FILE COPY
SURNAME:

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

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

December 17, 1952

Chapman
Selfridge

T. L. Chapman

BV

N.S. in R.v R.

Docket No. DMEA 2651 - Manganese
J. E. Miera and Valentine Burrola
Buena Vista Claims
Socorro County, New Mexico

Location

Eastern foothills of Magdalena Mountains, about 10 miles west of San Antonio, Socorro County, New Mexico, Sec. 2, T. 5 S., R. 3 W.

History

First discovered and located in 1914 by Valentine Burrola. Allowed to lapse and five claims relocated in 1940. Explored deposit over a 75-foot length with a 15-foot shaft, a short adit, and an open cut. First located as public domain, but was found to be on public school land and is now controlled by leasing from the State of New Mexico.

Geology

Manganese occurs in a fault zone in flows of volcanic rocks. The fault zone is 2 to 6 feet wide with irregular walls. Traced over a length of about 400 feet. Psilomelane and pyrolusite are found in the fault zone and probably continues to considerable depth as the outcrops are several hundred feet above water level.

One hundred tons of rock mined produced about 5 tons of ore assaying 14 to 45 percent manganese. Amount of ore that can be sorted out to a 45 percent grade very small. Estimated by geologist that 15 percent of vein is mineral bearing; 1 percent of ore will run 45 percent manganese; 5 percent, 13 to 14 percent manganese; and the remaining 9 percent of fault filling shows very little value.

Conclusions

The amount of ore that could be produced from the property would be too small to warrant exploration.

Recommendation

It is recommended that the application for Government assistance be denied. The Field Team of Region IV denied Government aid in a letter to the applicant, dated December 8, 1952.

The Iron and Ferro-Alloy Division, DMEA, concurs in the denial.

TLChapman:ls 12/17/52

cc: Docket
Admn. Read. File
N.B. Melcher, USBM
M. D. Crittenden, USGS

T. L. Chapman

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

224 New Customhouse
Denver 2, Colorado

December 2, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2651, (Manganese) J. E. Miera and V. Burrola, Buena Vista Claims, Socorro County, New Mexico

Enclosed are four copies of the final report on DMEA 2651, two copies 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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 8 1952

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

COPY

224 New Customhouse
Denver 2, Colorado

December 2, 1952

Mr. Joe E. Miera
Mr. Valentine Burrola
Box 215
San Antonio, New Mexico

Re: DMEA Docket 2651

Gentlemen:

Reference is made to your application for Government aid in exploration work on the Buena Vista Claims.

Projects approved by the Defense Minerals Exploration Administration must, in its judgement, show definite promise of yielding material of acceptable grade, and in quantities that will significantly improve the mineral supply position 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 you that your application for Government aid is denied.

Very truly yours,

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

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

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

Reviewed by
DMEA OPERATING COMMITTEE
12-12-52
(date)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 8 1952

November 29, 1952

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2551, Buena Vista Claims, Socorro County, New Mexico
J. E. Mirra and V. Burrola. Manganese.

Enclosed are the original and 8 copies of the geological report by J. N. Faick of the U. S. Geological Survey, covering the above docket. It has been recommended that the loan be denied.

The U. S. Bureau of Mines will not submit a report.

The brochure is enclosed.

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

Enclosures (10)

Reviewed by
DMEA OPERATING COMMITTEE
12-12-52
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P.O.Box 4125, University Station
Tucson 5, Arizona

November 25, 1958

Memorandum

To: Field Team, Region IV, Denver, Colorado
Through: Mr. A. H. Koschmann

From: A. F. Shride, Tucson, Arizona

Subject: Final Report, IDRA 8631, Buena Vista Claims (Manganese), J. E. Miera and V. Barrola, Socorro County, New Mexico

Enclosed are the original and 8 copies of the above report by J. H. Faick of the Geological Survey.

It is recommended that an exploration loan be denied for lack of potential of significant amounts of manganese. The report and this recommendation have my approval.

The Bureau of Mines will not submit a report on this application. In Mr. Storms'absence I am taking the liberty of forwarding this as the final report.

The brochure is enclosed.

A. F. Shride
Acting District Supervisor
Arizona-New Mexico

Enclosures 10

BONITA VISTA CLAIMS
JOE E. MIERA AND VALENTIN BURGOLA
SOCORRO COUNTY, NEW MEXICO
DMEA 2651

MANGANESE

Geology

By
John E. Feick
Geologist, U. S. Geological Survey

BUENA VISTA CLAIMS
JOE K. MIERA AND VALENTIN BURROLA
SOCORRO COUNTY, NEW MEXICO
EMRA 2651

MANGANESE

CONTENTS

	Page
Introduction	1
Location, Topography, and Climate	1
History and Ownership	2
Manganese Deposit	2
Ore Reserves	5
Possible Exploration	5
Conclusions	6
Recommendations	6

INTRODUCTION

The Buena Vista manganese claims, Socorro County, New Mexico, were examined in connection with a request for Government exploration assistance. The application was submitted by Messrs. Joe X. Miera and Valentine Burrola, residents of Socorro and Gallup, New Mexico respectively. The application requested assistance for exploration estimated to cost $25,000, of which the applicants propose to use $2,000 for building an access road, the remainder to be used for purchase of equipment and supplies. No definite methods for exploration of the manganese deposit were proposed. The application to the Defense Minerals Exploration was docketed as DMEA 2651.

The property was examined by John H. Faick of the U. S. Geological Survey on October 27, 1952, with the object of determining if the requested assistance is justified. The examiner was guided to the prospect by the applicants.

LOCATION, TOPOGRAPHY, AND CLIMATE

The Buena Vista claims are situated in the eastern foothills of the Magdalena Mountains, and are about 10 miles west of San Antonio, Socorro County, New Mexico. The claims are reported by the applicants to be in section 2, T. 5 S., R. 3 W. The property may be reached by driving south from San Antonio along U. S. Highway 85, a distance of 18 miles to the San Marcial road. At this crossroad an improved ranch road leads northwesterly about 11.5 miles to the headquarters of the Diamond A ranch. Only a very poor abandoned road extends beyond the ranch headquarters, but it is possible to drive a truck an additional 2 miles and to go another mile by jeep, to within ½ mile of the prospect. The prospect is situated several hundred feet above the valley floor and can be reached by climbing the steep hillside, a 37 degree slope.

...s is in an area of rough topography and the hills are ...vered with scrubby juniper, pine, live oak, and several varieties of grasses. Annual rainfall averages about 15 inches in the area. The nearest available water is a permanent spring at the headquarters of the Diamond A ranch, about 3½ miles from the prospect, but it is probable that water could be obtained by drilling wells in nearby canyons.

HISTORY AND OWNERSHIP

The Buena Vista manganese deposit was first discovered by Mr. Valentin Burrola about 1914. At that time he was unable to develop the deposit and permitted the claim to lapse until about 1940 when he relocated the prospect with 5 unpatented claims. Between 1940 and 1952 Mr. Burrola sank a 15-foot shaft, continued an open cut and adit for a few feet, thereby bringing the prospect to its present state of development. It is explored for a strike length of about 75 feet and maximum depth of about 15 feet. The prospect was originally thought to be on Public Domain and was claimed by lode locations, but subsequently the property was surveyed and found to be on Public School lands and is now controlled by leasing from the State of New Mexico.

MANGANESE DEPOSIT

The Buena Vista manganese deposit occupies a fault zone or fissure in a very thick series of volcanic rocks, probably rhyolite flows, of probable Tertiary age. The fault strikes N. 5° W. and dips 78° southwest. It has clearly discernable walls that are quite irregular, angular, and blocky, giving the impression that the fault developed under tension with only nominal movement along it. The walls are from 2 to 6 feet apart in the explored area of the fault zone, but extensions along the fault zone are concealed with residual debris and little could be learned of its character.

The presence of manganese stain and small pieces of psilomelane in the debris along the projected course of the fissure attest to its probable continuity for about 300 or 400 feet. The depth to which the manganese oxides persist is unknown but as the deposit is situated several hundred feet above the water table it is not unlikely that oxidation has taken place to considerable depth, and that manganese oxides probably occur throughout the zone of oxidation.

The fault zone is partly filled with blocks and fragments of country rock around which are deposited manganese and iron oxide minerals, thus forming a vein-like deposit. The manganese ore consists of pyrolusite, and psilomelane with which limonite is associated. Limonite and fragments of wall rock are the principal gangue materials present, and these are estimated to constitute about 5 percent and about 80 percent respectively of the fissure filling, the remainder being manganese ore.

The pyrolusite occurs as friable loose granular or dust-like material and the psilomelane forms veinlets, lumps, or rounded masses. The ore minerals fill or partly fill interstices in the shattered wall rock, from which the ore minerals may be readily segregated by hand methods. The vein has been explored by an open cut, short adit, and a shallow shaft for a total strike length of about 75 feet, and a maximum depth of about 15 feet below the surface. Of this explored zone about 2/3 has been mined out to yield the small amount of ore now piled on the dump; very little has been shipped. It is estimated that approximately 100 tons of the ore zone was mined out to yield about 5 tons of soft pyrolusite ore and about 1 ton of hard psilomelane ore. Four samples of the ore and vein material were assayed as follows:

Number	Description of Sample	Percent Manganese
12891	Sample of sorted hard lump ore	43.5
12892	Sample of largest pile of sorted soft, fine ore	13.8
12893	18 inch vein on north side of shaft	18.6
12894	22 inch vein on south side of shaft	19.0

From the above analysis it is apparent that ore of a good grade could be obtained from the deposit. The amount that may be present, however, is highly speculative and in this writer's opinion is probably very small.

This writer estimates that about 15 percent of the fissure filling is manganiferous material of which one percent contains from 40 to 45 percent manganese, and about 5 percent contains about 13 to 14 percent manganese. The remaining 9 percent of the vein filling is a mixture of manganese oxide, iron oxide, and waste rock of very low manganese content. Some of the best ore observed in the vein by this writer is near the bottom of the 15 foot shaft. This is about 20 inches wide and contains 19 percent manganese where sampled.

According to the September 22, 1952, purchase program for domestic manganese ore at Deming, New Mexico, any ore containing less than 15 percent manganese is not acceptable, and as there is no other market available for this grade of ore it is concluded that most of the Buena Vista ore is not marketable. Ore containing 19 percent manganese is quoted at $15.43, F.O.B. Deming, which this writer estimates is less than the cost of production and delivery to the stockpile. Ore containing 43 percent manganese is valued at about $94.00 per long ton; a very good price that would yield a profit to many mines. On the Buena Vista prospect, however, only trivial amounts of this grade of ore could be produced by hand sorting.

Although we do not know the length of depth of the Buena Vista ore shoot, the above data offer a fair measure of its potential. An assumed block of ore having a strike length of about 100 feet long and an,

assumed depth of 100 feet would contain about 3,000 tons of manganiferous material, of which only about 30 tons would be high grade ore and about 150 tons would be low grade ore. The latter may be too low grade to be marketable. The ratio of ore to waste is so small and the grade of most of the ore is so low that it is doubtful if the deposit could be profitably worked under foreseeable conditions.

ORE RESERVES

The deposit is not sufficiently explored to justify estimation of reserves. Undoubtedly a small amount of ore remains, but the deposit appears to be too small to yield quantities of ore that would be significant from the standpoint of national emergency supplies.

POSSIBLE EXPLORATION

The applicants did not propose a specific exploration program and seemed to have little knowledge of what might be done. In the opinion of the writer the deposit does not deserve exploration but if it is explored, then two methods appear feasible. The first method would be to trench and test pit the ore zone along the vein extension north of the present workings. The other method would be to try to follow the vein down the hill south of the present workings and then to drive an adit along the vein.

The applicants propose to build an access road to the prospect and have obtained a contractor's estimate that it could be done for about $2,000. This estimate appears too low to this writer because about 3 miles of old road and trail would have to be reconditioned and at least a mile of new road would be required to traverse the very steep hill upon which the prospect is situated.

In considering the desirability of exploration it is necessary to take into consideration the problems of marketing the ore that might be produced as well as other practical problems brought about by isolation of the deposit. From the prospect it is about 33 miles by road to San Antonio, the nearest railroad shipping point, or 126 miles by road to the Deming stockpile.

CONCLUSIONS

The Buena Vista manganese deposit consists of pyrolusite and psilomelane filling openings in a fissure zone in a volcanic flow rock. The deposit contains a small amount of ore containing from about 13 to about 45 percent manganese . A fairly good grade of ore may be obtained by sorting and screening, but the deposit is so small that further exploration is not justified. Other important determents to possible operation of the property are the relative isolation of the deposit, the distance to market, and lack of water and living accommodations.

RECOMMENDATION

Because of the very small size of the Buena Vista ore deposit it is unlikely that significant amounts of manganese ore will be produced from it; therefore, it is recommended that the application for Government assistance be denied.

Mining Division
Date Rec'd.
JUL 28 1952
BUREAU OF MINES
Denver, Colorado

For the last 15 years, I have been supervising mining works (prospecting) and to my best knowledge, I believe that we have plenty of ore of the kind that the Government is in need of now. I have good experienced Mining Men to work for me. I am in need of money to buy equipment and to build a road to the Mine. The road will cost around Two Thousand Dollars $$2,000.00). In equipment, we need Air Compressor, Jack Hammers, Pipe, Air Hose, Water Tank, Truck and also may need Track and Mine Cars, which I estimate will cost Twenty Three Thousand Dollars ($23,000.00).

Yours truly,

J. E. Miera

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-2651
Metal or Mineral
Date Received 8-14-52
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Joe E. Miera
Box 215
San Antonio, N. Mex.
(D) Valentin Burrola Gallup, N. Mex.

(*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 Section 2, T-5S, R-3W, Socorro, County.

(*b*) State any mine name by which the property is known. Buena Vista Claims No. 1, 2, 3, 4, 5.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Leased from the State of New Mexico

(*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.

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. See Mr. Anderson's Report

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

16—66551-1

We have all manpower we need here but need equipment.

5. *The exploration project.*—(*a*) [redacted]te the mineral or minerals for which you wi[redacted] 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 10 days and be completed within 3 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.).

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

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

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

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

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

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

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

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

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

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

☐ 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 18th, 1952

(Applicant)

By

Box 215

San Antonio, N. Mex.

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

DEPARTMENT OF THE INTERIOR
Defense

[illegible]

THE BUENA VISTA PROSPECT - SOCORRO COUNTY

General Statement

The "Buena Vista" group of five lode mining claims, located in Section 2, T. 6 S., R. 3 W., Socorro County, is owned by Miera and Associates of San Antonio, New Mexico.

This property was examined by this writer at the request of Mr. Miera on Monday, April 23rd, 1951. It was reached by traveling south from San Antonio along U. S. Highway 85, approximately 18 miles to the junction of the San Marcial Lake road, thence northwesterly 12 miles over a ranch road to the old Gilmore ranch house where the road ends. From the Gilmore ranch house the balance of the trip, a distance of about 3 miles was made on foot over a fairly good trail. The property can also be reached by traveling the Walnut Creek road westerly from San Antonio the Gilmore ranch, a distance of only 18 miles, but this road has been impassable for a year or more.

The Deposit

The minerals, manganese oxide and iron oxide, occur in a fissure vein in a highly silicified somewhat brecciated rhyolite flow. The vein is five to six feet wide where examined, partially filled with blocks and fragments of rhyolite around which the iron and manganese minerals, hematite and psilomelane have been deposited, filling the voids. In part the minerals are very intimately mixed, but there are segregations of very highgrade almost iron free manganese ore, also some highgrade almost pure red iron ochre. The

highgrade manganese occurs in blobs from the size of a peanut to lumps that would weigh 100 pounds or more. This ore has assayed as high as 55 percent MnO2. It makes up possibly 30 percent of the total vein material in the section examined and is very easily sorted from the other materials.

The vein material comprising the intimate mixture of the two minerals makes up probably another 20 percent of the total vein fill and the red ocher possibly 5 percent. The balance is fragments and blocks of rhyolite. The manganiferous material would probably average 15 percent to 20 percent MnO2 and 45 percent FeCO3.

The vein has a vertical dip and strikes north 140 west. Evidence of its continuity is the highgrade float that is found on the slopes and in the canyons for several hundred feet both north and south of the point where the deposit has been opened up.

The Workings

The vein has been opened up by an open cut about thirty feet long along the vein and a ten foot shaft. Both workings are very near the crest of the mountain through which the vein passes. Some of the work was accomplished some years ago, reportedly during World War I when a small shipment of ore was made. The ore was brought down to the road by pack animal. Recently some work has been done in the open cut and approximately five tons of highgrade manganese ore and about the same amount of manganiferous iron ore is piled on the dump.

Economic Possibilities

The deposit appears promising but considerable more

work must be done before an evaluation of the possible reserves can be made. This work could be done by core drilling or by trenches along the vein, both north and south of the present east end shaft. The old Walnut Canyon road, previously mentioned, could be improved and a new road from the Olmaro ranch to the deposit could be constructed without excessive cost.

In the present need for manganese, it is my belief this deposit merits further investigation

(Signed)

E. C. Anderson
Mining Engineer

BUENA VISTA CLAIM NO. 3.

Commencing at the SW corner of Section 2, T-5S, R-3W thence N 31°05' W a distance of 2170 feet to the S end center of Buena Vista Claim No. 3 and true place of beginning. Thence S 88° 24' W 300 feet to the SW corner of the claim, thence N 1° 33' W 1500 feet to the NW corner, thence N 88° 24' E 600 feet to the NE corner, thence S 1° 33' E 1500 feet to the SE corner, thence S 88° 24' W 300 feet to the S end center and true place of beginning.

Containing one standard mining claim lying in the S½SW¼, S½NW¼, Sec. 2, T-5S, R-3W.

BUENA VISTA CLAIM NO. 1.

Commencing at the SE corner of Section 2, T-5S, R-3W thence N 31° 05' W a distance of 2170 feet and S 88° 24' W 300 feet to the SE corner of Buena Vista Claim No. 1 and true place of beginning. Thence S 88° 24' W 600 feet to the SW corner of the claim, thence N 1° 33' W 1500 feet to the NW corner, thence E 88° 24' E 600 feet to the NE corner, thence S 1° 33' E 1500 feet to the SE corner and true place of beginning.

Containing one standard mining claim lying in the N½SE¼, S½NE¼, Sec. 2, T-5S, R-3W.

BUENA VISTA CLAIM NO. 2.

Commencing at the SE corner of Section 2, T-5S, R-3W thence N 31° 05' W a distance of 2170 feet and S 88° 24' W 900 feet to the SE corner of Buena Vista Claim No. 2 and true place of beginning. Thence S 88° 24' W 600 feet to the SW corner of the claim, thence N 1° 33' W 1500 feet to the NW corner, thence E 88° 24' E 600 feet to the NE corner, thence S 1° 33 ' E to the SE corner and true place of beginning.

Containing one standard mining claim lying in the NW¼SW¼, SW¼SW¼, S½NE¼, NW¼SW¼ of Section 2, T-5S, R-3W.

BUENA VISTA CLAIM NO. 4.

Commencing at the quarter corner on the E boundary line of Section 2 T-5S, R-3W thence N 31° 30' W a distance of 1450 feet to the E end center of Buena Vista Claim No. 4 and true place of beginning. Thence N 1° 33' W 300 feet to the NE corner of the claim, thence S 88° 24' W 1500 feet to the NW corner, thence S 1° 33' E 600 feet to the SW corner, thence N 88°24' E 1500 feet to the SE corner, thence N 1° 33' W 300 feet to the E end center and true place of beginning.

Containing one standard mining claim lying in the SE¼NE¼, NE¼ of Sec. 2, T-5S, R-3W.

BUENA VISTA NO. 5 CLAIM.

Commencing at the quarter corner on the E boundary line of Section 2, T-5S, R-3W thence N 37° 58' W a distance of 1315 feet to the E end center of Buena Vista Claim No. 5 and true place of beginning. Thence N 1° 36' W 300 feet to the NE corner of the claim, thence S 88° 24' W 1500 feet to the NW corner, thence S 1° 36' E 600 feet to the SW corner, thence N 88° 24' E 1500 feet to the SE corner, thence N 1° 36' W 300 feet to the E end center and true place of beginning.

Containing one standard mining claim lying in the E½W½, NE¼ of Sec. 2, T-5S, R-3W.

Socorro, N. M.
March 16, 1940

No. 6033

STATE BUREAU OF MINES AND MINERAL RESOURCES

Division of New Mexico School of Mines
Assay Certificate

Assay data for:

Mr. E. C. Anderson (for Mr. Mora)

Address: State Bureau of Mines (San Antonio, N. M.)
Socorro, New Mexico

No.	Description and Remarks	Zn %	CaO Ba %
4836	Sample #1	19.04	
4837	Sample #3	45.42	Nil

Certified Correct

(Signed) R. A. Lettunsund
(Assayer)