann

Enclosures

DENIED

Reviewed by
DMEA OPERATING COMMITTEE
10-23-53
(date)

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

COPY

224 New Customhouse
Denver 2, Colorado

October 12, 1953.

Mr. John W. Montoya
P. O. Box 295
San Antonio, New Mexico

Re: Docket DMEA-3150

Dear Mr. Montoya:

Reference is made to your application for Government aid on the Ryan Hill and White Hill #2 claims.

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

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

Very truly yours,

/s/ John F. Shaw
For W. H. King
Field Team, Region IV

/s/ A. H. Koschmann
Field Team, Region IV

HMC:cwm

cc: Docket
Administrator, DMEA
WRStorms
AFShride
AHKoschmann (2)
Chron.

Reviewed by
DMEA OPERATING COMMITTEE

10-23-53
(date)

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

September 30, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3150, Ryan Hill and White Hill No. 2 Claims (manganese), Socorro, New Mexico

Enclosed are 9 copies of the geologic report by John N. Falck of the U. S. Geological Survey covering the above docket.

It has been recommended that the loan be denied.

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

Enclosure (9)

Reviewed by
DMEA OPERATING COMMITTEE
10-23-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 4126, University Station
Tucson 5, Arizona

September 28, 1953

Memorandum

To: Field Team Region IV
(Through A. H. Koschmann)

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Enclosed are the original and 8 copies of a report on the examination of the above prospect by John N. Faick of the U. S. Geological Survey. John N. Hayes, Engineer, U. S. Bureau of Mines, assisted in making the examination but will not submit a separate report because he has been assigned to other duties.

Two prospects, several miles apart, were examined in connection with this application. One prospect contained a few tons of low-grade manganese ore; the other was essentially unmineralized. Both prospects adequately explored the geological structures upon which the prospecting was done, and further exploration is unjustified.

It is unlikely that either of these prospects will ever produce significant amounts of strategic minerals; therefore it is recommended that the application for Government assistance be denied.

John N. Faick
Geologist

Reviewed by
DMEA OPERATING COMMITTEE
10-23-53
(date)

RYAN HILL AND WHITE HILL NO. 2 CLAIMS
(Manganese)
SOCORRO, NEW MEXICO

JOHN H. MONROYA, APPLICANT

DMEA 3150

by

JOHN N. FAICK
GEOLOGIST, U. S. GEOLOGICAL SURVEY

Reviewed by
DMEA OPERATING COMMITTEE

10-23-53
(date)

RYAN HILL AND WHITE HILL NO. 2 CLAIMS
(MANGANESE)
SOCORRO COUNTY, NEW MEXICO

DMEA 3150

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INTRODUCTION

The Ryan Hill and White Hill No. 2 claims, Socorro, New Mexico, were examined in connection with a request for Government exploration assistance. The application was submitted to the Defense Minerals Exploration Administration by Mr. John N. Montoya of San Antonio, New Mexico. The application requested assistance for exploration estimated to cost $33,000. It was proposed to explore 2 prospects, situated several miles apart, by means of an adit and an inclined shaft. These two prospects are unpatented locations which were made by the applicant in 1952.

The properties were examined September 22, 1953, by the writer of this report, John N. Faick of the U. S. Geological Survey, and John Haynes of the U. S. Bureau of Mines. A separate report by the Bureau of Mines will not be prepared. The examiners were guided to the prospect by the applicant.

LOCATION, TOPOGRAPHY AND CLIMATE

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1¼ miles to the Ryan Hill (also Gesmero) ranch, an unoccupied unit of the Terreon ranch. The Ryan Hill prospect is N. 25° W. about 3000 feet from this abandoned ranch house and is about 100 feet south of the bottom of Ryan Hill Canyon.

The White Hill No. 2 prospect is about 10 miles by ranch road easterly of the Ryan Hill prospect and lies a couple hundred feet south of Walnut canyon. The White Hill prospect may be easily reached over 6 miles of fair ranch road extending westerly from San Antonio.

The Ryan Hill prospect lies about 1½ miles east of the Buena Vista claims, DMRA 2651, which was examined by this writer October 27, 1952.

The applicant reports that the Ryan Hill claim is in Section 1, T. 5 S., R. 3 W. and the White Hill No. 2 claim is in Section 32, T. 4 S., R. 1 E.

The claims are situated at an altitude of 5000 to 6000 feet in an area of moderate relief and sparse vegetation. Rainfall is estimated at about 15 inches per year and there are a few permanent springs in the area.

RYAN HILL PROSPECT

At the Ryan Hill prospect a mineralized fault zone, which cuts a thick series of rhyolitic rocks, is exposed for a

strike length of about 100 feet. This fault strikes about N. 52° W. and dips about 75 degrees southwest. The southeast end of the explored part of the fault was prospected by a shallow cut from which a 22 degree inclined shaft was driven about 20 feet. The surface cut exposed a zone about 11 feet long and 3½ feet wide which is intensely impregnated with black manganese oxides. These form a thin zone that extends to a depth of about 2 feet; however, a vein of similar material, about 3 inches wide, is exposed along the hanging wall side of the fault, and this vein extends to the bottom of the inclined shaft. It is estimated that from 5 to 10 tons of ore containing about 20-25 percent manganese are present in the zone.

About 15 feet southeast of the shaft a shallow trench (now filled) which was dug across the fault zone exposed altered and iron-stained rhyolite but found no manganese. There is no surface indication of manganese mineralization extending southeast from the shaft and open cut.

Northwest of the shaft very small amounts of manganese are found along the fault zone for a distance of about 100 feet, beyond which neither the fault nor the manganese oxides could be found. At the north end of the mineralized zone a small pit about 3 feet deep has prospected the weakly mineralized zones. In this

pit thin stringers and veinlets of manganese and iron-oxides cement moderately brecciated rhyolite. The manganese occurs as a surficial layer only 2 or 3 feet thick, and about 2 feet wide, and is estimated to contain only about 10 percent manganese. Only a couple of tons of low-grade ore are present at this pit.

The Ryan Hill prospect has been found by prospecting to be very small and to contain only a few tons of manganese ore. The prospect has been adequately explored, and further exploration is not justified.

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The White Hill prospect is situated in Sec. 32, T. 4 S., R. 1 E. and is a few hundred feet south of Walnut Canyon. This area is underlain by volcanic tuffs that are estimated to be at least 200 feet thick. These are overlain by a rhyolite flow a few tens of feet thick. At the base of the flow is a zone of black perlitic volcanic glass which is a few feet thick in the several places where it is exposed. The bedded or banded flow rocks strike northerly and dip easterly from 20 to 30 degrees.

The White Hill prospect is situated at the base of the rhyolite flow near the east edge of the outcrop of tuff. This prospect explores two intersecting faults, the total displacement of which is several feet. Both faults strike almost north, and respectively dip 40 and 55 degrees east. The effect of these faults

is to leave wedge-like masses of perlite and tuff, a few feet wide, between walls of rhyolite. Alteration, which is probably due to surface weathering has altered the rhyolite on the west side to kaolinitic material. Other areas in the same general vicinity have also been strongly altered by weathering.

Although the applicant reported the presence of several metallic minerals none were found by the examiners. The prospect appears to be worthless as it does not contain valuable minerals. If the deposit were favorably situated it is possible that the tuff, and possibly the perlite, could be used commercially.

CONCLUSIONS AND RECOMMENDATIONS

The Ryan Hill prospect explores a fault zone in rhyolite for a strike length of about 100 feet. Small amounts of manganese oxides occur along this fault, but apparently do not extend beyond the area prospected. It is possible that from 5 to 10 tons of ore containing from 20 to 25 percent manganese could be produced from this prospect. The ore is a product of concentration by surface agencies and only extends to very shallow depths. The deposit is adequately explored by 2 pits and a shallow shaft and further exploration is not warranted.

The White Hill prospect explores a fault zone in rhyolite, and wedge-shaped blocks of tuff and perlitic material between the

fault walls, which are only a few feet apart. One wall of the rhyolite is altered to a clay-like material. There are no visible metallic minerals present; therefore further work at the prospect is not justified.

Neither the Ryan Hill nor White Hill prospects reveal any geological evidence to indicate that significant amounts of ore would be discovered by additional exploration; therefore it is recommended that this application, DMEA 3150, be denied.

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

224 New Customhouse
Denver 2, Colorado

August 28, 1953.

Memorandum

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

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docketing for Exploration Assistance

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

A. L. Gheen et al. (a partnership) Box 135 Worland, Wyoming	Manganese
Hanosh Mines, Inc. Box 447 Grants, New Mexico	Uranium
John N. Montoya P. O. Box 295 San Antonio, New Mexico	Manganese

W. H. King
W. H. King

Enclosures

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 3150
Metal or Mineral
Date Received 8/31/53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: John N. Montoya
P.O.Box.295
San Antonio, New Mexico. Socorro, County.

(*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. None other,

(*c*) If a corporation, add to above statement, titles, names and addresses of officers. No,

(*d*) If a partnership, add to the above statement the names and addresses of all partners. No,

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 The Land was located Dec, 1952.
And I have been working and have spend over $1000.00
In Labor and material.

(*b*) State any mine name by which the property is known. Ryan Hill and White Hill #2

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise I Have
Possetion of the land under the Mineral Rights.

(*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 No,

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

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

(*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.

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

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power. Have None.

16—66551-1

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

(*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. Have No Map.

(*c*) The work will start within 30 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. I have (12) Years prospecting

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

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

(*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. None.

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated July 22 A.D. 1953., 195...

John H. Montoya
(Applicant)

By

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

5 A. Manganese.

B. With (3) men will work Tunnel to depth of 200.ft.

the incline about 200.ft. will drop to 93/00 per cent

will spred to where I can work (6) men or more.

The vain shows better ore every (10)ft.

Location Ryan Hill, Sec. 1 Twp5s,R3w.Recorded in Book156

Page. 394

White Hill. Located, Sec.32Twp.4s.R.1.E.

C. Work will start within (30)days.

D. I have (12)Years experience here and in Alaska,

Prospecting.

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
AUG 31 1959

6.

A. None $33,000.00.

B.Labor Sup, will be done by me and men which I will employed

will be experience mimning men.

C. material and suplies will cost including power $150.00

A month.

D. Will purchase a Jack Hammmer $800.00 and Truck $3200.00

E. Will have to have $500.00 for tools repair per Month.

F. To Start (One) (TwoRoom House)for living and lodging and One tool House. $2000.00

G. Micelaneous Expenses $1500.00

H. Contingencies. $10,000.00

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 31 1953

(6) Total Need to do the job will be ($ 30.000.00) Thirty Thousand Dollars,

(A) None (B) Will do the Consulting as soon as I know The Amount of Ore that is required that is there.

(C)Material Needed will be a Compressor Jack hamer Pipe, ans Truck

(D)None (E)None (F) None (G) None (H) None.

(7) Yes (B) Working and separating the work.

Comments

Vains of Piezo electric quarts Crystals are Avalable Too.

(95ft)Traingle Vains Runs all over the surface.

And Indication of a (200)ft Under vain is possible.