DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E NO._____ DMEA NO. 4818

Application
- [x] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [ ] Project summary (final)
- [ ] Work Completed analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [✓] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No._____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No._____: Maps (Use pocket folder or envelope)

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1605 Evans Avenue
Reno, Nevada

August 22, 1957

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application (Mercury)
C. A. Coppin
Cinnabar Lode Claims Nos. 1, 2, & 3
Pershing County, Nevada

Enclosed are three sets of MF-103, Application for Aid forms, relative to above subject. The fourth set has been retained in our files.

S. Ricker

Attachments

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DMEA
RECEIVED AUG 27 1957

DATE	INITIALS	CODE
8/27	WSM	400

Form MF–103
Revised Feb. 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42–R1035.3
Approval expires June 30, 1958

APPLICATION FOR AID IN AN EXPLORATION PROJECT

PURSUANT TO DMEA ORDER I, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

NAME OF APPLICANT (Full legal name and mailing address as it should appear on contract if one is executed)

C.A. Coppin

Lovelock, Nevada

RECEIVED AUG 27

APPLICANT NOT TO USE THIS BLOCK

Docket Number: 4818

Date Received: 8/27/57

Government Participation %:

Region: II

Division Code: 400

BUSINESS ORGANIZATION (Check one)

- Individual [x]
- Corporation [ ]
- Partnership [ ]
- Other (Specify) [ ]

State in which firm is organized:

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

Name	Address	Title

Mineral(s) for which you wish to explore: Mercury

Estimated Cost of Project: $ 17,600.00

LOCATION OF PROPERTY

Name	County	State
Cinnabar Lode Claim No.3	Pershing Co.	Lovelock, Nevada

GENERAL INSTRUCTIONS

Before filling out this application, please read DMEA Order–I, Amended, "Government Aid in Defense Exploration Projects." To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit four copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 1, existing mine workings and geology in item 2, and the proposed exploration project in item 4. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 2(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest DMEA Field Office.*

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.

August 16, 1957
Dated

C. A. Coppin
BY (Signature)

Operator
Title

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. *Applicant's Property Rights:*

(a) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all land adjacent to the proposed project area which you own or control. Describe any part of the project land or workings which should not be subject to Government lien for royalty payments. If the land consists of unpatented claims, state the book and page number for each recorded location notice, including amended locations, and the place where recorded (courthouse, recorder's office, county, and state).

(b) State all the names by which you know the property.

(c) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise. If you are not the owner, submit with this application one exact copy of the lease, contract, or other document (with address of owner) under which you control the property.

(d) Describe all liens, mortgages, or other encumbrances on the property.

2. *Physical Description:*

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the lands, including existing mine workings. Describe all production facilities.

(b) State your interest, if any, in operations stated in 2*(a)*.

(c) State, as far as you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves on the property giving quantities and grades and sampling methods used, supporting your statement with copies of assay certificates and assay maps if available.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you may have, indicating on each whether you require its return to you.

3. *Accessibility of Project:*

(a) To aid DMEA representatives who may be required to examine the property, state the name and address of the person who will meet the DMEA representative; give directions for reaching the property; and describe accessibility of the property including the mine workings.

(b) Name the shipping and supply points and places where employees reside and state the distances between them and the property.

4. *The Exploration Project:*

(a) Describe fully the proposed exploration project giving individual footages and sizes of openings *for each item of work.* Use narrative, maps, plans, and longitudinal and cross sections as necessary. Show the location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *property boundaries* or to the closest identifiable corner.

(b) If an access road to the project must be built, show the location on the property map and state the length, type, and construction methods proposed.

(c) In the event that an exploration contract with DMEA is executed, how soon will the work start and how many months will be required to complete it? State your anticipated average daily or monthly rate of progress for each type of work.

5. *Experience:*

State your operating experience and background with relation to your ability to carry out this exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of Costs:*

Furnish detailed estimates of the costs *for each item of the work proposed in 4(a)* under the headings listed below with a total for each heading and the estimated total cost of the project. Costs for any work to be performed by an independent contractor should be shown separately under category *(a)* below. Costs for any work that is not to be performed by an independent contractor should be given in detail under categories *(b)* through *(g)*.

(a) Independent contracts. State the cost of any proposed independent contract for the performance of all or any part of the work, expressed in units of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. *(Note* – If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. For necessary supervision, engineering and geological services, and labor, include an itemized schedule of numbers, classes, rates of wages, salaries or fees, and periods of employment. State whether these technicians and employees are available.

(c) Operating materials and supplies. List items of material and supplies with their cost. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of operating equipment to be used giving specifications and indicating how each item is to be acquired – i.e., rented, purchased, or provided by the applicant. If it is rented or purchased, state the estimated rental or purchase price. If it is to be furnished by the applicant, give its present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of necessary *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant, which will be used on the exploration project.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration project stating specifications and cost including labor, materials and supervision.

(g) Miscellaneous. For the operating equipment listed in 6*(d)*, describe the type and estimate the cost of repairs and maintenance expected during project operations. Do not repeat initial repairs listed in 6*(e)*. Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories.

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)* State whether you are prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation stated in Sec. 7 of DMEA Order–I, Amended.

(b) Explain to what extent you propose to furnish your share of the costs by providing money, by use of equipment owned by you, or otherwise.

* * * * *

INT.–DUP. SEC., WASH., D.C. 15539

C.A.Coppin
Lovelock, Nevada

APPLICATION FOR AID IN AN EXPLORATION PROJECT

1. Applicant's Property Rights:
   (a) Section 33, Township 27N, Range R34E
   Unpatented claims recorded in Book No.2 pages 213,214, and 215 in recorder's office, courthouse Pershing County, Lovelock, Nevada under name of Cinnabar Lode Claim Nol, No.2, and No.3.
   Cinnabar Lode Claims No.1 and No.3 join the Redbird Mine on the south. Cinnabar Lode Claim No.2 joins Cinnabar Lode Claims No.1and No.3 on the south.
   (Applicant controls Redbird Mine by lease and Has DMEA loan on the same.)
   Cinnabar Lode Claim No.3 is the site of the proposed exploration project for which this application is being made.
   Cinnabar Lode Claims No.1and NO. 2 are not subject to lein or Government royalty.

   (b)This property is known only by the name of the Cinnabar Lode Claims No.1, No.2, and No.3.

   (c)C.A.Coppin is one of the owners, together with J.S.Harrison and Llewellyn Young. C.A. Coppin leases the Redbird Mine from Llwellyn Young.

   (d)There are no liens, mortgages, ob other encumbrances on the property.

2. Physical Description:

   (a)This was virgin ground and the applicant has had bulldozing done to strip off the overburden to the bedrock over a distance of 200feet in length by 125 feet in width. In addition he has made three open cuts exposing ore showings.

   (b)As co-owner applicant had the above work done.

   (c)No past or current production as this is virgin ground.
   (d)No assays to date.

   (e)Geologic formation consists of lime and black shale with hematite iron showings. Has outcroppings of ore in three places.

   (f)The vein of the Redbird Mine which produced so much ore runs into this claim from the Redbird as it is the trend of the ore that produced the ore bodies in the Redbird, for that reason we expect to find ore here.

   (g)No reports or maps have been made on this claim.

C.A.Coppin
Lovelock, Nevada

3. Accessibility of Project:

(a) DMEA representative already familiar with this property due to association with the Redbird Mine.

(b) Lovelock, Nevada is 21 miles away over a first class graveled road. This is the shipping and supply point. Employees reside here.

4. The Exploration Project:

(a) The project to consist of a 300 foot tunnel on the vein driven from the access tunnel of the Redbird Mine in a South-easterly direction into Claimber Claim No.3.
Also 100 feet of cross cut on either side of vein in the most promising area, approximately 50feet to either side.
Also 100 feet of sinking on the vein at point with the best indications of ore.
The Ruebold's Club Stope of the Redbird Mine which produced 1948 flasks of quicksilver during World War II is less than 50 feet from the sideline of Claimber Lode Claim No.3.

(b) Access road is already there.

(c) Work will start immediately and be completed in seven months. Approximately 100 feet of tunnel a month and 50 feet of sinking will be done a month.

5. Experience:

Applicant, C.A.Coppin, has been in the mining business off and on since he started in Butte for the ASH Co. in 1915. He has worked at every job in the mine from miner to superintendent. During World War II he was superintendent of the Redbird Quicksilver Mine. He has completed one DMEA Exploration project at the Redbird and has paid back some royalty on this loan. He is now working on a second loan which will be completed shortly.

6. Estimate of Costs:

(a) Independent contracts
300 feet of drilling.....$37.00 per foot...$11,000.00
100 feet of sinking.....$60.00 per foot...$ 6,000.00
Total $17,000.00

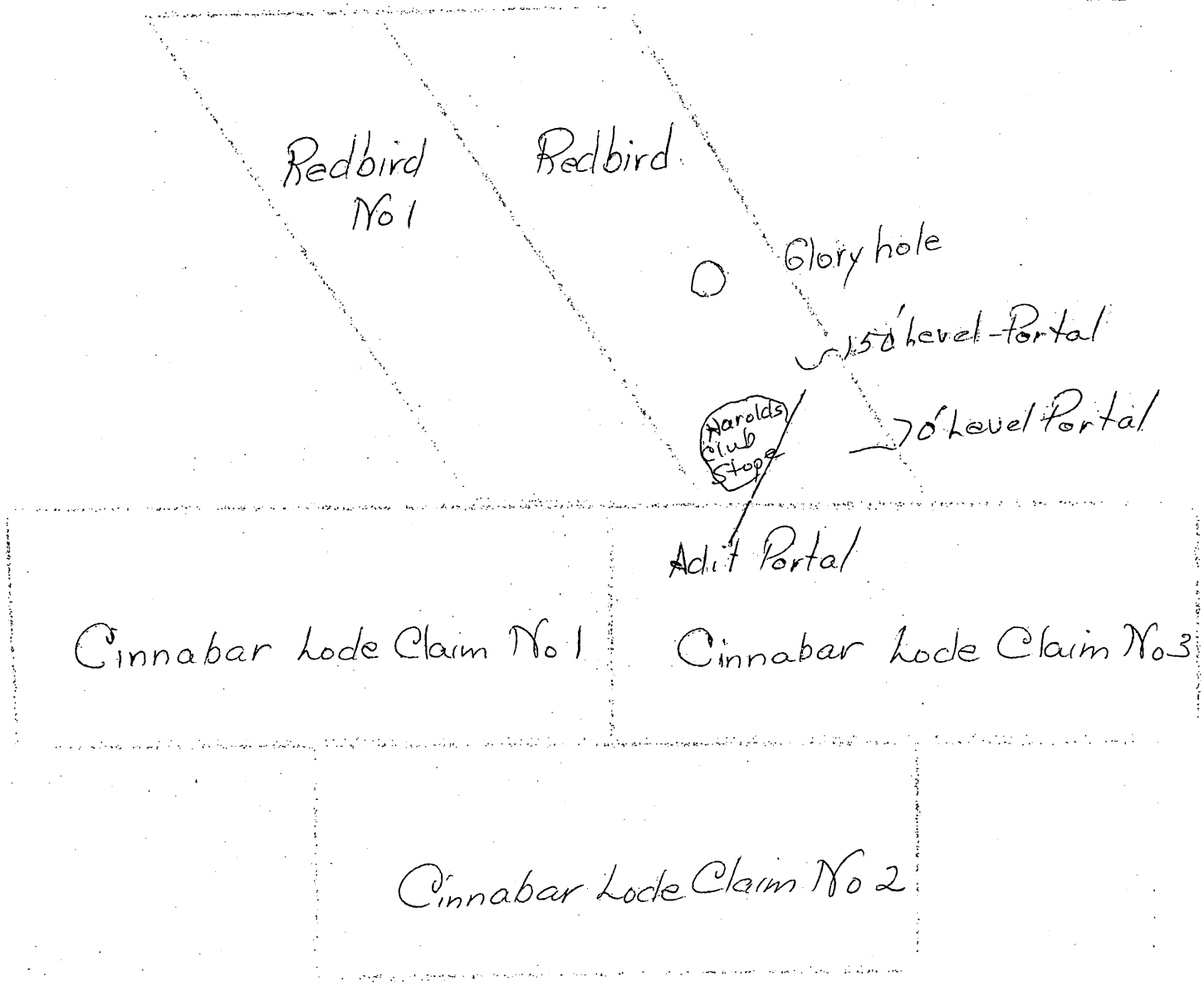
(b) Included in contract
(c) Included in contract
(d) Operating equipment will be furnished by applicant.
(e) Rehabilitation and repairs...none.
(f) New buildings etc. none
(g) Misc. included in contract.

G.A.Coggin
Lovelock, Nevada

7. Applicant is prepared to furnish his share of the cost of the proposed project in accordance with the regulations.

Applicant's share will consist of all necessary mining equipment. All of this equipment is now on the Redbird property and is being used on the claims on which he is now working.

SKETCH OF PROPOSED ADIT OR TUNNEL ON REDBIRD MINE



DMEA Form 7
(12-56)

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Date	Surname	Code
11-19	Hopkins	400
11-19	Martin	400
11/22	Martin	130
11/22	Williams	130
11/22	Lamb	130
"	Johnson	110
"	Mittendorf	100
		230

NOV 25 1957

Mr. C. A. Coppin
Lovelock, Nevada

Re: Docket No. DMEA 4818 - Mercury
Cinnabar Lode Claim No. 3
Pershing County, Nevada

Dear Mr. Coppin:

Your application for aid for an exploration project and other data available to us in Washington concerning the referenced property have been reviewed.

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

Careful study of all our information although noting the occurrence of mercury mineralization on your property indicates to us that the probability of disclosing significant ore reserves is not sufficiently promising to justify Government participation. Under these circumstances we regret to advise you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Administration program and for bringing this property to our attention.

Sincerely yours,

C. O. Mittendorf (for)
Administrator

JHOPKINS/dlm 11-19-57
cc to: Code 400
Admr. R. File
Oper. Comm.
FT. REG. II
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

8623

DMEA Form 7
(12-56)

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Date	Surname	Code
11-19	[illegible]	400
11-19	Martin	400
		110

November 19, 1957

MEMORANDUM

To: Administrator, DMEA

From: Division of Iron and Ferro-Alloys, DMEA

Subject: Denial of the subject application for exploration assistance in the amount of $17,600.00.
Docket No. DMEA 4818 - Mercury
C. A. Coppin
Cinnabar Lode No. 3
Pershing County, Nevada

Denial of the subject application is recommended by this Division based on the following information.

The Applicant, C. A. Coppin, on August 8, 1957, applied for exploration assistance on the above-cited property of an estimated cost of $17,600.00 for 400 feet of drifting and 100 feet of sinking. The property was examined by J. E. Carlson, Geological Survey and H.W. Jones, Bureau of Mines accompanied by the Applicant.

Applicant: Mr. C. A. Coppin
Lovelock, Nevada

Property Ownership: The Cinnabar Lode Claim No. 3 is held by right of location by C. A. Coppin, J. G. Harrison and Llewellyn Young, and is recorded in book 2, page 215, in Recorder's office, Pershing County, Nevada.

The claim is located in Section 33, T. 27N., Range R34E. and adjoins the Redbird Mine.

Geology: The rocks in the claim area are limestone, limestone conglomerate and shale of the Pershing formation of upper Triassic age.

The structural relationships in the area are complex and the rocks may possibly be overturned. They are folded into a shallow northwesterly plunging syncline. The south flank is cut by a major northwest trending fault. Other faults that trend generally west to northwest also cut the sedimentary rocks. The Cinnabar ore bodies of the Redbird Mine are along these west trending faults. No faults were observed in the Cinnabar No. 3 Claim, but fractures in all attitudes are common. Cinnabar in small amounts occurs as disseminated crystals and films along these fractures.

Past History and Production: There is no record of production

Development: The claim is explored by about 250 feet of bulldozer cuts and three pits 4 to 6 feet deep and 10 feet in diameter. Pits 1 and 2 contained no visible cinnabar and pit No. 3 contained cinnabar in trace amounts.

Sampling and Ore Reserves: Samples were taken across exposed faces in the three cuts and assayed with the following results.

Sample No.	Thickness feet		Lbs. Hg/ton
517	3.8		0.1
518	3.0	Less than	0.1
519	1.5	Less than	0.1
* 496	1.0 (altered zone)		8.7

* Taken at site of No. 2 pit before pit was dug.

Cinnabar Lode Claim contains no measured or indicated reserves, nor are any inferred.

Proposed Work:

The Applicant proposed to (1) drive a 300-foot crosscut southeast into the Cinnabar No. 3 Claim from the Redbird access adit and (2) drift 100 feet and sink 100 feet on the best mercury showing.

Conclusions: Ore in the Redbird Mine occurs along faults but no such faults exist in this claim. The poor surface showings confirmed by a geochemical survey and the prospect work done by the Applicant do not indicate that ore will be found at depth, or that a target can be inferred that would justify Government participation under the DMEA program.

The Field Team recommends that the application be denied.

The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in the recommendations of the Field Team.

W S Martin

W. S. Martin, Director
Division of Iron and Ferro-Alloys

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

IN REPLY REFER TO:

ORIGINAL FILE COPY
DMEA
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DATE	INITIALS	CODE
11/15	gb	220
11/15	WSM	400

Memorandum

November 14, 1957

To: W. S. Martin, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of field examination report, DMEA 4818 (mercury), C. A. Coppin, Cinnabar Lode claim No. 3, Pershing County, Nevada.

The examining team report that the Cinnabar lode claim no. 3 is adjacent to the Redbird mine which is currently being explored under DMEA 3647, Idm-E838. The examiners do not believe conditions are good on the applicant's property for minable mercury ore deposits. They describe how small amounts of cinnabar are found as disseminated crystals and as films along fractures in limestone conglomerate. The poor surface showings have been confirmed by a geochemical survey. The examiners report no evidence that indicates ore at depth.

In view of the several unfavorable features of the property, I am in agreement with the recommendations for denial of the application.

W. P. Williams

W. P. Williams

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

November 6, 1957

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: Assistant Chief, Branch of Base Metals

Subject: Review of Field Team examination report, Docket No. DMEA-4818 (mercury), C. A. Coppin, Cinnabar Lode Claim No. 3, Pershing County, Nevada. $17,600.00

The applicant proposed to explore for mercury on the Cinnabar Lode Claim No. 3 by 300 feet of crosscutting, 100 feet of drifting, and 100 feet of sinking at an estimated total cost of $17,600.00.

Examination of the property revealed that small amounts of cinnabar occurred as disseminated crystals and films along fractures in limestone conglomerate. However, there were no indications that sufficient ore was present to justify the proposed exploration program.

I concur with the recommendations of the Field Team that the application be denied.

J. W. Pennington

Copy to: Division of Minerals
Branch of Base Metals (2)
Thor Kiilsgaard, U. S. G. S.
F. D. Lamb
F i l e s

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DATE	INITIALS	CODE
11/7	gb	220
11/7	WSM	400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1605 Evans Avenue
Reno, Nevada

October 30, 1957

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DATE	INITIALS	CODE
11/1	C	220
11/4	26	130
11-6	C	220
11/7	WSM	400

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4818 (Mercury)
C. A. Coppin
Cinnabar Lode Claim No. 3
Pershing County, Nevada
(Your letter, September 5, 1957)

ON SITE EXAM

Enclosed are three copies of a report by J. E. Carlson, Geological Survey, and H. W. Jones, Bureau of Mines, recommending that application for exploration loan on subject property be denied.

Roscoe Smith and I concur in the recommendation.

S. Ricker

Attachments

Reviewed by
DMEA OPERATING COMMITTEE
11-6-57
(date)

BUREAU OF MINES
WASHINGTON, D. C.

Nov 1 9 25 AM '57

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DMEA
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DATE	INITIALS	CODE
11-6	JHB	130
		220

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

DMEA-4818 (Mercury)
Mr. C. A. Coppin
Cinnabar No. 3 claim
Pershing County, Nevada

by

H. W. Jones
U. S. Bureau of Mines

J. E. Carlson
U. S. Geological Survey

October 29, 1957

Reviewed by
DMEA OPERATING COMMITTEE
11-6-57
(date)

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Exploration 7

ILLUSTRATIONS

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2 . . . . . Geologic and Assay map

INTRODUCTION

Mr. C. A. Coppin, Lovelock, Nevada, applied to the Defense Minerals Exploration Administration, docket DMEA-4818, for assistance in a $17,600.00 program to explore for mercury on the Cinnabar lode claim No. 3, Pershing County, Nevada. This claim is adjacent to and southeast of the Redbird mine, currently being explored under Amended Contract Idm-E838, docket DMEA-3647.

A field examination was requested by the Operating Committee and was made September 17, 1957 by Henry W. Jones, U. S. Bureau of Mines, and J. E. Carlson, U. S. Geological Survey, accompanied by the applicant.

A brunton and tape survey was made of the mineralized area and the surface pits were correlated with existing underground workings. Three samples were taken. Cinnabar Nos. 1 and 2 claims are outside the critical area, have not been prospected by the owner, and were not mapped.

CONCLUSIONS AND RECOMMENDATIONS

The Cinnabar No. 3 claim contains small amounts of cinnabar as disseminated crystals and as films along fractures in limestone conglomerate.

The poor surface showings confirmed by a geochemical survey, and the prospect work done by the applicant do not indicate that ore

will be found at depth, or that a target can be inferred that would justify Government participation under the DMEA program. We recommend that the application be denied.

LOCATION, ACCESSIBILITY, AND LOCAL FACILITIES

The Cinnabar No. 3 claim is in sec. 33, T. 27 N., R. 34 E., M.D.B.&M., in the Antelope Springs district, Pershing County, Nevada (fig. 1), and on the south slope of Buffalo Mountain at an altitude of about 5,500 feet.

It is reached by travelling northeast from Lovelock, Nevada, along U. S. Highway 40 for 5.8 miles; then southeast through the iron ore loading ramps and follow a well maintained gravel road over a small pass into the next valley 10.4 miles, to a windmill; at this point leave the main road and continue straight along an ungraded road up a mountain wash for 3.2 miles; follow the left fork of the road past the Nevada quicksilver mine sign and continue on a progressively steeper road 1.4 miles to the claim. The road leading to the Antelope Springs area is gravelled and accessible at all times of the year, although infrequent snow and rain storms make the last 1-1/2 miles of road nearly impassible for short periods.

Materials, equipment, and mining personnel can usually be obtained in Lovelock. There is no housing at the adjacent Redbird mine but living quarters are available in and near Lovelock. Transmitted

electric power is available at the Nevada quicksilver mine plant and could be extended one-half mile to the Cinnabar No. 3 claim. Water for mine usage is hauled 4.8 miles from the windmill and water tank on the valley floor.

HISTORY, PROPERTY, DEVELOPMENT, AND PRODUCTION

The Cinnabar lode claims were located during the summer of 1957. No prior claims were made on the property as it was thought until recently to be railroad property not open to location.

Three lode claims, the Cinnabar No. 1, Cinnabar No. 2, and Cinnabar No. 3, are held by right of location by C. A. Coppin, J. G. Harrison, and Llewellyn Young. They are recorded in book 2, pages 213, 214, and 215 at the Pershing County Courthouse, Lovelock, Nevada.

The adjoining Redbird claims have been worked intermittently since 1907 and approximately 2,270 flasks of mercury has been produced from two stopes developed on three levels.

No work has been done on the Cinnabar 1 and 2 claims, but Cinnabar No. 3 claim is explored by about 250 feet of bulldozer cuts and three shallow pits. There has been no production from the claim.

GENERAL GEOLOGY

The rocks in the claim area are limestone, limestone conglomerate and shale of the Pershing formation of upper Triassic age. They have been tentatively correlated, whole or in part, with Dun Glen strata farther north. The relation of the bedded limestone to the limestone conglomerate is not certain, but the conglomerate appears to overlie the limestone.

The limestone is dark gray, finely-crystalline, unfossiliferous, and heavily veined with calcite. Black fissile shale in discontinuous lenses in the limestone has probably been derived in place from the limestone by removal of the carbonate fraction and concentration of the argillaceous material.

The limestone conglomerate is dark gray to olive, subangular to rounded, limestone and dolomite fragments in a yellowish-brown dolomite matrix, and contains veinlets and clots of calcite. The individual fragments may be as much as 3 inches in diameter, although they average one-quarter inch. This conglomerate is depositional in origin; locally, it resembles breccia.

Light yellowish-brown fissile shale is exposed on the surface and overlies both limestone and conglomerate. It is continuous and probably has no relation to the black shale seen in the Redbird mine.

The structural relationships in this area are complex, and the rocks may possibly be overturned (R. E. Wallace, oral communication). "These (rocks) are folded into a shallow, northwesterly-plunging syncline. The south flank of the syncline is cut by a major, northwest-trending fault (Canyon fault) that dips 50° to 75° SW. The southwest side of the fault is downthrown; displacement is about 300 feet. Other faults that trend generally west to northwest and dip from 30° to 50° S. and SW. cut the sedimentary rocks." (Reeves and Jones, Supplemental Application Report, DMEA-3647.) The cinnabar ore bodies of the Redbird mine are along these west-trending faults.

ORE DEPOSITS

The ore deposits on the adjacent Redbird and Redbird No. 1 claims have been described by Reeves and Jones in Supplemental Application Report DMEA-3647, and by Pampeyan and Jones in Application Report DMEA-3647.

The ore occurs as crystalline and earthy cinnabar in the bedded limestone, limestone conglomerate, and calcite associated with these rocks. It is locallized by the generally west-trending faults of small displacement under the shale cap. Harold's Club stope of the Redbird mine contains cerusite, hemimorphite and

bindheimite in addition to earthy cinnabar. Bailey[1/] suggests that

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1/ Bailey, E. H., and Phoenix, D. A., December 1944, Quicksilver deposits in Nevada: Univ. Nev. Bull., vol. 38, no. 5, p. 168.

---

cinnabar may have been locallized in a pre-existing lead-zinc ore body.

On the Cinnabar No. 3 claim (fig. 2) three pits, excavated by the applicant, 4 to 6 feet deep and 10 feet in diameter are in limestone and limestone conglomerate that has had bedding and texture altered by mineralizing solutions. Pits 1 and 2 contained no visible cinnabar and pit No. 3 contained cinnabar in trace amounts. Cinnabar paint was seen in nearby outcrops, but much of the claim was covered by rock rubble. Limonite is common along fractures and disseminated in the rocks.

Faults along which ore occurs in the Redbird mine strike west and northwest, approximately parallel to and north of the north side line of the claim. No faults were observed on Cinnabar No. 3 claim, but fractures in all attitudes are common.

SAMPLING

Samples were taken across exposed faces in the three cuts. The locations of the samples are shown on figure 2.

Sample No.	Thickness, feet	Lbs. Hg/ton
517	3.8	0.1
518	3.0	<0.1
519	1.5	<0.1

Another sample, No. 496, was cut from an altered zone at the site of No. 2 pit before the pit was dug and a 1.0-foot width assayed 8.7 pounds of mercury per ton.

ORE RESERVES

Cinnabar No. 3 claim contains no measured or indicated reserves, nor are any inferred.

EXPLORATION

The applicant proposes to (1) drive a 300-foot crosscut southeast into Cinnabar No. 3 claim from the Redbird access adit, and (2) drift 100 feet and sink 100 feet on the best showings in the adit. In the Redbird mine north of the claim, ore occurs along faults that strike west and northwest, but these faults do not enter Cinnabar No. 3 claim. Exploration by crosscuts, drifts, and a diamond drill hole immediately northwest of the claim did not find ore. The application states that Harold's Club stope in the Redbird mine is less than 50 feet from the side line of Cinnabar No. 3 claim, whereas figure 2 shows this distance to exceed 200 feet.

In October 1957, E. H. Bailey[1/] ran geochemical traverses

1/ Bailey, E. H., oral communication.

---

over the Redbird and Cinnabar claims, using a method developed by Fred Ward, Geochemistry and Petrology Branch, Denver, Colorado. The results of this work show that high ppm assays occur over the Redbird ore body; 21 assays from samples taken in the applicant's prospect pits and bulldozer cuts on Cinnabar No. 3 claim have approximate background values.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA-4818
(Mercury)

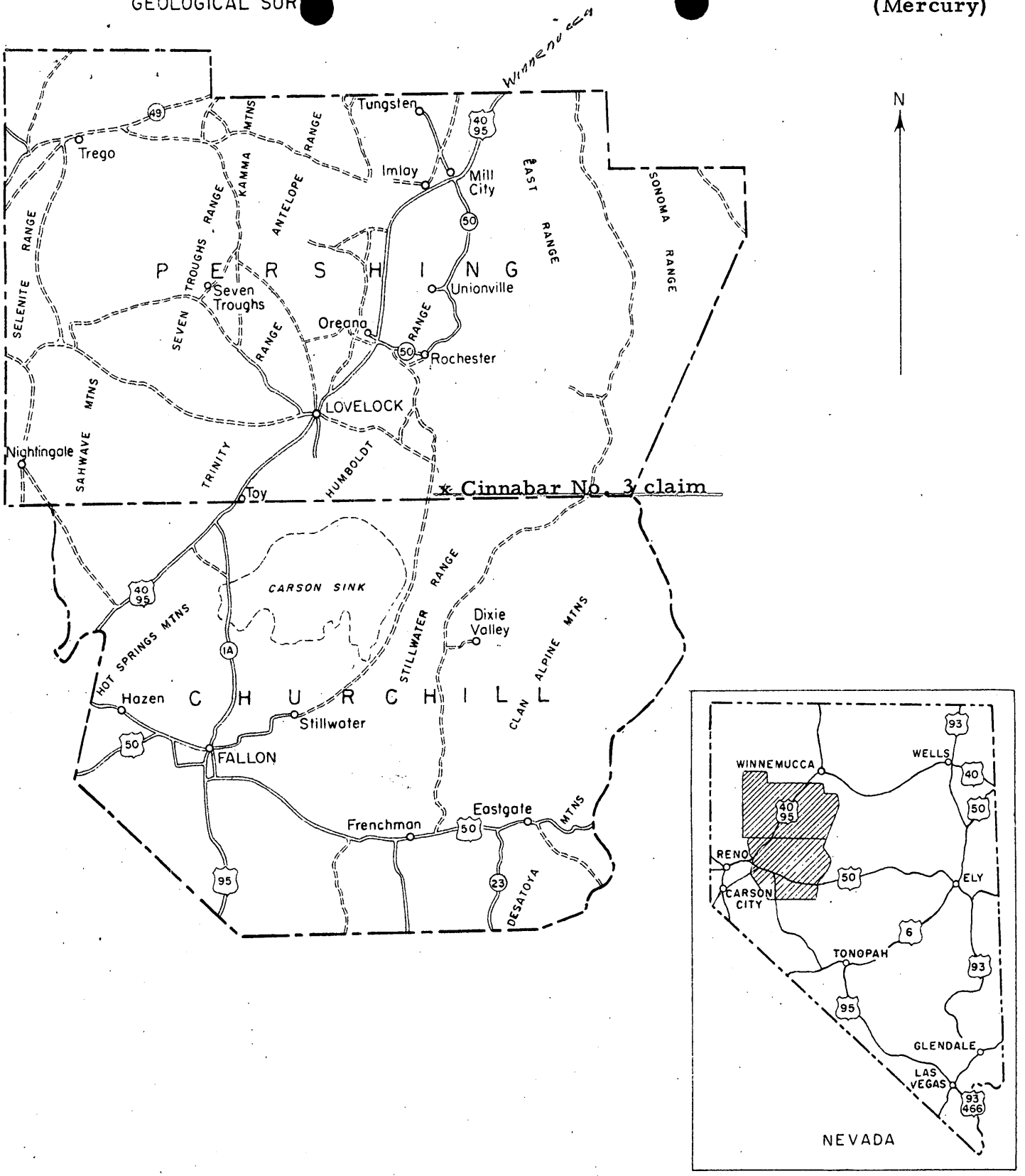


Figure 1. INDEX MAP OF CHURCHILL AND PERSHING COUNTIES, NEVADA

0 20 40 60 Miles

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-4	Hopkins	400
9-4	Martin	400
9-4	Selfridge	130
9/4	McMahon	130
9/4	Kilsgaard	130
"	Johnson	110
"	Mittendorf	100
9/5	G	220
		400

SEP 5 1957

Mr. C. A. Coppin
Lovelock, Nevada

Re: Docket No. DMEA 4818 - Mercury
Cinnabar Lode Claim No. 3
Pershing County, Nevada

Dear Mr. Coppin:

The above-docketed application for exploration assistance for mercury ores has been reviewed by the Washington Office of the Defense Minerals Exploration Administration and is being referred to Mr. Spangler Ricker, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada, for further consideration and possibly a field examination of the property.

If a field examination is considered necessary, any assistance that you may give the members of the Field Team will be appreciated.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

JHopkins/dlm 9-4-57
cc to: Code 400
Admr. R. File
Oper. Comm.
FT. REG. II
Messrs. J. W. Pennington, USBM
T. H. Kilsgaard, USGS

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-4	Hopkins	400
9-4	Martin	400
9/4	[illegible]	130
"	Johnson	110
"	Chittenday	100
		220

SEP 5 1957

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 4818 - Mercury
C. A. Coppin
Cinnabar Lode Claim No. 3
Pershing County, Nevada

Dear Mr. Ricker:

The above-docketed application for exploration assistance is being referred to your office for a field examination or for a review in case you already have sufficient information on the property.

Copies of memoranda dated August 28, 1957, by W. P. Williams, Geological Survey, and J. W. Pennington, Bureau of Mines, respectively, relating to the project are enclosed. An extra copy of the application is enclosed for the use of the Field Team.

Please note that the Applicant is a co-owner of the property with J. G. Harrison and Llewellyn Young who will be required to subordinate their interest if a project is recommended.

It should also be determined during the examination if Cinnabar Lode Claims Nos. 1 and 2 should be included with Cinnabar Lode Claim No. 3 or if it would be more advantageous to include work on these Claims as an amendment to contract No. Idm-[illegible] (Docket No. DMEA 3647) C. A. Coppin, Redbird Quicksilver Mine.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Enclosures

APPROVED:

A. D. McMahon (JHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

JHopkins/dlm 9-4-57
cc to: Code 400
Admr. R. File
Oper. Comm.
FT. REG. II
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

OFFICIAL FILE COPY
D M E A
RECEIVED AUG 28 1957

DATE	INITIALS	CODE
8/28	P	220
8/29	WSM	400

August 28, 1957

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: Assistant Chief, Branch of Base Metals

Subject: Review of application, Docket No. DMEA 4818, (mercury), C. A. Coppin, Cinnabar Lode Claim No. 3, Pershing County, Lovelock Nevada. $17,600.00

The applicant proposes to explore further the mercury mineralization on the property by 400 feet of drifting and 100 feet of shaft sinking at an estimated total cost of $17,600.00.

According to the application, the DMEA representative of Region II is familiar with the property.

Referral of the application to the Field Team is recommended.

The application is returned herewith.

Jno Pennington
J. W. Pennington

Copy to: Division of Minerals
Branch of Base Metals (2)
Thor Kiilsgaard, U.S.G.S.
F. D. Lamb
F i l e s

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 28 1957
INITIALS | CODE
Q | 220
WBM | 400

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

August 28, 1957

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of application, DMEA 4818 (mercury), C. A. Coppin, Red bird mine, Pershing County, Nevada

The applicant proposes to explore for new mercury ore deposits on three newly acquired lode mining claims. The proposed project would consist of 300 feet of drifting, 100 feet of cross-cutting, and 100 feet of sinking on the vein - probably winzing. Total estimated cost of the work would be $17,600.

The applicant proposes to drive a 300-foot drift south-eastward from the Redbird mine. The Redbird mine, ~~is~~ the site of DMEA 3647, Contract Idm-E838, has been partly successful, as a small tonnage of ore was found, and some royalty payments have been made to the Government.

In an Interim Report, DMEA 3647, dated August 12, 1957, by H. W. Jones, Mining Engineer, Mr. Jones describes how bulldozer trenching by the Operator on some recently obtained mining claims west of the mine uncovered some favorable cinnabar mineralization. The applicant mentions some bulldozing he has done; but the proposed work is southeast of the mine.

The property may warrant more exploration with DMEA participation. I recommend that the Field Team be asked to review and appraise the application. A field examination may not be necessary as field personnel are familiar with the property from the previous contract. Several excellent maps of the Redbird mine and vicinity are in DMEA Docket No. 3647.

W. P. Williams

W. P. Williams

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

August 27, 1957

Mr. C. A. Coppin
Lovelock, Nevada

Subject: DMEA 4818

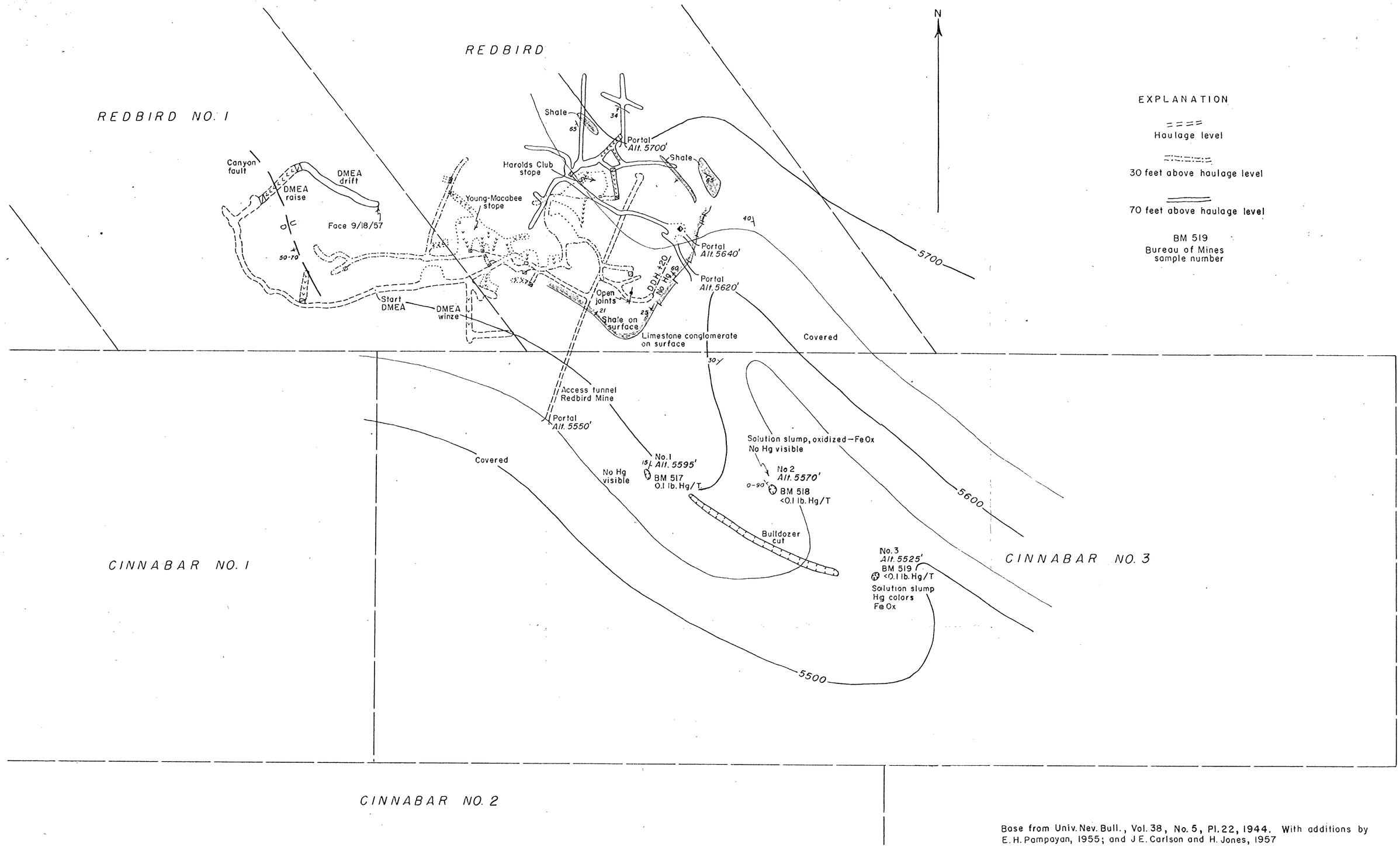
Dear Mr. Coppin,

Your application for exploration assistance, dated August 16, 1957 submitted to our office at Reno, Nevada has been assigned Docket Number 4818 and referred to the Division of Iron & Ferro-Alloys in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to:
Region II



Base from Univ. Nev. Bull., Vol. 38, No. 5, Pl. 22, 1944. With additions by E. H. Pampayan, 1955; and J. E. Carlson and H. Jones, 1957

Figure 2. REDBIRD QUICKSILVER MINE, PERSHING COUNTY, NEVADA

0 100 200 300 Feet

Contour interval 50 feet