Administrator, DMEA

4-23-53

Iron and Ferro-Alloys Division, DMEA

2900

Denial of application by Field Team, Region IV
Docket No. DMEA-2900 - Manganese
Tuffy Nunn and Finley Dunagan
Blackie Claims
Dona Ana County, New Mexico

The applicants requested exploration assistance in the amount of $33,000.00 to explore a manganese deposit, known as Velarde, on the Blackie Claims in Dona Ana County, New Mexico.

The Velarde manganese deposits are situated in a country of Paleozoic sedimentary rocks, which are predominatly limestones, some cherty banded and some sandy, and a few beds of sandstone. Some shale beds probably occur interbedded with the limestones.

The area is traversed by a number of northerly trending, generally steeply dipping faults, some of which have a large apparent displacement. All of the manganese deposits appear to be associated with three of these faults which have no great displacement.

Manganese minerals consisting of psilomelane, manganite, pyrolusite and wad associated with calcite, strontianite (?) and jasper occurs in fault openings and solution cavities having a very irregular pattern. The maximum length of mineralization along the strike of the faults is about 150 feet and may average about 30 feet in depth.

The Field Team has calculated about 50 tons of indicated ore and has inferred reserves of 250 tons containing 22% manganese which could be mined by simple mining methods but at prohibitive costs. They conclude that these ore reserves are very small and significant discovery that would increase these reserves appreciably is not within the realm of possibility.

Because of the apparently hopelessness of making a significant discovery and the probable uneconomic results to be derived from any operations, the Field Team recommends that the request for Government aid Docket No. DMEA 2900 be denied.

We concur in the denial.

W. S. Martin

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

JHopkins:foc
cc: Docket
Code 400
Adm. Reading File
Opr. Comm.

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

C
O
P
Y

224 New Customhouse
Denver 2, Colorado

April 7, 1953.

Mr. Tuffy Nunn
Mr. Finley Dunagan
P. O. Box 665
Deming, New Mexico

Re: Docket DMEA-2900

Gentlemen:

Reference is made to your application for Government aid on the Blackie 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 revels 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 that your application for exploration aid is denied.

Very truly yours,

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

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

cc: Administrator, DMEA
WRStorms
AFShride
Subject
Chron.
Koschmann (2)

400

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

224 New Customhouse
Denver 2, Colorado

April 7, 1953.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2900 (Manganese), Tuffy Nunn and Finley Dunagan, Blackie Claims, Dona Ana County, New Mexico.

Attached are the original and three copies of the final report on the subject docket, the original and one copy of Form 3b, and a copy of the letter of denial to the applicant.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

Reviewed by
DMEA CLEARING COMMITTEE
4-17-53
(Date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

40's file

Mining Division
Region IV

April 7, 1953.

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
APR 10 1953

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, MMA Docket 2500 (Manganese), Blackie Claims, Doña Ana County, New Mexico.

Enclosed are nine copies of the final engineering report on the subject docket.

The applicants requested $33,000.00 for road building, sinking and drifting. The examining engineer believes that any additional exploration on this property is not warranted.

We recommend that the application be denied because of the improbability of making a significant discovery of manganese.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

Brought to
Mining Division Conference
4-17-53
(date)

DEPARTMENT OF THE INTERIOR
Public Lands Administration
RECEIVED
APR 10 1953

MINING DIVISION
REGION IV

March 27, 1953

Memorandum

To : W. R. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Branch, Mining Div., Region IV

Subject : Final Report, Docket LM&A-2900, Slackie (Velarde) Manganese Deposits, Rincon Mining District, Dona Ana County, N. Mex.

Enclosed are original and 8 copies of the above report by John H. Soule' of the Bureau of Mines. As the Geological Survey did not participate in this examination, a separate report on Geology will not be submitted.

Because of high mining costs and the improbability of discovering substantial amounts of manganese ore by additional exploratory work, the examiner recommends that an exploration loan be denied. I concur with this recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC: W. R. King (3)
A. F. Shride
LM&A-2900
DF

WRStorms:als

RTB
4/28/53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA-2900, Blackie (Valencia) Manganese Deposits,

Sierra Mining District,

Doña Ana County, N. Mex.

John H. Soule', Mining Engineer
U. S. Bureau of Mines

March 1953

4-17-53

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By John H. Soule[1]

The Blackie (Velarde) manganese deposits were leased by F. Dunagan and T. Nunn, who applied for Government assistance under the Defense Production Actoof 1950, as amended, to explore the property. The application, Docket DMEA- 2900, was referred to the field for an examination, the examination being made on March 19, 1953. Previous examinations of the property were made in 1940, 1942 and 1943 by 5 Federal engineers and geologists.

Infrequent attempts have been made to operate the property over a time span exceeding 30 years. Total production from the deposits probably does not exceed 250 tons of ore that contained about 22 percent manganese.

Ownership of the property has changed since the examinations of a decade ago. The locations now are held by C. Hirsch, J. Jones and E. F. Carmichael, all of Garfield, N. Mex. As previously mentioned, the claims are leased to F. Dunagan and T. Nunn who are operating the property in a small way at the present time.

Manganese oxide minerals, predominantly psilomelane, occupy irregular openings along faults and associated solution cavities. The minerals occur in thin seams lining the cavities and also as disseminations in associated gangue minerals. These gangue minerals are calcite, jasper and strontianite (?).

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

Minable ore reserves were calculated and resulted in a few tons of ore being classed as measured, about 50 tons as indicated, and about 250 tons as inferred. All classes of minable reserves were estimated to contain about 22 percent manganese.

The application for Government assistance proposed a project that consisted of road rehabilitation and construction, 300 feet of drifting, and 60 feet of shaft sinking. The work was to cost in excess of $20,000.00.

The conclusions, with 2 exceptions, were favorable to the project. The exceptions were the hopelessness of making a significant discovery and the probable uneconomic results derived from any operations. Because of the above exceptions, it must be recommended that the request for Government aid, Docket DMEA-2900, be denied.

DMEA-2900, BLACKIE (VELARDE) MANGANESE DEPOSITS, RINCON MINING DISTRICT, DONA ANA COUNTY, N. MEX.

Engineering Report

By John R. Seule'
Mining Engineer
U. S. Bureau of Mines

March 1953

DMEA-2900, BLACKIE (VELARDE) MANGANESE DEPOSITS,
RIMROK MINING DISTRICT
DONA ANA COUNTY, N. MEX.

CONTENTS

Engineering report — Page

Introduction 1
Acknowledgments 2
Location, topography and physical features.. 2
History and production 3
Ownership and extent 4
Description of the deposits 4
Minable ore reserves 5
Present status 6
Project proposals with costs 6
Conclusions 7
Recommendations 8

ILLUSTRATIONS

Figure — Following page

1 Location map 2
2 Claim map 4
3 Topographic and geologic sketch 4

INTRODUCTION

Tuffy Munn and his partner, Finley Dunagan, both of Deming, N. Mex. and operating as the Tres Hermanos Mining Co., have leased a group of mining claims containing deposits of manganese ores. They have applied for Government assistance to explore the deposits. The application, Docket DMEA-2900, was returned to the field for an examination of the property. This examination was made on March 19, 1953 by John H. Soule', Mining Engineer of the Bureau of Mines. Tuffy Munn, one of the lessees, showed the property to the examining engineer.

The above manganese deposits are in the Rincon Mining District, Dona Ana County, New Mexico. They have been examined by the following engineers of the Bureau of Mines. Lowell S. Moon examined the deposits in June 1940. He reported them as the Luchini claims. In July 1942, L. G. Marshall examined the deposits, followed by Paul L. Russell in September of the same year. The above engineers reported on the property as the Velarde Manganese Property. Charles H. Johnson examined the deposits in October 1942 with respect to an application for an access road which was denied. Sherman K. Neuschel of the Geological Survey studied the deposits, reported on them in July 1943, and reported them as the Velarde Manganese Property. The different names, Luchini and Velarde, are doubtlessly derived from the men of these names, who were members of the group that located the claims. None of the examining engineers nor the geologist were favorably impressed with the potentialities of the deposits.

ACKNOWLEDGMENTS

Acknowledgment is due Tuffy Nunn, who showed the examining engineer over the property and furnished information about the deposits. Acknowledgment also is made of the information derived from the reports submitted by Federal engineers and geologist who had previously examined the property.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The Blackie (Velarde) manganese deposits are located near the center of sec. 10, T. 18 S., R. 3 W. in the Rincon Mining District, Dona Ana County, N. Mex. (see figure 1). The property is reached by leaving the junction of U. S. Highway 85 and New Mexico Highway 27 just west of the town of Hatch, N. Mex., travelling northwesterly on U. S. Highway 85 for 2.8 miles, at this point, turn sharply right off the highway and follow northeasterly, a dirt road through a farm and farmyard for 0.6 miles, thence sharply right for 0.1 mile, thence sharply left and proceed northeasterly for 5.8 miles to the mine, taking no abrupt turns off the main road. The road ends at the important mine workings. Other workings seen from the end of the road are accessible by foot trail.

The terrain is very rugged with steep canyon walls and prominent cliffs. The deposits lie at an average altitude of about 4,600 feet in the southern end of the Sierra Caballo.

Rainfall is scanty, averaging about 12 inches per year. Winter snowfall usually is light and occasional summer thunder showers may

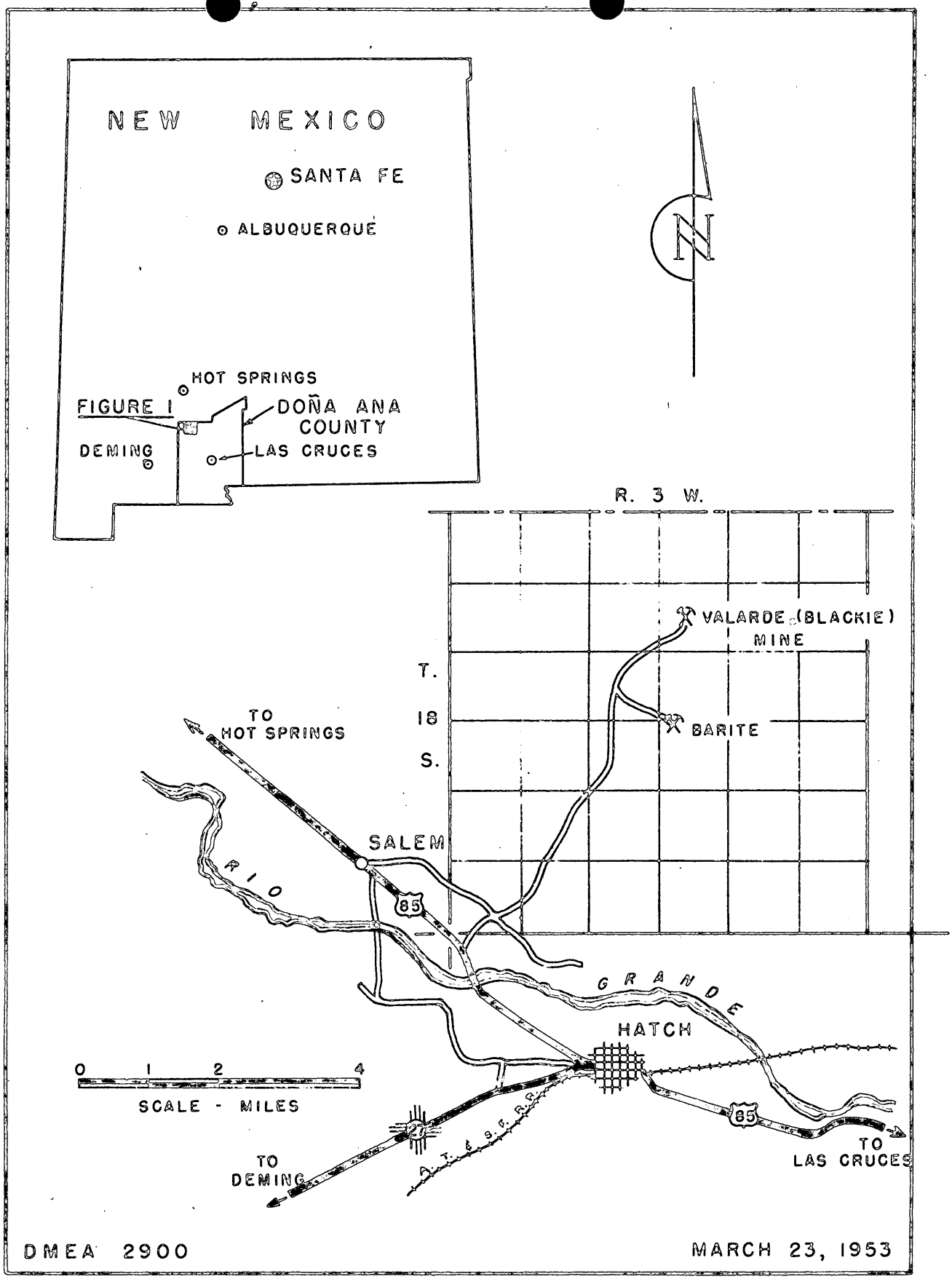

FIGURE 1.- LOCATION MAP, VALARDE (BLACKIE) MANGANESE DEPOSITS
RINCON MINING DISTRICT DOÑA ANA COUNTY, NEW MEXICO

be heavy. There are no permanent streams in the area and all water must be hauled from the Rio Grande, about 6 miles to the southwest, or from farther sources. Temperature extremes usually are of short duration.

There are no living accomodations at the mine, excepting one primitive shack. All such, as well as minor supplies, are obtainable at Hatch. Major mining supplies may be obtained at El Paso, Tex., about 90 miles by road to the south.

HISTORY AND PRODUCTION

Little is known of the early history of the deposits. It is reported that J. Velarde was the original locator and worked the property by hand methods, taking the carefully sorted ore out on burros. This ore was reportedly sold for $6.00 per ton. Interest in the deposits was revived during both World Wars, but little work was done. Recently, Tuffy Munn and Finley Dunagan leased the property and have shipped a little ore.

Early production was small, judging from the extent of the old workings. It is doubtful if this production exceeded 100 tons of ore. In June 1942, a reported 14 tons of 20 percent ore was shipped, followed by an additional 4 tons a little later. Since July 1952, a total of 110.4 tons of ore has been shipped that contained an average of 22.9 percent manganese. About half of this recent production was sent to the U. S. Manganese Corp. mill at Deming, N. Mex. The remainder was sent to the stock-pile at Deming that is being administered by the General Services Administration. It is likely that the total production from the Velarde deposits has been less than 250 tons of ore that contained a little over 20 percent manganese.

OWNERSHIP AND EXTENT

Nothing is known about the early claims located upon the Velarde manganese deposits, other than J. Velarde was reportedly the first locator. In 1940, these deposits were covered by a group of 5 unpatented claims: the Mule, Manganese, Crystal, Number 2, and Number 3. The locators were J. Velarde, Alfredo Duran, Benjamin Luchini, C. F. Kaublauch, and Felipe G. Lopez, all of Garfield, N. Mex. These locations evidently were allowed to lapse. The claims were relocated later by C. B. Hirsch, J. Jones, and H. F. Carmichael, all also of Garfield. Only 2 claims were located by this latter group of men, the Blackie No. 1 and Blackie No. 2 (see figure 2). In June 1952, Finley Dunegan and Tuffy Munn, as the Tres Hermanas Mining Co., leased the 2 claims for 5 years. Recent locations by Munn completely surround the Blackie claims.

DESCRIPTION OF THE DEPOSITS

The Velarde manganese deposits are situated in a country of Paleozoic sedimentary rocks. These rocks are predominantly limestones, some cherty banded and some sandy, and a few beds of sandstone. No shale was observed but thin beds probably occur interbedded with the limestones.

A number of northerly trending, generally steeply dipping faults traverse the area as shown in figure 3. Some of these faults have a large apparent displacement. All of the manganese deposits seem associated with three of these faults which have no great displacement.

Psilomelane, the most abundant manganese mineral, with minor manganite, pyrolusite and wad, occurs in fault openings and in solution

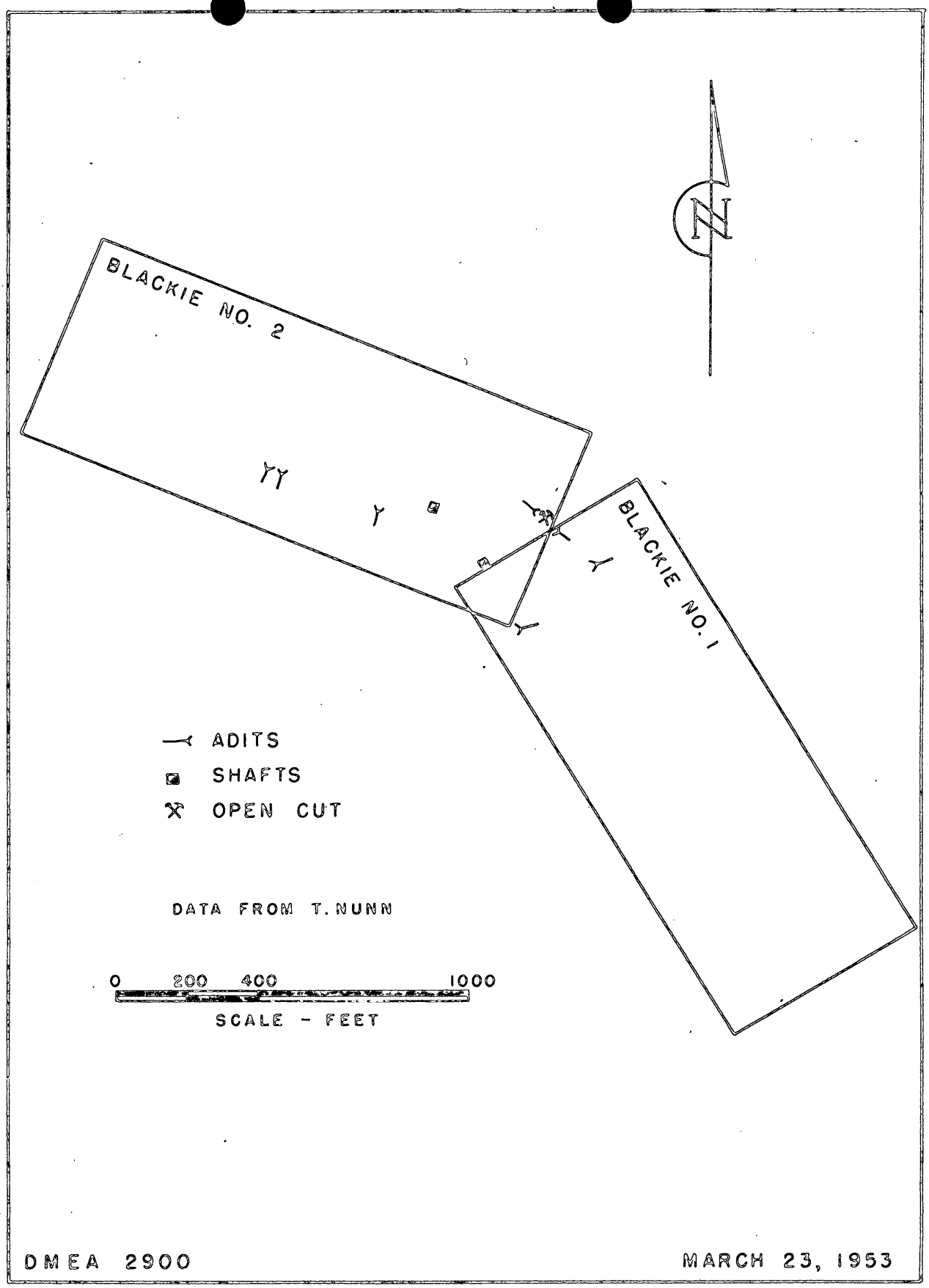

FIGURE 2. - CLAIM MAP, BLACKIE MANGANESE DEPOSITS

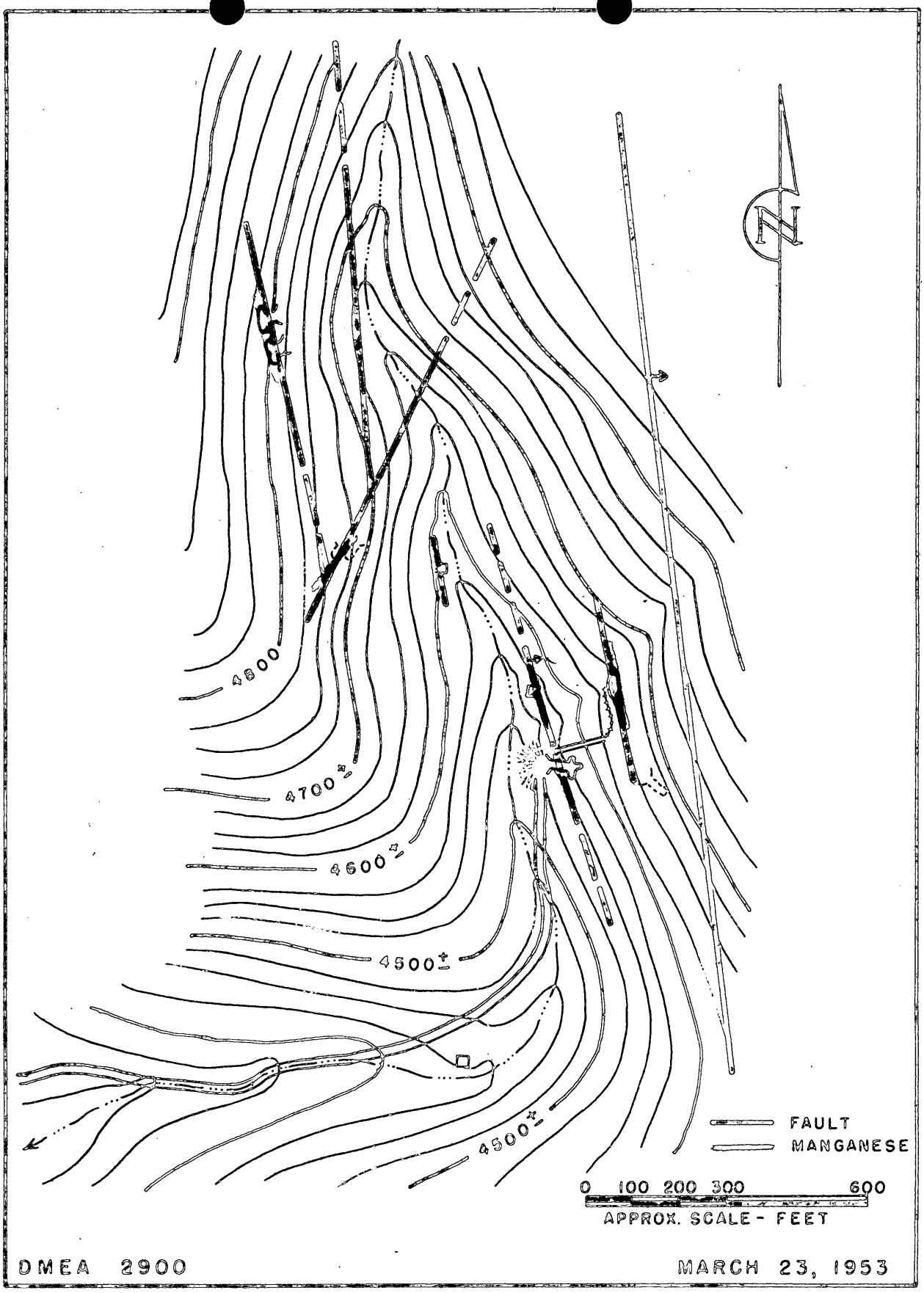

FIGURE 3. - TOPOGRAPHIC & GEOLOGIC SKETCH

cavities associated with the faults. These minerals form small seams of nearly pure mineral, as well as disseminations through the gangue minerals occupying the openings. Many of the openings are incompletely filled, giving rise to small caves. The gangue minerals are calcite, strontianite (?), and jasper, the latter underlying the ore in many places. Some of the calcite is coarsely crystalline but none was of optical quality.

As the openings in the faults and solution cavities were extremely irregular, the manganese ore bodies are likewise irregular. They pinch and swell, reaching maximum widths of 5 to 6 feet in an equivalent strike length. The solution cavities depart from the faults along seemingly certain bedding planes, and give some of the deposits a flat attitude rarely exceeding 4 feet in thickness. All of the deposits, irrespective of the attitude, have similar mineralogy and irregularity of shape.

Judging by the outcrops and mine workings, the zones of the manganese ore bodies are very limited in extent, both laterally and vertically. The maximum length of mineralization noted was about 150 feet along the strike of one of the faults. The maximum depth of the mineralized zone probably does not exceed 50 feet, and may average only about 30 feet.

MINABLE ORE RESERVES

A few tons of mined ore may be classed as measured. Indicated reserves are on the order of 50 tons of ore containing about 22 percent manganese. Assuming a total length of 900 feet for all mineralized zones, an average depth of 30 feet and an average thickness of 1 foot,

there may be inferred 1,250 tons of manganiferous material. Of this, only 20 percent or 250 tons may be considered minable because of thickness and grade limitations. The grade of the inferred ore would be about 22 percent manganese.

The above word, minable, may need a little explanation. As the ore bodies are small and very irregular, and careful control of the mining is necessary to produce an acceptable product, the mining costs will be very high. It is doubtful if an economic operation could result under present conditions.

PRESENT STATUS

Finley Dunagan and Tuffy Nunn are working the Velarde manganese deposits at the present time with Nunn as superintendent. Operations are on a very small scale with only 2 men on the payroll. From the amount of work seemingly done since July 1952, the operations have been intermittent. Nearly 120 feet of drifting, plus some road rehabilitation and construction, and some shallow test drilling with a jackhammer was accomplished during the past 7 months. About 110 tons of ore was shipped during this period, largely from the above development.

PROJECT PROPOSALS WITH COSTS

The proposed project as outlined in the application for Government assistance consisted of repairing half a mile of road, constructing 300 feet of new road, driving one adit for 100 feet, extending a present shaft from 40 to 100 feet, and 200 feet of drifting from the bottom of the shaft. The estimated costs of this work are given in the following table.

TABLE I - Applicant's Proposed Costs

Item	Cost
Repair half a mile of road	$ 586.00
Construct 300 feet of new road	532.33
Drive 100 feet of adit	2,779.80
Sink 60 feet of shaft, includes headframe installation and cleaning present shaft	6,897.92
Drive 200 feet of drift from shaft bottom	8,837.20
Contingency	500.00
Total	$20,183.25

In addition, there was listed equipment and supplies valued at $8,432.14. Some of this would not be applicable to a project such as proposed. Other supplies were listed for which no value was given. The costs outlined in the above table would be reasonable, although a little high if they were all-inclusive. Any addition to the costs would make them excessive.

It is felt that most of the objectives generally were well planned with the exception that the potentialities of the deposits do not warrant the proposed exploration.

CONCLUSIONS

The following conclusions were derived from an examination of the Blackie (Velarde) manganese deposits:

(1) Manganese is the important metal in the deposits. It occurs in oxide minerals associated with calcite, jasper, and strontianite (?) in fault openings and solution cavities. The critical and strategic nature of manganese is well known.

(2) Ore reserves are small and significant discovery that would increase these reserves appreciably is not within the realm of possibility.

(3) A small amount of manganese ore may be produced from the property by simple mining methods although the costs will be high because of the small size and irregularity of the deposits and the necessity of careful mining to obtain an acceptable product. It is doubtful if any operation would be economic.

(4) Materials, supplies, and manpower necessary for the operation of a proposed project are available.

(5) The property is accessible although some of the road is not in good condition.

(6) Tuffy Nunn, one of the applicants, would have supervised the project. His ability is adequate.

RECOMMENDATIONS

Because of Conclusions 2 and 3, especially 2 in which a significant discovery is highly improbable, it must be recommended that the application of Finley Dunegan and Tuffy Nunn for Government assistance in exploring the Blackie (Velarde) manganese deposits be denied.

FILE COPY
SURNAME:

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

Administrator, DMEA

4-23-53 Hopkins Martin

Iron and Ferro-Alloys Division, DMEA

Denial of application by Field Team, Region IV
Docket No. DMEA-2900 - Manganese
Tuffy Nunn and Finley Dunagan
Blackie Claims
Dona Ana County, New Mexico

W.S. in R.v.P.

The applicants requested exploration assistance in the amount of $33,000.00 to explore a manganese deposit, known as Velarde, on the Blackie Claims in Dona Ana County, New Mexico.

The Velarde manganese deposits are situated in a country of Paleozoic sedimentary rocks, which are predominatly limestones, some cherty banded and some sandy, and a few beds of sandstone. Some shale beds probably occur interbedded with the limestones.

The area is traversed by a number of northerly trending, generally steeply dipping faults, some of which have a large apparent displacement. All of the manganese deposits appear to be associated with three of these faults which have no great displacement.

Manganese minerals consisting of psilomelane, manganite, pyrolusite and wad associated with calcite, strontianite (?) and jasper occurs in fault openings and solution cavities having a very irregular pattern. The maximum length of mineralization along the strike of the faults is about 150 feet and may average about 30 feet in depth.

The Field Team has calculated about 50 tons of indicated ore and has inferred reserves of 250 tons containing 22% manganese which could be mined by simple mining methods but at prohibitive costs. They conclude that these ore reserves are very small and significant discovery that would increase these reserves appreciably is not within the realm of possibility.

Because of the apparently hopelessness of making a significant discovery and the probable uneconomic results to be derived from any operations, the Field Team recommends that the request for Government aid Docket No. DMEA 2900 be denied.

We concur in the denial.

W. S. Martin

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

JHopkins:foc
cc: Docket
Code 400
Adm. Reading File
Opr. Comm.

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Administrator, DMEA

DATE: 4-23-53

Noted

FROM : Iron and Ferro-Alloys Division, DMEA

SUBJECT: Denial of application by Field Team, Region IV
Docket No. DMEA-2900 - Manganese
Tuffy Nunn and Finley Dunagan
Blackie Claims
Dona Ana County, New Mexico

The applicants requested exploration assistance in the amount of $33,000.00 to explore a manganese deposit, known as Velarde, on the Blackie Claims in Dona Ana County, New Mexico.

The Velarde manganese deposits are situated in a country of Paleozoic sedimentary rocks, which are predominatly limestones, some cherty banded and some sandy, and a few beds of sandstone. Some shale beds probably occur interbedded with the limestones.

The area is traversed by a number of northerly trending, generally steeply dipping faults, some of which have a large apparent displacement. All of the manganese deposits appear to be associated with three of these faults which have no great displacement.

Manganese minerals consisting of psilomelane, manganite, pyrolusite and wad associated with calcite, strontianite (?) and jasper occurs in fault openings and solution cavities having a very irregular pattern. The maximum length of mineralization along the strike of the faults is about 150 feet and may average about 30 feet in depth.

The Field Team has calculated about 50 tons of indicated ore and has inferred reserves of 250 tons containing 22% manganese which could be mined by simple mining methods but at prohibitive costs. They conclude that these ore reserves are very small and significant discovery that would increase these reserves appreciably is not within the realm of possibility.

Because of the apparently hopelessness of making a significant discovery and the probable uneconomic results to be derived from any operations, the Field Team recommends that the request for Government aid Docket No. DMEA 2900 be denied.

We concur in the denial.

WSMartin

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

April 7, 1953.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2900 (Manganese), Blackie Claims, Dona Ana County, New Mexico.

Enclosed are nine copies of the final engineering report on the subject docket.

The applicants requested $33,000.00 for road building, sinking and drifting. The examining engineer believes that any additional exploration on this property is not warranted.

He recommends that the application be denied because of the improbability of making a significant discovery of manganese.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

4-17-53
(date)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

MINING DIVISION
REGION IV

March 27, 1953

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Branch, Mining Div., Region IV

Subject : Final Report, Docket DMEA-2900, Blackie (Velarde) Manganese Deposits, Rincon Mining District, Dona Ana County, N. Mex.

Enclosed are original and 3 copies of the above report by John H. Soule' of the Bureau of Mines. As the Geological Survey did not participate in this examination, a seperate report on Geology will not be submitted.

Because of high mining costs and the improbability of discovering substantial amounts of manganese ore by additional exploratory work, the examiner recommends that an exploration loan be denied. I concur with this recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC: W. H. King (8)
A. F. Shride
DMEA-2900
DF

WRStorms:als

4-17-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA-2900, Blackie (Velarde) Manganese Deposits,

Rincon Mining District,

Dona Ana County, N. Mex.

John H. Soule', Mining Engineer
U. S. Bureau of Mines

March 1953

DMEA OPERATING CONTROL
4-17-53

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By John H. Soule[1/]

The Blackie (Velarde) manganese deposits were leased by F. Dunagan and T. Nunn, who applied for Government assistance under the Defense Production Act of 1950, as amended, to explore the property. The application, Docket DMEA- 2900, was referred to the field for an examination, the examination being made on March 19, 1953. Previous examinations of the property were made in 1940, 1942 and 1943 by 5 Federal engineers and geologists.

Infrequent attempts have been made to operate the property over a time span exceeding 30 years. Total production from the deposits probably does not exceed 250 tons of ore that contained about 22 percent manganese.

Ownership of the property has changed since the examinations of a decade ago. The locations now are held by O. Hirsch, J. Jones and H. F. Carmicheal, all of Garfield, N. Mex. As previously mentioned, the claims are leased to F. Dunagan and T. Nunn who are operating the property in a small way at the present time.

Manganese oxide minerals, predominantly psilomelane, occupy irregular openings along faults and associated solution cavities. The minerals occur in thin seams lining the cavities and also as disseminations in associated gangue minerals. These gangue minerals are calcite, jasper and strontianite (?).

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

Minable ore reserves were calculated and resulted in a few tons of ore being classed as measured, about 50 tons as indicated, and about 250 tons as inferred. All classes of minable reserves were estimated to contain about 22 percent manganese.

The application for Government assistance proposed a project that consisted of road rehabilitation and construction, 300 feet of drifting, and 60 feet of shaft sinking. The work was to cost in excess of $20,000.00.

The conclusions, with 2 exceptions, were favorable to the project. The exceptions were the hopelessness of making a significant discovery and the probable uneconomic results derived from any operations. Because of the above exceptions, it must be recommended that the request for Government aid, Docket DMEA-2900, be denied.

DMEA-2900, BLACKIE (VELARDE) MANGANESE DEPOSITS, RINCON MINING DISTRICT, DONA ANA COUNTY, N. MEX.

Engineering Report

By John H. Soule'
Mining Engineer
U. S. Bureau of Mines

March 1953

DMEA-2900, BLACKIE (VELARDE) MANGANESE DEPOSITS,
RINCON MINING DISTRICT
DONA ANA COUNTY, N. MEX.

CONTENTS

Engineering report	Page
Introduction	1
Acknowledgments	2
Location, topography and physical features	2
History and production	3
Ownership and extent	4
Description of the deposits	4
Minable ore reserves	5
Present status	6
Project proposals with costs	6
Conclusions	7
Recommendations	8

ILLUSTRATIONS

Figure		Following page
1	Location map	2
2	Claim map	4
3	Topographic and geologic sketch	4

INTRODUCTION

Tuffy Nunn and his partner, Finley Dunagan, both of Deming, N. Mex. and operating as the Tres Hermanas Mining Co., have leased a group of mining claims containing deposits of manganese ores. They have applied for Government assistance to explore the deposits. The application, Docket DMEA-2900, was returned to the field for an examination of the property. This examination was made on March 19, 1953 by John H. Soule', Mining Engineer of the Bureau of Mines. Tuffy Nunn, one of the lessees, showed the property to the examining engineer.

The above manganese deposits are in the Rincon Mining District, Dona Ana County, New Mexico. They have been examined by the following engineers of the Bureau of Mines. Lowell B. Moon examined the deposits in June 1940. He reported them as the Luchini claims. In July 1942, L. G. Marshall examined the deposits, followed by Paul L. Russell in September of the same year. The above engineers reported on the property as the Velarde Manganese Property. Charles H. Johnson examined the deposits in October 1942 with respect to an application for an access road which was denied. Sherman K. Neuschel of the Geological Survey studied the deposits, reported on them in July 1943, and reported them as the Velarde Manganese Property. The different names, Luchini and Velarde, are doubtlessly derived from the men of those names, who were members of the group that located the claims. None of the examining engineers nor the geologist were favorably impressed with the potentialities of the deposits.

ACKNOWLEDGMENTS

Acknowledgment is due Tuffy Nunn, who showed the examining engineer over the property and furnished information about the deposits. Acknowledgment also is made of the information derived from the reports submitted by Federal engineers and geologist who had previously examined the property.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The Blackie (Velarde) manganese deposits are located near the center of sec. 10, T. 18 S., R. 3 W. in the Rincon Mining District, Dona Ana County, N. Mex. (see figure 1). The property is reached by leaving the junction of U. S. Highway 85 and New Mexico Highway 27 just west of the town of Hatch, N. Mex., travelling northwesterly on U. S. Highway 85 for 2.8 miles, at this point, turn sharply right off the highway and follow northeasterly, a dirt road through a farm and farmyard for 0.6 miles, thence sharply right for 0.1 mile, thence sharply left and proceed northeasterly for 5.8 miles to the mine, taking no abrupt turns off the main road. The road ends at the important mine workings. Other workings seen from the end of the road are accessible by foot trail.

The terrain is very rugged with steep canyon walls and prominent cliffs. The deposits lie at an average altitude of about 4,600 feet in the southern end of the Sierra Caballo.

Rainfall is scanty, averaging about 12 inches per year. Winter snowfall usually is light and occasional summer thunder showers may

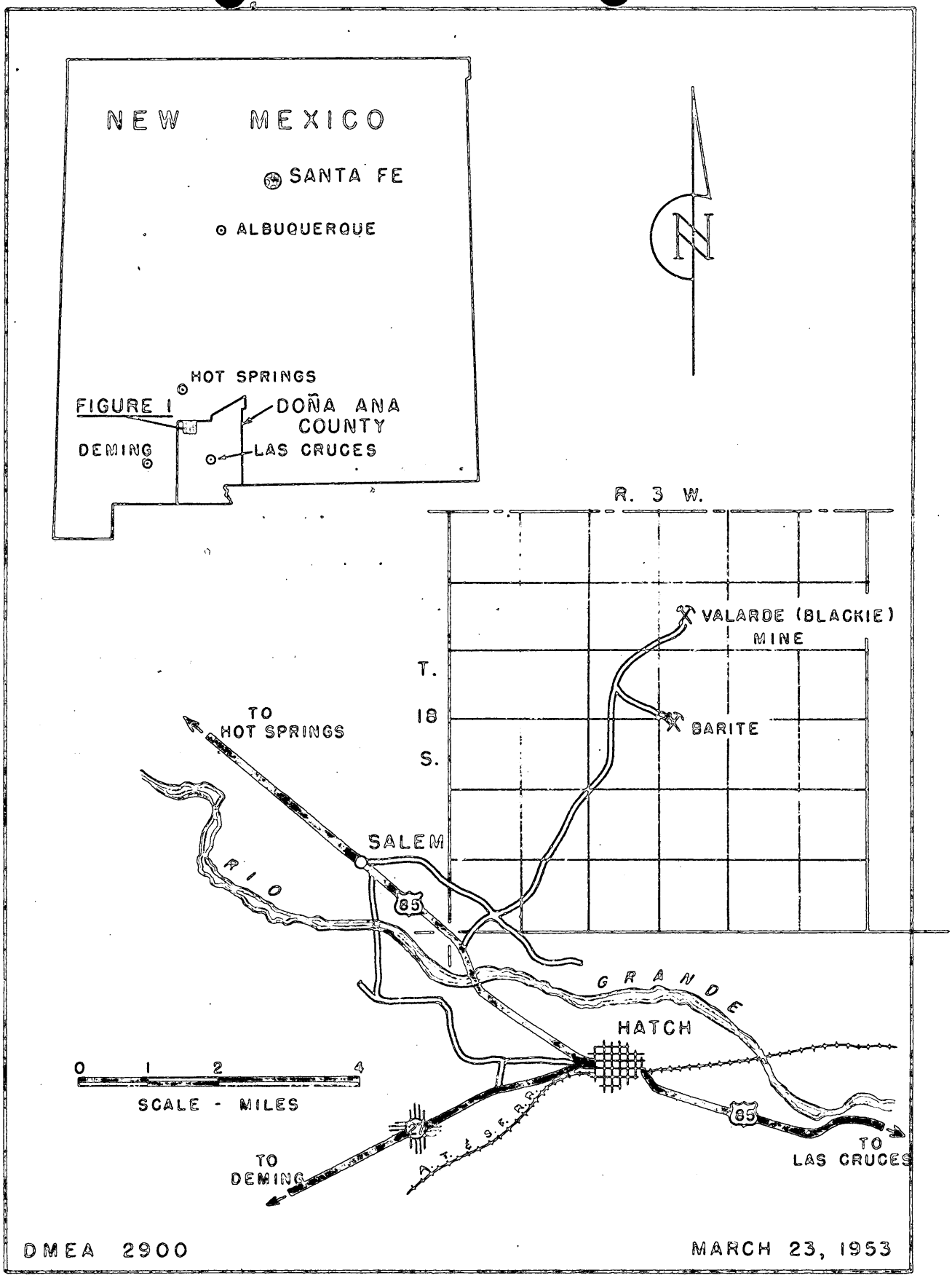

FIGURE 1.- LOCATION MAP, VALARDE (BLACKIE) MANGANESE DEPOSITS
RINCON MINING DISTRICT DOÑA ANA COUNTY, NEW MEXICO

be heavy. There are no permanent streams in the area and all water must be hauled from the Rio Grande, about 6 miles to the southwest, or from farther sources. Temperature extremes usually are of short duration.

There are no living accomodations at the mine, excepting one primitive shack. All such, as well as minor supplies, are obtainable at Hatch. Major mining supplies may be obtained at El Paso, Tex., about 90 miles by road to the south.

HISTORY AND PRODUCTION

Little is known of the early history of the deposits. It is reported that J. Velarde was the original locator and worked the property by hand methods, taking the carefully sorted ore out on burros. This ore was reportedly sold for $6.00 per ton. Interest in the deposits was revived during both World Wars, but little work was done. Recently, Tuffy Nunn and Finley Dunagan leased the property and have shipped a little ore.

Early production was small, judging from the extent of the old workings. It is doubtful if this production exceeded 100 tons of ore. In June 1942, a reported 14 tons of 20 percent ore was shipped, followed by an additional 4 tons a little later. Since July 1952, a total of 110.4 tons of ore has been shipped that contained an average of 22.9 percent manganese. About half of this recent production was sent to the U. S. Manganese Corp. mill at Deming, N. Mex. The remainder was sent to the stock-pile at Deming that is being administered by the General Services Administration. It is likely that the total production from the Velarde deposits has been less than 250 tons of ore that contained a little over 20 percent manganese.

OWNERSHIP AND EXTENT

Nothing is known about the early claims located upon the Velarde manganese deposits, other than J. Velarde was reportedly the first locator. In 1940, these deposits were covered by a group of 5 unpatented claims: the Mule, Manganese, Crystal, Number 2, and Number 3. The locators were J. Velarde, Alfredo Duran, Benjamin Luchini, C. F. Knoblauch, and Felipe G. Lopez, all of Garfield, N. Mex. These locations evidently were allowed to lapse. The claims were relocated later by O. B. Hirsch, J. Jones, and H. F. Carmicheal, all also of Garfield. Only 2 claims were located by this latter group of men, the Blackie No. 1 and Blackie No. 2 (see figure 2). In June 1952, Finley Dunagan and Tuffy Nunn, as the Tres Hermanas Mining Co., leased the 2 claims for 5 years. Recent locations by Nunn completely surround the Blackie claims.

DESCRIPTION OF THE DEPOSITS

The Velarde manganese deposits are situated in a country of Paleozoic sedimentary rocks. These rocks are predominantly limestones, some cherty banded and some sandy, and a few beds of sandstone. No shale was observed but thin beds probably occur interbedded with the limestones.

A number of northerly trending, generally steeply dipping faults traverse the area as shown in figure 3. Some of these faults have a large apparent displacement. All of the manganese deposits seem associated with three of these faults which have no great displacement.

Psilomelane, the most abundant manganese mineral, with minor manganite, pyrolusite and wad, occurs in fault openings and in solution

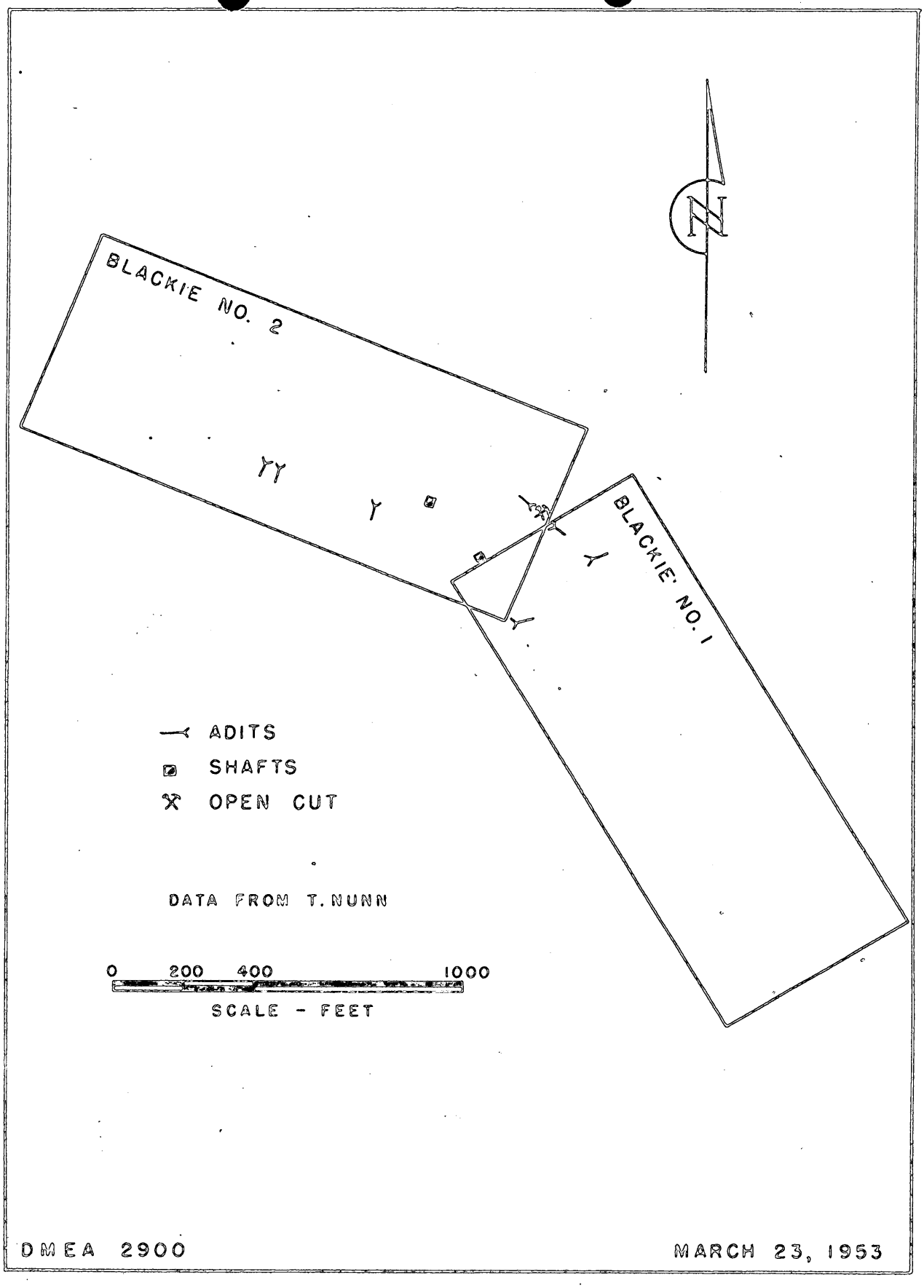

FIGURE 2. - CLAIM MAP, BLACKIE MANGANESE DEPOSITS

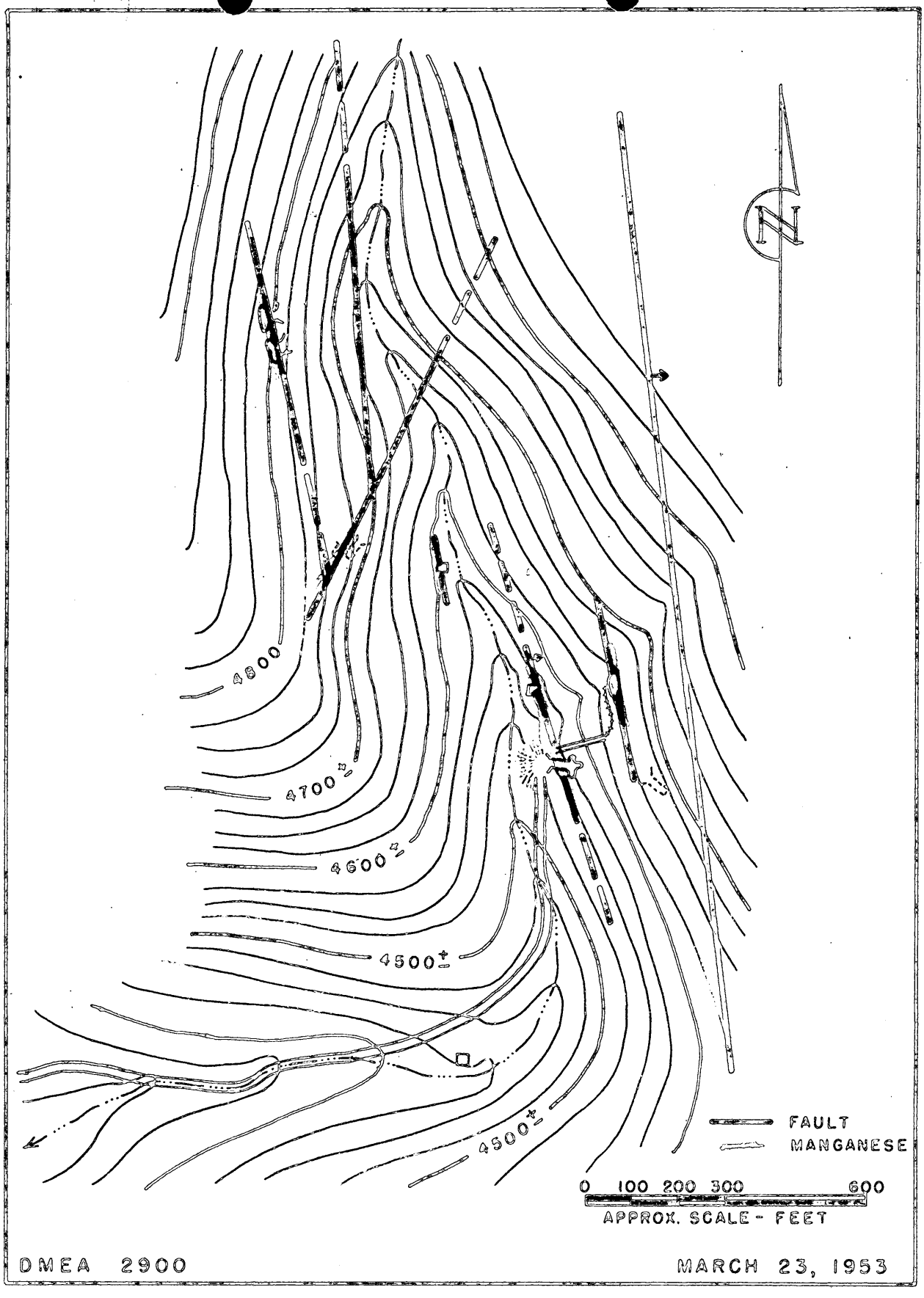

FIGURE 3. - TOPOGRAPHIC & GEOLOGIC SKETCH

cavities associated with the faults. These minerals form small seams of nearly pure mineral, as well as disseminations through the gangue minerals occupying the openings. Many of the openings are incompletely filled, giving rise to small caves. The gangue minerals are calcite, strontianite (?), and jasper, the latter underlying the ore in many places. Some of the calcite is coarsely crystalline but none was of optical quality.

As the openings in the faults and solution cavities were extremely irregular, the manganese ore bodies are likewise irregular. They pinch and swell, reaching maximum widths of 5 to 6 feet in an equivalent strike length. The solution cavities depart from the faults along seemingly certain bedding planes, and give some of the deposits a flat attitude rarely exceeding 4 feet in thickness. All of the deposits, irrespective of the attitude, have similar mineralogy and irregularity of shape.

Judging by the outcrops and mine workings, the zones of the manganese ore bodies are very limited in extent, both laterally and vertically. The maximum length of mineralization noted was about 150 feet along the strike of one of the faults. The maximum depth of the mineralized zone probably does not exceed 50 feet, and may average only about 30 feet.

MINABLE ORE RESERVES

A few tons of mined ore may be classed as measured. Indicated reserves are on the order of 50 tons of ore containing about 22 percent manganese. Assuming a total length of 500 feet for all mineralized zones, an average depth of 30 feet and an average thickness of 1 foot,

there may be inferred 1,250 tons of manganiferous material. Of this, only 20 percent or 250 tons may be considered minable because of thickness and grade limitations. The grade of the inferred ore would be about 22 percent manganese.

The above word, minable, may need a little explanation. As the ore bodies are small and very irregular, and careful control of the mining is necessary to produce an acceptable product, the mining costs will be very high. It is doubtful if an economic operation could result under present conditions.

PRESENT STATUS

Finley Dunagan and Tuffy Nunn are working the Velarde manganese deposits at the present time with Nunn as superintendent. Operations are on a very small scale with only 2 men on the payroll. From the amount of work seemingly done since July 1952, the operations have been intermittent. Nearly 120 feet of drifting, plus some road rehabilitation and construction, and some shallow test drilling with a Jackhammer was accomplished during the past 7 months. About 110 tons of ore was shipped during this period, largely from the above development.

PROJECT PROPOSALS WITH COSTS

The proposed project as outlined in the application for Government assistance consisted of repairing half a mile of road, constructing 300 feet of new road, driving one adit for 100 feet, extending a present shaft from 40 to 100 feet, and 200 feet of drifting from the bottom of the shaft. The estimated costs of this work are given in the following table.

TABLE I - Applicant's Proposed Costs

Item	Cost
Repair half a mile of road	$ 586.00
Construct 300 feet of new road	532.33
Drive 100 feet of adit	2,779.80
Sink 60 feet of shaft, includes headframe installation and cleaning present shaft	6,897.92
Drive 200 feet of drift from shaft bottom	8,887.20
Contingency	500.00
Total	$20,183.25

In addition, there was listed equipment and supplies valued at $8,432.14. Some of this would not be applicable to a project such as proposed. Other supplies were listed for which no value was given. The costs outlined in the above table would be reasonable, although a little high if they were all-inclusive. Any addition to the costs would make them excessive.

It is felt that most of the objectives generally were well planned with the exception that the potentialities of the deposits do not warrant the proposed exploration.

CONCLUSIONS

The following conclusions were derived from an examination of the Blackie (Velarde) manganese deposits:

(1) Manganese is the important metal in the deposits. It occurs in oxide minerals associated with calcite, jasper, and strontianite (?) in fault openings and solution cavities. The critical and strategic nature of manganese is well known.

(2) Ore reserves are small and significant discovery that would increase these reserves appreciably is not within the realm of possibility.

(3) A small amount of manganese ore may be produced from the property by simple mining methods although the costs will be high because of the small size and irregularity of the deposits and the necessity of careful mining to obtain an acceptable product. It is doubtful if any operation would be economic.

(4) Materials, supplies, and manpower necessary for the operation of a proposed project are available.

(5) The property is accessible although some of the road is not in good condition.

(6) Tuffy Nunn, one of the applicants, would have supervised the project. His ability is adequate.

RECOMMENDATIONS

Because of Conclusions 2 and 3, especially 2 in which a significant discovery is highly improbable, it must be recommended that the application of Finley Dunagan and Tuffy Nunn for Government assistance in exploring the Blackie (Velarde) manganese deposits be denied.

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

224 New Customhouse
Denver 2, Colorado

April 7, 1953.

Mr. Tuffy Munn
Mr. Finley Dunegan
P. O. Box 665
Deming, New Mexico

Re: Docket DMEA-2900

Gentlemen:

Reference is made to your application for Government aid on the Blackie 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 by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

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

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

√Administrator, DMEA
cc: WRStorms
AFShride
Subject
Chron.
Koschmann (2)

4-17-53

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

224 New Customhouse
Denver 2, Colorado

April 7, 1953.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2900 (Manganese), Tuffy Nunn and Finley Dunagan, Blackie Claims, Dona Ana County, New Mexico.

Attached are the original and three copies of the final report on the subject docket, the original and one copy of Form 3b, and a copy of the letter of denial to the applicant.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
4-17-53
(date)

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 2900
Metal or Mineral
Date Received 2-24-53
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: Tuffy Nunn - 665 - Deming New Mexico
Finley Dubbingam - 665 - Deming New Mexico (partners)

(*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

(*b*) State any mine name by which the property is known. Blackie-No-1-2

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee

(*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. Blackie No-1 - Book-21 - Page-194 - Location Records Dona Ana County
Blackie No-2 - Book-21 - Page-195 - Dona Ana County - Las Cruces New Mexico

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.

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

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

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

5. *The exploration project.*—(*a*) [redacted]te the mineral or minerals for which you wi[redacted]o 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.

(*c*) The work will start within 5 days and be completed within 8 months from the date of an exploration project contract.

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

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

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

(*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 [X] 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 Feb - 15, 1953

Luffy Nunn
(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

(A) Adit #1-40' in length - 5'x7' face. The vein is pitching 54° to the east and the direction is 36° west of north. Between Adit #1 and Adit #2 there is a open pit from which we took 42.87 L.D.T. of Manganese which ran 23.99% Manganese, we also shipped 5.96 L.D.T. from the dump at the pit which ran 18.77% Manganese. This Manganese ore was shipped to the U.S. Manganese Corp. Mill Deming, New Mexico. We drove Adit #1 from the north side of the pit from this Adit we shipped 6.03L.D.T. Manganese which ran 22.90% Manganese. This went to the U.S. Manganese Corp. Mill Deming, New Mexico. Also from Adit #1 we shipped to the General Service Adm. Manganese Purchasing Depot Deming, New Mexico.

Oct.-29-52-	17.32 L.D.T. MN.-	22.3% MN.
Nov.-14-52-	18.40 L.D.T. MN.-	22.75%MN.
Dec.-22-52-	5.30 L.D.T. MN.-	23.7% MN.
Jan.-26-53-	14.51 L.D.T. MN.-	21.9% MN.

Adit #2-20' in length 6'x7' face vein pitching 58° to the east and the direction is 41° east of south. There was very little Manganese encountered in this drift. Most of the vein is Calcite.

Adit #3-is a new workings started in Dec.-52. It is now 60' in length on a pitch of 28° direction of vein 50° east of south. This drift is going under a vein of Manganese approximately 4' thick which runs about 20% Manganese. I have traced this vein and the surface for 1800'. It is a separate vein from the one in Adit #1 and 2. On the Accompanying sketch it is listed as vein #1.

Adit #4-is an old drift about 8' in length and 5' high with a vein of Manganese, approximately 6' wide on the south side of the drift. This work was done in world war 1.

Adit #5-is also an old workings approximately 20' in length. The Manganese ore at this adit is about 6' thick and of a very good grade approximately 35% Manganese. This adit is approximately 200' from the

(B) First, is repair last ½ mile of Existing road. This is shown on sketch.
Second, construct 300' of new road to reach old shaft.
Third, Drive adit #3-100' under the existing ore to fault on east side of vein. To determine if vein continues on through the fault.
Fourth, Sink old shaft 60' to determine whether the existing ore extends on down also cross cut 100' to the north and 100' to the south on existing body of ore. This shaft is 15' east of main fault and vein #1.

(D) I have worked in mines off and on since I was 13 years old and I am now 39 years of age. I have also done drift contracting and shaft sinking. Was mine boss for the New Mexico Ore Processing Co. at Central, New Mexico and Pinos Altos, New Mexico, Jigger boss in shaft at Santa Rita, New Mexico for Slayer & Richmond Contractors, Construction Supt. for U.S. Forest Service for 3 years. I have been mining for myself for the last year.

For Recomendations write-

Euel R. Nave - Mountainair, New Mexico
J.H. Cole - Deming, New Mexico c/o Deming Brake & Tractor

Oscar Hirsch - Garfield, New Mexico

I plan to supervise the operations myself.

#6 ESTIMATE of COSTS

Finley Dunagan-Tuffy Munn
Deming, New Mexico

Repair Existing Road

Bulldozer-	40 hrs.-at-$12.50 per hr.	500.00
Air Compressor-	10 gal. of Gas- 10 hrs.-at-$5.00 per hr	53.00
Labor-	10 hrs.- at- 1.78 per hr	17.80
Powder-	1 case-at- $12.50 per case	12.50
Caps-Fuse		2.70
		$586.00

Construct 300 ft. New Road

Bulldozer-	30 hrs-at- $12.50 per hr	375.00
Air Compressor-	12 gal. of gas- 16 hrs-at- $5.00 per hr	83.60
Labor-	16 hrs-at-$1.78 per hr	28.48
Powder-	3 cases-at-$12.50 per case	37.50
Caps-Fuse		7.75
		$532.33

Drive Drift No. 3 - 100 ft. - 5'x7'-Time-30 days

Air Compressor-	gas and oil- 120 hrs.-at$5.00 per hr	780.00
1 Miner-	240 hrs-at- $1.78 per hr	427.20
2 Muckers-	480 hrs.-at-$1.49 per hr	715.20
Supervision-	15 days-at-$400.00 per month	200.00
Powder-1 ton		500.00
Caps-Fuse		47.40
Bits-	on hand	
Track-	on hand	
Track Spikes-	100 at 10¢ per lb.	10.00
4x4 Cross Ties-	on hand	
		$2677.80

#6 ESTIMATE of COSTS

Finley Dunagan-Tuffy Munn
Deming, New Mexico

Set Head Frame and Hoist on 40' Shaft

Hauling from Deming		100.00
2 Labor-	32 hrs.-at-$1.49 per hr	47.68
4 Timbers-	on hand	
Nails-	on hand	
4 Bolts-	on hand	
8 Stulls-	on hand	
40 ft. of Skids-	on hand	
Supervision-	4 days-at-$400.00 per month	80.00
		227.68

Clean 40' Shaft

3 Labor-	24 hrs.-at-$1.49 per hr	34.56
30 gal.-Gas		9.00
1 Hoistman-	24 hrs.-at-$1.78 per hr	42.72
		86.28

Sink 40' Shaft 60' down to 100'-Size 6'x8' -- (40 days)

Air Compressor-gas-	160 hrs.-at-$5.00 per hr	1040.00
2 Miners-	640 hrs.-at-$1.78 per hr	2278.40
2 Muckers-	640 hrs.-at-$1.49 per hr	953.60
1 Ton of Powder-	at $500.00 per Ton	500.00
Caps-Fuse		96.80
Supervision-	20 days-at-$400.00 per month	400.00
Timbers-	on hand	
1 Keg of Nails		10.00
Bell Cord-150'-	on hand	
1 Mine Bell-	on hand	
Bits-	on hand	
1 Jackhammer-	on hand	

Cont

50' of Water Hose 50'-Air Hose-	on hand-	
100' Pipe-	on hand-	
1 Hoistman-	640 hrs.-at-$1.78 per hr-	1139.20
100' Ladders-		95.36
1 Common Labor-	320 hrs.-at-$1.41 per hr-	70.60
		5583.90

Crosscut-North & South-160 ft. from Shaft Bottom (200'-60days)

Air Compressor-gas-	320 hrs.-at-$5.00 per hr-	1960.00
2 Miners-	480 hrs.-at-$1.78 per hr-	1708.80
2 Muckers-	480 hrs.-at-$1.49 per hr-	1350.40
1 Hoistman	480 hrs.-at-$1.78 per hr-	854.40
1 Common Labor	480 hrs.-at-$1.41 per hr-	676.80
Supervision-	60 days-at-$400.00 per month-	1200.00
Powder-2 tons-	at $500.00 per ton-	1000.00
Caps-Fuse-		96.30
Bits-	on hand-	
Liner-	on hand-	
Water Hose & Air Hose	on hand-	
Mine Car-	on hand-	
Track & Spikes-	on Hand-	
4x4 Cross Ties-	on hand-	8826.40

(B) All labor. Classes rates of wages and Supervision are also listed in

Estimate of Costs.

1.- Supervisor -	$400. per month
2-Miners-	1.78 per hr.
4-Muckers-	1.49 per hr.
1-Hoistman-	1.78 per hr.
1-Common Labor	1.41 per hr.

(C) 3- Single jacks
4- Double jacks
5- Picks
3- # 5 Scoop shovels
2- Round point shovels
75'-¾" Water hose
160'-1" Black pipe
220'-¾" Galvanized pipe
2- 4' Cross cut saws
2- Hand saws
6- Pipe wrenches
3- Wrecking bars
2- Crow bars
2- Crescent wrenches
1- Set pipe dies
6- Miners hot lamps
4- Miners helmets
50 lbs. - Miners carbide
1- 1500 lb. ore bucket
Power not necessary at present
Water is being hauled from the river in barrels for mine use.
Fuel - Wood

(D) Equipment to be furnished by operator

1- 105 P - Smith Motor Compressor-Serial #010532- 2995.00
1- Hoist and Motor- 500.00
3- 1 Ton ore buckets at $50.00 each- 150.00
3- Mine cars at $50.00 each- 150.00
1- JA-45- Ingersoll Rand jack-hammer - Serial # 454405- 175.00
1- J-33- Gardner Denver Jack-hammer - Serial # 587-cx- 125.00
1- CP-34-S- Stopper - Serial # S-2179843- 650.00
1- 3" Intake Suction Pump- 65.00
1- Pipe Head Frame 18' high- 235.00
1- 38" Shiv Wheel- 75.00
75'-3/4" Air Hose at $1.02 per ft.- 83.50
62'-1" - Jack Hammer and Stoper Steel- 91.14
1- 550 gal. Water Tank- 125.00
250'-1½" - Black pipe at 27¢ per ft.- 67.50
300'-3/4" - Black pipe at 18¢ per ft.- 54.00
116'-1/8" x30" - Flat steel- 92.80
$4,[illegible]

6 Estimate of costs

Finley Dunagan— Tuffy Bunny
Deming, New Mex.

D Equipment to be furnished by opperator

600 Timken rock bits at $27.50 per box of 50	330.00
15 Timken insert rock bits at $21.00 each	315.00
600 feet mine rail at $1.56 per foot	936.00
1 Ford jeep	600.00
1 16 x 16 house	200.00
1 water pressure tank	50.00
	3432.00

500.00

H Contingencies
Minor equipment repairs during opperations

canyon bottom and very rough. It was worked in world war 1 with pack burro's. On the sketch it is on vein #3. #6 on the sketch is an old shaft 40' in depth sunk in world war 1. This shaft is 15' east of vein, #1 in what looks to be a pocket instead of a vein. There is a drift 23' to the east at the bottom of shaft. This drift went through 12' of Manganese and into the limestone. Icannot tell without cleaning the shaft whether the ore was bottomed or not. This ore goes to the surface for approximately 150' in length, 65° west of north. The ore runs approximately 30% Manganese.

All of these workings are accessible for examination.

(B) Past production 110.39 L.D.T. averages 22% Manganese, at present we are not shipping any ore.

(C) Type of Deposit-Veins

These veins are in a limestone formation following a large fault, northwest by southeast. Fault is shown on sketch.

We wish to determine how much Manganese there is on this property.

(D) The Access road is in good shape to within ½ a mile of the mine. The ½ mile of road is usable but rough. It is 10 miles to the town of Hatch New Mexico where there is a railroad but no carloading ramp. We have been shipping 60 miles to Deming by truck at $4.00 per L.D.T.

Supply point-10 miles from Mine at Hatch, New Mexico

Residence point-10 miles from mine at Hatch, New Mexico

(E) Availability of Manpower - good

Materials, Supplies, Equipment,-good - Hatch, New Mexico and El Paso, Texas. Water and power 6 miles from mine on Rio Grande river.

Finley Dunagan-Tuffy Munn
Deming, New Mexico

We have all of this equipment on hand. It is all paid for and in top condition. What we do not have is enough operating capital to accomplish the exploration that is necessary to produce a paying amount of Manganese ore. If necessary we can furnish a small sum of money, but would rather use our equipment as our share in the cost.

DMCA 2900

DMCA 2900

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

OFFICIAL BUSINESS

U. S. [illegible]
[illegible] 2nd St.
[illegible]

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, $300
(PMGC)

SPOKANE
FEB 20
3 PM
1953
WASH.

Mr. George C. Selfridge, Chairman

Operating Committee,

Defense Minerals Exploration Administration

Department of the Interior

Washington 25, D. C