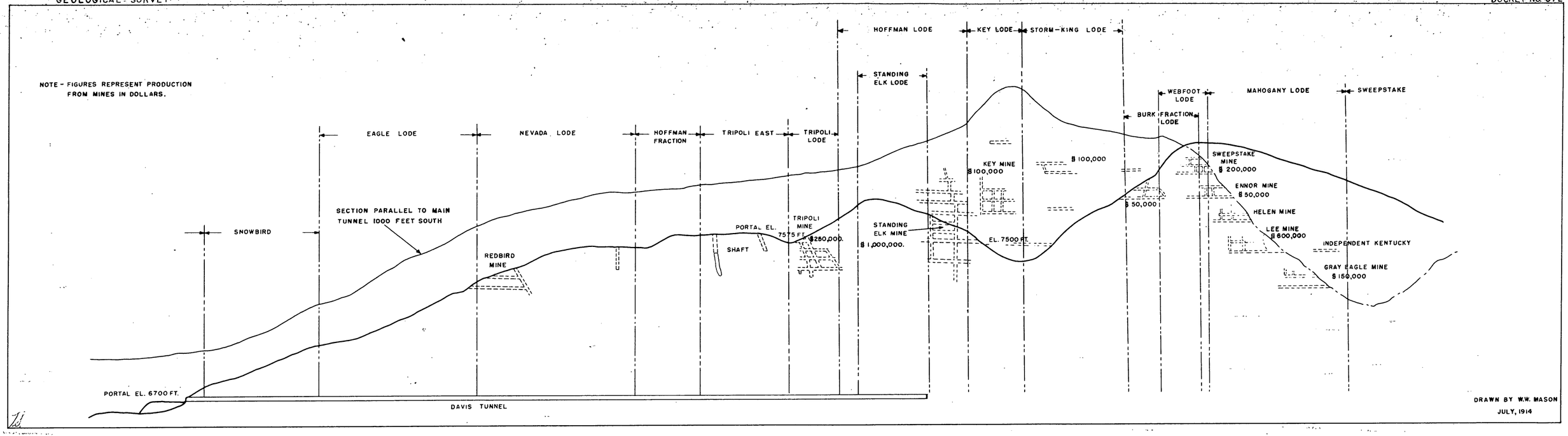

FIG. 3

SECTION OF BULLION MINING DISTRICT

ELKO COUNTY, NEVADA

0 400 800 FEET
Scale

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY Bureau of Mines

PBS TELETYPE

Originator:
Ext.: 472 Room: 1006

Appro.: Bureau of Mines
Date: March 24, 1953
Time: 2:20 p.m.
No.:
To: C. O. Mittendorf, Administrator, Defense Minerals Exploration Administration, Interior Building, Washington, D. C.
Subject:

Please refer to your letter March 18 to Senator Malone regarding report on Bullion Mining District by the New World Exploration Research and Development Corp. With particular reference to third paragraph of your letter, our docket file shows DMA-872 (Copper-Zinc-Lead) assigned to exploration application from J. H. Uhalde, Lead & Copper Mines, Inc., Reno, Nevada, in connection with Aladdin Mines, Elko County, Nevada. See letter April 16, 1952, from Ernest Wm. Ellis to Russell T. Miller, New World Exploration, Reno, Nevada, advising application will be held pending further data from him.

H. C. Miller
Executive Officer, DMEA Field Team
Region III

Authorized:
H.C.Miller

AMeiers:
Files
Chrono

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

Refer to	Noted	Date
	NALU	3/24
Answered		

500

Memorandum

MAR 18 1953

To: The Administrator

From: Base Metals Division

Subject: Letter from Senator George W. Malone accompanied by a report on the Bullion Mining District, Elko County, Nevada.

The subject letter relates to the same matter as the previous inquiry from Representative Young, prepared for your signature March 13, 1953.

The writer telephoned Senator Malone's office in an attempt to get a clearer understanding of the inquiry. After discussing the matter quite fully with Pete Kelley of Senator Malone's office, it appeared that Mr. Russel T. Miller, for whom the report on the Bullion Mining District was made, intended to present an application for Government assistance in an exploration project.

The attached letter answering Senator Malone has been prepared for your signature.

/s/
A. G. Keating

Attachment

Ufy to Bailey 3/24

AGK Keating/hmj
(3-17-53)
CC to: Docket
Operating Committee
Base Metals Division
Region III (2)
Mr. Keating
Chron.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

1953 MAR 24 AM 8:56

SAN FRANCISCO, CALIFORNIA

Transferred		
Mail to	Moved	Date

Hon. George . Malone
Senate Office Building
Washington 25, D. C.

MAR 18 1958

Dear Senator Malone:

We have your letter of March 10, 1958, together with a report by the New World Exploration Research and Development Corporation titled Project No. 63, "The Mullan (Milbrandt) Mining District, Shoshone County, Idaho."

Unfortunately our records do not correspond to the information contained in your letter to the effect that there was a preliminary report on the project labeled DMEA 2351, formerly referred to as DMEA 872.

Our files indicate that Docket No. DMEA 2351 is already assigned to a mining project in Idaho, and we are informed that Docket No. DMEA 872 should properly be referred to as DMEA 872 with the Defense Materials Procurement Agency. This agency, which has to do with development and production, not exploration, reports that an application was made to them but was withdrawn November 30, 1951.

We note that there is a letter attached to the report from the New World Exploration Research and Development Corporation, the letter-head of which states that they conduct contract mineral surveys. The letter is addressed to Mr. Russell E. Miller, Pacific Gamble Robinson Company, Seattle, Washington, and informs him that in compliance with his request, they are submitting a report on the Bunker Hill Mine Area, Mullan, Idaho.

We note, therefore, inasmuch that it is Mr. Russell or his corporation who wish to make application for Government assistance, and we have conferred with him by telephone with Mr. Dale Dailey of your office.

Since there has been no formal application presented to us, we are enclosing a copy of Circular 1, and four copies of Form [illegible]-103 which is therefore used in making an application for aid in an exploration project.

We suggest that you forward this information to Mr. Miller with such other explanations as you may feel are required.

In the meantime we will hold the report subject to further advice from your office or from the applicant, at which time the matter will be given prompt attention. If we can be of further assistance, please do not hesitate to call on us.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures - 5

AGKeating/hmj
(written 3-17-53)
CC to: Docket
Adm. R. File
Op. Committee
Base Metals Div.
Region III (2)
Mr. Bishop
Mr. Kinkel
Mr. Keating
Chron.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

1966 MAR 24 AM 8:56

SAN FRANCISCO, CALIFORNIA

MAR 1 8 1953

Answered		
	Allen	3/24

Hon. Clifton Young
House Office Building
Washington 25, D. C.

Dear Mr. Young:

This will acknowledge receipt of your letter of March 6, 1953, together with a copy of a report by the Pacific Exploration Research and Development Corporation, which we have just received. This report is on mining property, Mineral Project No. 83, "The Pullion (Unlisted) Mining District, Elko County, Nevada."

In answer your letter we regret to inform you that we are unable at this time to understand just what is wanted. From our review of the report it appears that Mr. Russell T. Miller has obtained a report on the so-called Project 83 and the Pullion Mining District, but that he is not the one who requests information from you.

We assume that the inquiry made to your office may be relative to obtaining Government assistance for exploration at the project. Therefore, you will please find enclosed a copy of this letter and four copies of Form DM-103, "Application for Aid in an Exploration Project", so that you may forward these to the person who has made the inquiry.

We have this information will be helpful, and we will be pleased to have you call on us for any further assistance that may be required.

Sincerely yours,

SIGNED

Administrator

JGKeating/hmj
(3-13-53)

CC to: Docket
Adm. P. File
Op. Committee
Base Metals Div.
Region III(2)
Enclosures -5 Mr. Sinkel
Mr. Lishop
Mr. Keating
Chron.

Copy to Bailey 3/24

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

1955 MAR 24 AM 8:57

SAN FRANCISCO, CALIFORNIA

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

AIR MAIL

APR 18 1952

Mr. Russell T. Miller
New World Exploration, Research
and Development Corporation
P. O. Box 1206
Reno, Nevada

Re: Docket No. DMA-872
(Copper, Zinc-Lead)
Aladdin Mines,
Elko County, Nevada

Dear Mr. Miller:

Your letter of April 9, 1952, advising that Mr. John Uhalde, Vice President, Lead and Copper Mines, Inc. Box 307, Reno, Nevada, has engaged your services to obtain the information required by this Agency in connection with his above docketed application, is appreciated.

It is noted that considerable time will be required to compile this data, but we will hold the application in abeyance pending further information from you.

Very truly yours,

Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division
Defense Minerals Exploration
Administration

Copy to Mr. John Uhalde, Reno, Nevada - copy to Beverley 4/21

GLAult/EWEllis/gla
4-15-52
cc to: Adm. Reading File
Docket
Messrs. Johnson, CH Rm. 3621
Nelson, Ned Rm. 4216 GS
Ellis
✓Field Team, Region III (2)

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

AIR MAIL

MAR 26 1952

Mr. J. H. Uhalde, President
336 Merrill Avenue
P.O. Box 387
Reno, Nevada

Re: Docket No. DMA-872 (Copper, Zinc-Lead)
Aladdin Mines
Elko County, Nevada

Dear Mr. Uhalde:

We wish to acknowledge receipt of your revised Form MF-103 "Application for Aid for an Exploration Project" dated March 5, 1952.

There appears to have been a misunderstanding regarding the kind of information we will require to process the captioned application. In our letter of February 11, 1952, we requested "a detailed plan of exploration with geologic maps showing plans and section of proposed drilling and complete cost estimate". In order for us to continue with the processing of the application we will require the following detailed information:

1. Furnish a detailed description of the exploration work you propose to do, i.e. number and length of diamond drill holes, with the facilities and work required to make the drilling site accessable. Also an estimate of the length of time required to complete each part of this work.

2. Submit maps or sketches in plan and section drawn to scale, showing the geology, location and extent of the proposed work, exposures and extent of the known mineral exposures with locations and sample values, all in relation to the mining claims.

3. Furnish a detailed cost estimate covering each separate part of this drilling program, broken down into terms of labor, supplies, supervision, engineering (including sampling, analysis and mapping) and equipment. Indicate if equipment to do this work is to be purchased, rented or furnished, and give a description of each unit with an estimate of the period of time each unit will be required. If the equipment units are to be purchased, quote the unit price, if to be rented, give the rental rate, and if to be furnished state the fair market value of each unit.

4. If any part of the proposed work is to be done by a contractor, the unit contract price is to be indicated.

5. If the results of the exploration work done by the Newmont Mining Company, during 1946 and 1947 are available, please send a copy of the report.

Upon the receipt of the above information we will be able to continue processing this application.

Sincerely yours,

Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division
Defense Minerals Exploration
Administration

FLKnouse/jem
3/25/52
cc to: Adm. Reading File
Docket
Messrs. C.H.Johnson, Rm. 3621
Ned Nelson, Rm. 4216 GS
Ellis
Knouse
Field Team, Region III (2)

Copy to Bailey w/1

700

Answered

FEB 11 1952

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

AIR MAIL

Mr. J. H. Uhalde, Vice President
Lead and Copper Mines, Inc.
336 Merrill Avenue
P. O. Box 387
Reno, Nevada

Re: Docket No. DMA-872 (Copper-Zinc-Lead)
Aladdin Mines
Elko County, Nevada

Dear Mr. Uhalde:

Your application on form MF-103 requesting exploration assistance was received by this Division February 4,1952.

In our letter of January 11, 1952, attached to the forms sent you we suggested that you apply for an exploration contract since the measured ore reserves were inadequate to warrant a production loan of the magnitude you had requested. It is noted that you have failed to give a detailed plan of exploration with your new application. This would have been covered by the first five questions on form MF-103. These questions require the location of work, amount of work, and unit and total cost of work proposed. It has been inferred from the information submitted that your new request is similar to the original request for a production loan.

On this basis, your application has been reviewed by the Defense Minerals Exploration Administration and it is our opinion that the past production from this property, the known ore reserves, and geologic evidence do not warrant the expenditure of such a large sum of money for exploration.

However, a proposal for diamond drilling from the end of the Davis Tunnel to locate the downward extensions of the Standing Elk and Hoffman ore bodies and possibly drilling from the tunnel to locate the downward extension of the Tripoli ore body might be considered by this agency. This would depend upon the geologic evidence favoring such a possibility.

If you are interested in an exploration program of this nature please complete the attached forms and give a detailed plan of exploration with geologic maps showing plan and sections of proposed drilling and complete cost estimates.

Copy to Beasley 2/14

FRutledge/mej 2/8/52
cc to: Adm. Reading File
Docket
Messrs. Johnson, CH Rm. 3621
Nelson, Ned Rm. 4216 GS
Ellis Rutledge
Field Team, Region III (2)

Enclosures
5 MF-103 Forms

Sincerely yours,

SIGNED

Ernest Wm. Ellis, Acting Chief
Rare and Misc. Metals Division
Defense Minerals Exploration
Administration

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

AIR MAIL

JAN 11 1952

Mr. J. H. Uhalde
Lead and Copper Mines, Inc.
336 Merrill Avenue
P. O. Box 387
Reno, Nevada

Re: Docket DMA-872
(Copper Zinc Lead)

Dear Mr. Uhalde:

Your application was received January 4th by this Division from the Defense Materials Procurement Agency which is now handling loan applications.

On July 18, 1951 Mr. Tom Lyon, then Director of the Supply Division, Defense Minerals Administration, wrote you (copy of letter attached) suggesting that you apply for exploration assistance because measured ore was inadequate to warrant a loan.

For your convenience we enclose MO-5 As Amended and 5 copies of form MF-103, Revised June, 1951 and a sample copy of an exploration contract. These forms are currently in use.

A search of our files fails to reveal that an exploration application has been submitted. If we do not hear from you within 30 days, we will assume that you are not interested in making an application for exploration assistance and consider your file closed.

Sincerely yours,

SIGNED

Ernest Wm. Ellis, Acting Chief
Rare and Misc. Metals Division
Defense Minerals Exploration
Administration

Copy to Beeley 1/16

Enclosures

SAFeitler/jem 1-10-52
cc to: Adm. Reading File
Mails & Files Br.
Docket
Messrs. Johnson, C. H. 3621
Nelson, Ned Rm. 4216 G.S.
Ellis
Feitler
Field Team, Region III (2)

DEFENSE MATERIALS PROCUREMENT AGENCY
WASHINGTON 25, D. C.

Nov 30, 1951

Memorandum

To: Docket Control Center

From: Chief, Copper Branch

Subject: Application for a Production Loan of Lead and Copper Mines, Inc., DMA 872, Commodity-Copper

This application is to be withdrawn in favor of an exploration aid docket DMA 872 and should be transferred to Defense Minerals Exploration Administration for denial for exploration aid.

Transmitted herewith is the complete file consisting of:

1 Folder with NSRB 146 and 8 letters
2 Folders with NSRB 146 and supporting material
3 Field Team Report on Lead and Copper Mines, Inc. October 8, 1951
3 Field Team Report on Lead and Copper Mines, Inc. Nov. 5, 1951

SIGNED
J. B. Gowen, Chief
Copper Branch

Attachment

RVWaugh:pk
11/27/51
Copy to: Field Team III
Copper Branch

Copy to Bailey 12/1

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION IV
RECEIVED

DEC 11 PM 2:14

SAN FRANCISCO, CALIFORNIA

DEFENSE METALS PROCUREMENT AGENCY
WASHINGTON 25, D. C.

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

1012 Flood Building
870 Market Street
San Francisco 2, Cal.

Office of
Executive Officer
DMA Field Team
Region III

November 9, 1951

Memorandum

To: Tom Lyon, Chairman, Coordinating Committee, Defense Minerals Administration, Washington, D. C.

From: Executive Officer, DMA Field Team, Region III

Subject: Docket DMA-872, Lead and Copper Mines, Inc.
Aladdin Mines, Elko County, Nevada

Reference is made to your subject letter to be dated July 18, requesting us to examine and report on the subject property.

Attached are four copies of a report, "DMA-872, Lead and Copper Mines, Inc., Aladdin Mines, Elko County, Nevada", by W. T. Benson, mining engineer, U. S. Bureau of Mines, dated November 5, 1951. Attached also are four copies of a report, "Docket DMA-872, Lead and Copper Mines, Inc. Bullion Mining District, Elko County, Nevada (Lead and Copper)", by G. C. Simmons and D. C. Arnold, geologists, U. S. Geological Survey, dated October 8, 1951.

According to the reports by the examining engineer and geologists, the ore bodies occur as pipes and veins along faults and at fault intersections in the limestone. The estimates of ore reserves at the present time are approximately 1500 tons in fills and as continuations of old stope areas.

Further exploration may be justified, but the limited amount of geologic work done in the district does not permit a detailed exploration project to be proposed at this time. The amount of work necessary for such a program is beyond the scope of the Government agencies, so it is advised the company employ the services of a consultant to conduct a geologic study of the area and prepare an exploration program.

The docket DMA-872 and correspondence pertaining thereto are being returned to you attached herewith.

H. C. Miller
Executive Officer
DMA Field Team, Region III

Attachments
Copy to E. H. Bailey, USGS
A. C. Johnson, Reno

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

P. O. BOX 1551
RENO, NEVADA

November 7, 1951

Answered Area 11/9

Memorandum

To: Mr. H. C. Miller, Regional Director, Region III

From: Chief, Mining Division, Region III

Subject: Docket DMA-872, Lead and Copper Mines, Inc.
Aladdin Mines, Elko Co., Nevada

Enclosed are five copies of reports on the Aladdin Mines by W. T. Benson, Engineer of the Bureau of Mines, and G. C. Simmons and D. C. Arnold, Geologists of the U. S. Geological Survey.

According to the reports by the examining engineer and geologists, the ore bodies occur as pipes and veins along faults and at fault intersections in the limestone. The estimates of ore reserves at the present time are approximately 1500 tons in fills and as continuations of old stope areas.

Further exploration may be justified but the limited amount of geologic work done in the district does not permit a detailed exploration project to be proposed at this time. The amount of work necessary for such a program is beyond the scope of the Government agencies, so it is advised the company employ the services of a consultant to conduct a geologic study of the area and prepare an exploration program.

I concur with recommendations that have been made by the examining engineer and geologists.

Docket and correspondence pertaining thereto are enclosed.

Separate as perto.

A. C. Johnson

A. C. Johnson

Encls.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

1951 NOV 8 AM 8:51

SAN FRANCISCO, CALIFORNIA

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMA-072, Lead and Copper Mines, Inc.

Aladdin Mines

Elko County, Nev.

W. T. Benson, Mining Engineer
U. S. Bureau of Mines

November 5, 1951

DOCKET DMA-872

UNITED STATES DEPARTMENT OF THE INTERIOR - BUREAU OF MINES

Lead and Copper Mines, Inc.
ALADDIN MINES
Elko County, Nev.

SUMMARY

The Aladdin Mines Co., presently known as the Lead and Copper Mines, Inc., is situated in the Bullion Mining District, southwestern Elko County, Nev., about 30 miles southwest of Elko, the supply and shipping point on the Western and Southern Pacific Railroads.

Rock formations in which the ore bodies occur comprise thick bedded limestones intercalated with small quartzite members which on surface are completely surrounded by igneous rocks. The igneous rocks consist of granodiorite, rhyolite, and andesite which as a general rule are intrusive into the sedimentaries.

The ore bodies occur in the limestone as pipes of irregular and variable cross section and course, rising more or less steeply through the metamorphosed limestones and dolomites. Some are entirely enclosed, while others occur at the contact of the intrusive dikes.

Estimates of ore reserves can be only of the most general nature, unsupported by measurement. At present, it is estimated approximately 1,500 tons are indicated in fills and as continuations to old stoped areas. By nature and mode of occurrence, the pipe-like ore bodies found in the area are continuous , persistent, and deep seated and it is expected they will be commercial as deep as the oxidized ore extends.

The applicant proposes to raise 780 feet, inclined distance, from the Davis Tunnel to the 700 level of the Standing Elk Mine. This raise would be used as an opening from which additional levels could be turned and as a chute to transfer ore to the Davis Tunnel level. A reserve of 1,600 tons is indicated in fills and as continuations to old stoped areas. This tonnage is inadequate to support a development loan. In view of the foregoing facts, it is recommended the development loan be denied.

Further exploration may be justified, but the limited amount of geologic work done in the district does not permit a detailed exploration project to be proposed at this time. It is suggested, however, the applicant employ a consultant to conduct a geologic study of the area and prepare an exploration program.

INTRODUCTION

The Aladdin Mines Co., presently known as the Lead and Copper Mines, Inc., property was visited by an engineer[1] of the Bureau of Mines during the period August 13-18, 1951, accompanied by geologists[2] of the U. S. Geological Survey. Purpose of the visit was in connection with a development loan, docket DMA-872.

Previously, the property was examined and reported on by an engineer[1] of the Bureau of Mines on April 24, 1947. At the time of examination, the property was under lease to the Newmont Mining Co.

Property holdings comprise a group of 22 contiguous lode mining claims of which six are patented and 16 unpatented. In addition to these holdings, the Aladdin Mines Co. has an option on four patented

1/ W. T. Benson.
2/ G. C. Simmons and D. C. Arnold.

mining claims owned by the Thurber Estate Corp., 50 Broadway, New York City, which adjoins the Aladdin Mines claims.

The property is located on the northerly slope of Bunker Hill mountain in the Railroad Mining District (Bullion Mining District), T. 31 N., R. 55 E., Elko County, Nev., about 30 miles southwest of Elko, the supply and shipping point on the Western and Southern Pacific Railroads.

HISTORY

The first locations were made in 1869, following which there was several years of considerable activity. Mining activities were hauled by the panic of 1873 and were not resumed until 1880, when small lead and copper smelters were erected for treatment of the ores. These smelters were operated until 1885. Thereafter, there was little activity in the district until 1905, when the Bunker Hill Mining Co. predecessor in interest to the Aladdin Mines Co. was organized for the purpose of exploring the ore bodies of the district by a deep level tunnel. Progress in the tunnel was rapid at first, but was interrupted by the panic of 1907. By leasing operations in the old workings during the war period 1914 to 1918 sufficient funds were received from royalties to resume work in the tunnel. During this period 8,349 tons of ore were shipped which yielded net smelter returns of $285,469. Following this period of activity the property was idle until 1940 when it was acquired on a bond and lease arrangement by the Newmont Mining Co. who extended the Davis Tunnel about 1,800 feet to a point immediately under the old workings on the Standing Elk claim. The property was then abandoned by the Newmont

Co. and released by the present Lead and Copper Mines, Inc. in 1948. Since acquiring the property, the present company has rehabilitated most of the old workings and has shipped about 2,500 tons of ore which was produced from fills and extensions to old stoped areas.

PHYSICAL FEATURES

The claims are located on the northeast slope of the Pinon Range in an area of steep and rough topography at altitudes ranging from 6,700 to 9,000 feet. Climate in the area is semi-arid with hot, dry summers and rather severe winters in which low temperatures are frequently experienced with enough snow fall to hamper but not prevent hauling. In addition to a large spring, one-half mile east of the property, which has a flow of about 25 gallon per minute, there are several small springs at the mine camp that provides a limited supply for domestic purposes. Sagebrush, juniper and pinon pine constitute the only vegetation near the property. For mining purposes, dimensional sizes of timber are supplied from Elko.

No transmitted electric power is available. For generation of power, it is necessary to supply fuel oil by truck from Elko, 30 miles northeast.

HOUSING FACILITIES

Camp facilities comprise four 3-room houses, a bunkhouse, boarding house, and dry room.

EQUIPMENT

Equipment on the property includes a small blacksmith shop and a compressor room, 3 compressors of 200, 270, and 387 cubic feet capacity, 9 compression drills, track, pipe, 6 mine cars, and a fairly large

assortment of hand tools. In addition to the above equipment, the company owns 2 light pick-up trucks, a jeep, and 2 large dump trucks.

GEOLOGY

The sedimentary rocks exposed in the district consist almost entirely of massive thick bedded limestone with intercalated, small quartzite members. These formations are intruded by granodiorite, rhyolite and andesite, and are cut by many faults of undetermined displacement.

Adjacent to the granodiorite, contact metamorphism has locally formed zones of garnet and other silicified rocks. In places along the contact, sulfides are present as sphalerite, chalcopyrite, and pyrite.

In the vicinity of the producing mines, garnet zones are associated with many of the ore bodies. These zones, however, are not in contact with intrusive rocks but appear to follow zone of the channel-ways that carried ore bearing solutions.

The workings on the Lead and Copper Mines, Inc. are in gray to black limestone which has been intruded by dikes of granite porphyry. In places the dikes have undergone moderate to extreme alteration. In places, the limestone has been silicified and locally recrystallized to a coarse marble.

The ore bodies occurring in the area seem to have the structural form of pipes of irregular and variable cross section and course, rising more or less steeply through the metamorphosed limestones or dolomite; some are entirely enclosed, while others occur at the contact of the granodiorite porphyry dikes.

In the copper areas the primary ore was probably chalcopyrite accompanied by some sphalerite, while in the lead areas the ore was derived by the oxidization of pyrite, galena, sphalerite, chalcopyrite and possibly tetrahedrite; the latter being the principal silver-bearing mineral, as well as supplying some of the copper in a quartzose gangue. The gangue minerals are calcite, limonite, hematite, garnet quartz and in places some manganese.

DEVELOPMENT

The ore bodies in the Standing Elk and Hoffman claims have been explored in part to a maximum depth of 700 feet below surface by 5 adits and a 200-foot winze. The adjoining Bullion, Elk, Stern King, and Hobfoot claims, have been partially explored to a maximum depth of 500 feet below the surface by 5 crescent adits.

The ore bodies on the Tripoli claims have been explored to a depth of 400 feet by two crescent adits, between which there are three inside levels and by a 100-foot winze below the lowest adit.

The Davis tunnel, the main working adit, has a portal elevation of 6,700 feet. It is 800 feet below the bottom of the Tripoli winze and 700 feet below the No. 7 Elk level.

ORE RESERVES

Any estimate of ore reserves can be only of the most general nature, unsupported by measurement of ore in sight. However, the pipe-like ore bodies are by nature and mode of occurrence, continuous, persistent, and deep-seated, and it is expected that they will be commercial as deep as the oxidized ore extends which could be several

hundred feet below the Davis Tunnel, giving therefore, a probable vertical range of 1,000 feet of unmined ore, as against a probable average depth of 500 feet to which the ore bodies have been previously mined. In addition, there is a strong probability that other ore bodies have been entirely missed by previous operations because of the mantle of wash that masks all exposures over a considerable area in the mineralized section.

Resulting from the recent examination, approximately 1,500 tons of ore are indicated as continuations to old stoped areas.

PLAN OF OPERATION

As outlined in the request for a development loan, the applicant had as his main objectives, the increase of present production and the development of downward continuations of the known ore sections from the main or Davis Tunnel level. The program as outlined by the applicant proposed raising 700 feet from the Davis Tunnel to the 700 level of the Standing Elk mine. This raise would be used for dewlopment purposes and as a transfer chute to the Davis Tunnel.

The reserve tonnages available for mining are small, and the program as outlined is vague and not sufficiently detailed to justify the loan requested. It is therefore recommended that the loan be denied.

CONCLUSIONS

The property is not a very large one and in view of its present condition is necessarily of a speculative nature, but the following conditions are favorable:

Previous production figures, authenticated by smelter settlement sheets show the ore to be of good grade.

Geological conditions are favorable to the persistency of the ore bodies at depth.

The ore being oxidized and of direct smelting grade will not need a mill.

The existence of a completed deep tunnel suitable for utilization for development purposes, will reduce the cost of an exploration program.

The property does possess attractive possibilities which warrant exploration; but the limited amount of geological work done in the area does not permit the proposal of an exploration project at this time since considerable time would have to be spent to properly evaluate the property for an exploration program. The amount of work necessary for such a program is beyond the scope of the Government agencies, so it is advised the company employ the services of a consultant to conduct a geologic study of the area and prepare an exploration program.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Room 307, 320 South Main
Salt Lake City 1, Utah
10 October 1951

Memorandum

To: A. C. Johnson, Mining Division, U. S. Bureau of Mines

From: Ralph J. Roberts, Acting District Supervisor

Subject: Geologic report, Docket DMA-872, Lead and Copper Mines, Inc., Bullion Mining District, Elko County, Nevada

Enclosed are six copies of a geologic report on property controlled by the Lead and Copper Mines, Inc., in the Bullion Mining District. The property was examined and the report prepared by G. C. Simmons and D. C. Arnold in response to the request made by the Field Team, Region III.

Docket DMA-872 is a request for a development loan. The applicant proposes to raise 780 feet inclined distance from the Davis Tunnel to the 700 level of the Standing Elk Mine. This raise would be used as a chute to drop the ore from the Standing Elk Mine to the Davis Tunnel level. The Standing Elk Mine contains approximately 1,500 tons of measured and indicated ore; these reserves which are inadequate to support a development loan, occur mainly in the walls of old stopes, and were too low grade to mine profitably in early day operations.

I concur with the examining geologist that the request for a development loan be denied.

Further exploratory work in the Standing Elk Mine may be justified, but the limited amount of geologic work done in the district does not permit the examining geologist to suggest a detailed exploration project. It is suggested that the applicant employ a consulting geologist to conduct a geologic study of the area, and then submit a specific exploration program to the Defense Minerals Administration.

Ralph J. Roberts

cc: Bailey

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

Docket DMA-872, Lead and Copper Mines, Inc.

Bullion Mining District, Elko County, Nevada

(Lead and Copper)

G. C. Simmons and D. C. Arnold, Geologists
U. S. Geological Survey

October 3, 1951

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Geology	1
Ore Deposits	1
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ILLUSTRATIONS

Figure 1. Index map showing location of Bullion Mining District, Elko County, Nevada.

Figure 2. Geologic map of 500 level of the Standing Elk Mine.

Figure 3. Section of Bullion Mining District showing location of Davis Tunnel.

Docket DMA-872, Lead and Copper Mines, Inc.

Bullion Mining District, Elko County, Nevada

GEOLOGY

The rocks of the district are light gray to black massive limestones, probably Ordovician in age. The limestone, which is intruded by granodiorite and fine-grained granite porphyry dikes, is cut by many faults of undetermined displacement.

Adjacent to the granodiorite, contact metamorphism has locally formed zones of garnet, tremolite, actinolite, calcite, and sericite in the limestone; in places along the contact sulfides are present as sphalerite, chalcopyrite, and pyrite.

In the vicinity of the producing mines, garnet zones are associated with many of the ore bodies; these zones, however, are not in contact with intrusive rocks but appear to follow some of the channelways that carried the ore bearing solutions.

The workings of the Standing Elk mine are in gray to black limestone, which has been intruded by irregularly shaped granite porphyry dikes. The dikes have undergone moderate to extreme argillic alteration. Much of the limestone is stained by red and brown iron oxides; in places it has been moderately silicified and locally recrystallized to a coarse marble.

ORE DEPOSITS

The principal ore bodies in the Standing Elk mine occur as pipes and veins along faults and at fault intersection in limestone. Some copper ore has also been mined from the granite porphyry dikes, but production from the igneous

rocks has been small compared to the production from the limestone.

The principal ore minerals are of secondary origin. Malachite, chrysocolla, and cerusite are the main ore minerals; minor amounts of azurite, galena, and ferruginous smithsonite are also present. Most of the ore contains silver, but no silver minerals were identified. The gangue minerals are calcite, limonite, hematite, garnet, quartz, and in places a little manganese oxide.

PROPOSED DEVELOPMENT

The development program outlined by the applicant is vague. The applicant wishes to raise 780 feet inclined distance from the Davis Tunnel to the 700 level of the Standing Elk mine. This raise would be used to drop the ore in the Standing Elk mine to the Davis Tunnel; however, the mine does not contain sufficient ore reserves to justify a development program. Approximately 1,500 tons of proven and indicated ore occur mainly in the walls of old stopes.

CONCLUSIONS AND RECOMMENDATIONS

The Standing Elk mine workings are in faulted Paleozoic limestone that has been intruded by granite porphyry dikes. The principal ore bodies occur along faults and at fault intersections.

The ore reserves, which are inadequate to support a development loan, are mainly the walls of old stopes that were too low grade to mine profitably in early day operations. It is therefore recommended that a development loan be denied.

Further exploration may be justified, but the limited amount of geologic work done in the area does not permit a detailed exploration project to be proposed at this time. A suggested program is outlined in the attached memorandum

MEMORANDUM

SUBJECT: DMA Docket 872. Suggested geologic program.

DMA Docket 872 is a request for a production loan. In a conversation between J. H. Uhalde, Vice President and the examining geologists, it was stated that the applicant would like to change part of the request to an exploration loan.

The portal of the Davis Tunnel extends approximately 5,000 feet southeast from the mining camp. The face of the tunnel is 600 feet below and 100 feet north of the workings of the Standing Elk Mine. (See fig. 3.) The tunnel is in good condition; additional work consisting of drifting and raising from the face of the tunnel would be the most logical way to explore the ground below the old surface workings in the district in a search for commercial ore bodies at depth. Two metallized faults were cut by the tunnel near the face, but were not explored. Geologic conditions indicate that the possibility of commercial ore bodies occurring below the old workings is favorable.

The field examination in connection with the development loan entailed mapping approximately 10,000 feet of mine workings, which showed that the property does not have sufficient ore reserves to qualify for a development loan. To justly evaluate the property as to an exploration program would require an additional three weeks of field work and would entail a mapping job of the surface geology and additional underground workings. A program of this extent is beyond the scope of a Defense Minerals Administration examination, but it would be advisable to notify the applicant that such a program is warranted. He should employ a consulting geologist to conduct a geologic study of the area and prepare an exploration program.

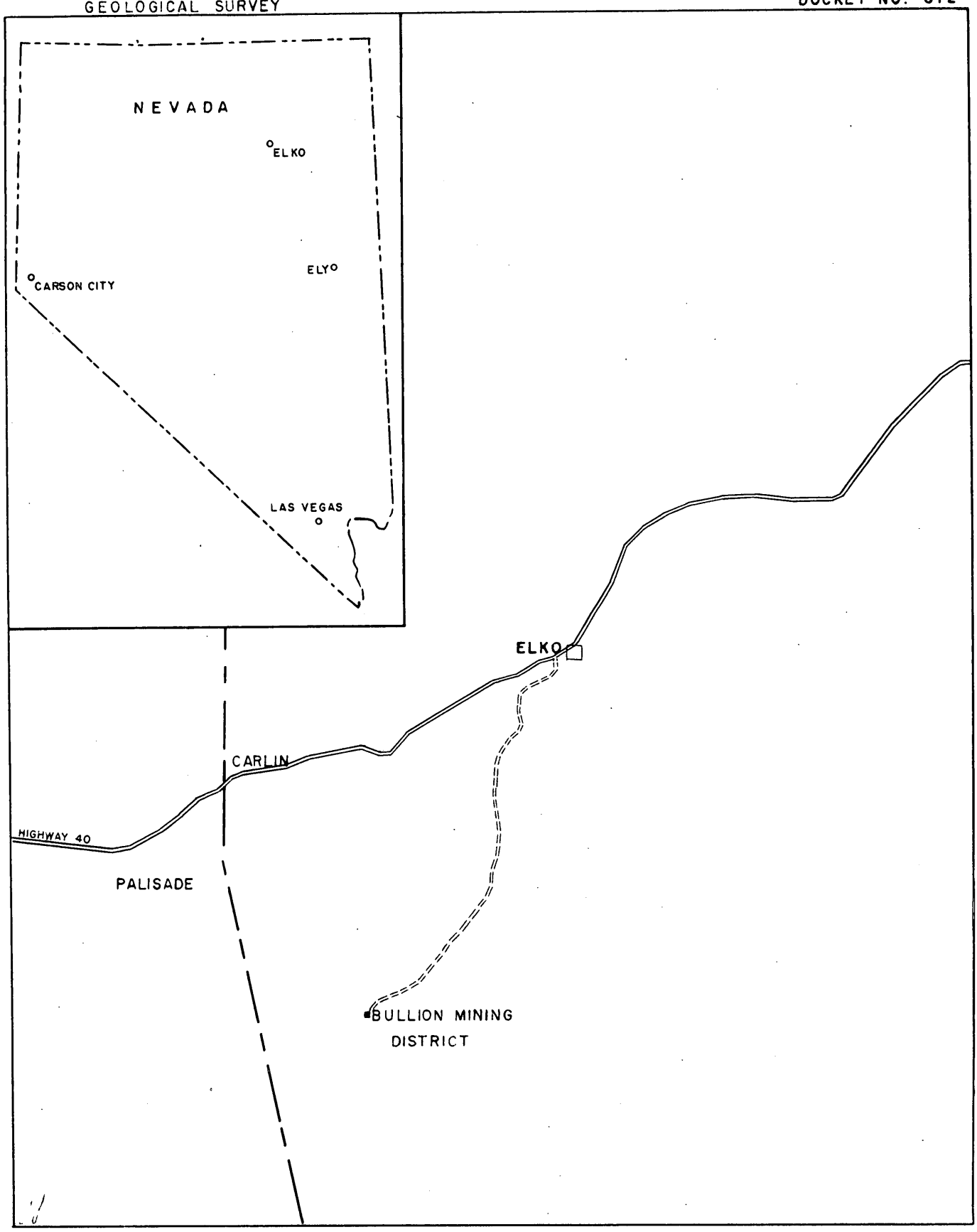


FIG. 1

INDEX MAP OF NEVADA

0 10 20 MILES
Scale

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
RARE AND PRECIOUS METALS EXPERIMENT STATION

METALLURGICAL DIVISION Hydrometallurgical and Ore-Dressing Branch RENO, NEVADA
Region III Box D, University Station

August 23, 1951

Dma-872

Mr. W. T. Benson
Bureau of Mines
P. O. Box 1551
Reno, Nevada

Project No. Benson

Sylvania Mine, Elko County, Nevada
Also Baite Lead-Silver

Sample No.	%,Pb	%,Zn	%,Cu	Oz.Au/T	Oz.Ag/T
1451	2.2	3.4	0.58	Tr.	1.65
1452	3.8	5.3	1.86	Tr.	2.50
1453	5.2	1.7	2.71	Tr.	10.20
1454	0.1	1.1	2.34	Tr.	Tr.
Aladdin 1455	5.9	7.4	1.26	Tr.	10.00

J. B. ZADRA

J. B. Zadra, Chief

cc: A. C. Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR

~~BUREAU OF MINES~~
~~REGION III~~

DEFENSE MINERALS ADMINISTRATION

OFFICE OF
~~REGIONAL DIRECTOR~~
Executive Officer
DMA Field Team
Region III

1012 Flood Bldg.
870 Market St.
~~MISSION BLDG.~~,
~~SAN SOME STREET~~,
SAN FRANCISCO ~~1~~, CALIF.
2

August 1, 1951

Memorandum

To: A. C. Johnson - Reno

From: Executive Officer, DMA Field Team, Region III

Subject: Docket DMA-872—Lead and Copper Mines, Inc., J. H. Uhalde, Vice President, 336 Merrill Ave., P.O.Box 387, Reno, Nevada

Subject docket has been referred to the Region III DMA Field Team for further study. Mr. Bailey, of the Survey, and I discussed the docket and concluded that a joint Bureau of Mines-Geological Survey examination is required. Accordingly, you are to get in touch with Mr. Ralph J. Roberts, U.S.Geological Survey, Salt Lake City, and arrange to have him meet your engineer at the property.

This property should be examined at the same time and by the same engineers and geologists covering the Reite property (DMA-1548X).

Note that through correspondence with Mr. Uhalde we learned that places in the mine that were not open when your engineers visited the property in 1947 can now be entered. See reply from Mr. Uhalde to my letter to him, dated July 26.

Docket DMA-872 is attached herewith.

H. C. Miller
Executive Officer, DMA Field Team
Region III

Attachment

Copy to: E. H. Bailey, USGS

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
102 Old Mint Building
San Francisco 3, California

Refer to	Noted	Date
	HCM	8/1
Answered		

DEPARTMENT OF INTER. BUREAU OF MINES REGION III RECEIVED AUG 1 1951 SAN FRANCISCO, CALIFORNIA

July 31, 1951

Subject; DMA-872
DMA-1548x

Mr. Ralph J. Roberts
U. S. Geological Survey
320 South Main Street
Salt Lake City 1, Utah

Dear Ralph:

Mr. Miller and I have agreed that a joint Survey-Bureau examination should be made for the two DMA applications enclosed. As two copies of the application were included with each docket sent to Miller, I am sending to you one copy of each, and the other has been sent to Johnson. In the future I will try to follow this plan, as it gives our geologists some idea of what they are getting into, which they rarely had when the whole docket went to Johnson.

Both properties are in the same area, and Washington suggested they both be looked at on the same trip.

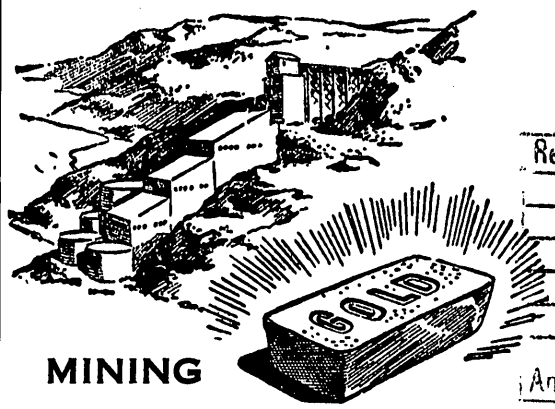
DMA 872 is a request for a production loan. The original correspondence from Washington stated the property had been examined a few years ago, and, as no reserves were present, it could not qualify for a production loan. Since then Mr. Miller has written to the applicant. They stated they are in production and have reserves blocked out; therefore, they are eligible for a production loan. In reply to Miller's questions they stated they were interested in either a production or exploration loan. So I suspect the examining geologist and engineer should carefully consider, probably with the applicant, the possibility of two loans, one for production and the other for exploration. As the amount of money involved is large, the study of the property and the report preparation will probably require more than the average amount of time.

DMA 1548x does not appear to offer any special problems except that the "Review" suggests there may be some conflict with the other application. I have not studied the dockets enough to know if the conflict is over ownership, or results from both applicants proposing expensive exploration in adjoining areas to test for the same ore body. Doubtless, the field examination will clarify this.

Sincerely yours,

Edgar H. Bailey

Enclosure (2)



MINING

NEVADA MINERAL LABORATORIES

J. BENJ. PARKER, METALLURGIST JOHN H. UHALDE, ANALYST
PHONE RENO 21001 - POST OFFICE BOX 387
336 MORRILL AVENUE
RENO, NEVADA

CABLE ADDRESS:
NEVMINLABS

Refer to	Noted	Date
Answered		

LABORATORIES:
- ASSAY
- CHEMICAL
- FLOTATION
- CYANIDATION
- CONCENTRATION
- AMALGAMATION

REFINERS AND PROCESSORS:
- GOLD
- SILVER
- MERCURY

26 July 51

United States Department of The Interior
Defense Minerals Administration,
Executive Officer-DMA Field Team Region III

Subject: Docket DMA-872

Dear Mr. Miller:

Regards your letter 26 July 51- The under ground workings of our property were not open for examination in 1947. During the period of 1949 to-date we have opened and made accessible some three to four thousand feet of workings.

We are now operating the number five level which has not been worked since 1916 and the main tunnel caved since 1921.

Over the past 15 months we have shipped 3000 tons of ore in addition to our continuous opening and development program.

The AS&R Geologists just visited the property and we now have a contract for our shipping ore. These Geologists were very much impressed with the mine and it's potentialities. They want as far as to express the opinion the property was far above any of the properties they had visited in the past year and definately should qualify under DMA.

We are open for a Production or an exploration loan.

We hope the above information gives you an answer to your letter and that we get a prompt examination.

Sincerely yours,

John H. Uhalde

John H. Uhalde
Vice Pres Lead and Copper Mines Inc.

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

Hem 7/25

Answer

DEPARTMENT OF INTERIOR
BUREAU OF MINES
RECEIVED
JUL 23 1951
SAN FRANCISCO, CALIFORNIA

JUL 18 1951

Mr. H. C. Miller
Executive Officer, DMA Field Team
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMA-872
Lead and Copper Mines, Inc.
Copper

Dear Mr. Miller:

We are enclosing herewith an application for a production loan of $415,000, submitted by Mr. J. H. Uhalde, Vice President, Lead and Copper Mines Inc., 336 Morrill Ave., P.O. Box 387, Reno, Nevada. The property is the Aladdin Mines, located about 28 miles southwest of Elko, in the Railroad Mining District, Elko County, Nevada. There is no evidence of any measured reserves offered with the application, and a Bureau of Mines report made in 1947 states that there is no measured ore in sight. From all the evidence available however, it appears that the property offers good possibilities as a prospect.

Will you please arrange for a Field Team to examine the property to see if, by any chance, sufficient ore to justify a loan has been blocked out since the Bureau of Mines examination was made. If a loan is not justified, please take up the exploration possibilities with Mr. Uhalde and assist him in preparing a program and an application on MF-103, if he should so desire.

Yours very truly,

Tom Lyon

Tom Lyon, Chairman
Coordinating Committee

Enclosures

Copy to Beasley 7/25

Lowell B. Mason
for the Bureau of Mines

Alex L. Don
for the Geological Survey

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

xxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxx

Executive Officer
DMA Field Team
Region III

July 26, 1951

Subject:
Docket DMA-872

Mr. J. H. Uhalde, Vice President
Lead and Copper Mines, Inc.
336 Morrill Avenue, P. O. Box 387
Reno, Nevada

Dear Mr. Uhalde:

You have received a letter, dated July 18, from Mr. Tom Lyon, Director, Supply Division, Defense Minerals Administration, concerning your application for a production loan of $415,000, giving information to the effect that this office was being requested to make a field examination of your property. This will be done, but before we send engineers and geologists to examine your property, we would like to have information on the following.

1. A Bureau of Mines report made in 1947 states that there is no measured ore in sight on your property. Has any ore been blocked out since the Bureau's examination was made?

2. If enough ore is not blocked out to warrant a production loan, would you consider an exploration project on a matching basis as outlined in the press release dated April 11, which Mr. Lyon sent to you.

Upon receipt of the above requested information, we will be in a better position than we are now to plan the kind of examination we should make of your property.

Sincerely yours,

H. C. MILLER

H. C. Miller
Executive Officer, DMA Field Team
Region III

Copy to: E. H. Bailey, USGSG

HCMiller:am

Files
Chrono

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

JUL 10 1951

Re: Docket No. [illegible]-572

Mr. J. F. Shelde, Vice President
Lead and Copper Mines Inc.
336 Merrill Avenue
P. O. Box 387
Reno, Nevada

Dear Mr. Shelde:

The Copper Branch of the Defense Minerals Administration has made a careful study of your application for a production loan of $415,000, and can find no evidence of any measurable ore reserves. Available reports indicate that in 1947 there was no measured ore in sight. However they believe the available evidence strongly suggests that your property merits consideration as an exploration project. They have requested a Field Team to make an examination of any reserves that might have been developed since 1947, and to discuss with you the possibilities of an exploratory contract. You should hear at an early date from Mr. H. C. Miller, Executive Officer, DMA Field Team, Region III, to arrange for an examination.

For your information we are enclosing copies of press releases dated April 11 and May 14 that will explain the exploration assistance program; [illegible]-5 (Regulations); 5 copies of [illegible]-103 (Application); and one copy of [illegible]-100 (Technical Data). Should you be interested in this program after talking to the Field Team, please submit four copies of [illegible]-103. You need answer only questions 6, 7, 9, 10, 21, 23, and 24, as the other information has already been submitted.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division, DMA

Enclosures
DMacLaren:ez
Copy to: Executive Officer, DMA Field Team III
Reports and Records Branch
Copper Branch
Administrator's Reading File
Coordinating Committee
C. H. Johnson, Rm 3425
D. MacLaren

U S DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS ADMINISTRATION
DOCKET NO 872

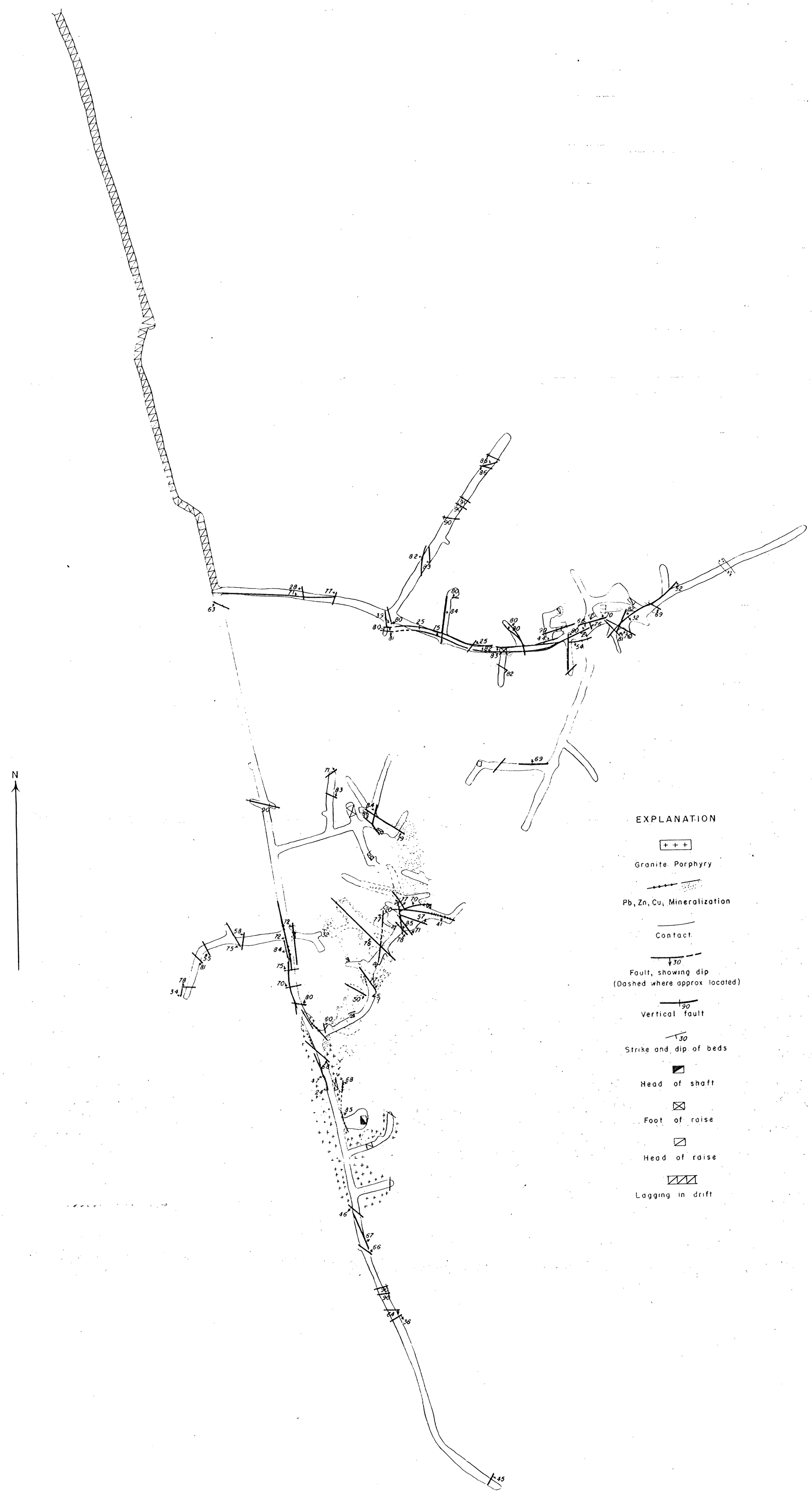


FIG. 2

MAP OF 500 LEVEL STANDING ELK MINE
BULLION MINING DISTRICT, ELKO COUNTY, NEVADA

0 40 80 FEET
Scale

Mapped by G. C. Simmons
and D. C. Arnold