DM[illegible]orm 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. [illegible]

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

EXPLORATION LOAN

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip

To:	Copper Branch	Date	7-10-51
To:		Date	JUL [illegible] 1951
To:	R & R	Date	[illegible] 1951
To:	Johnson	Date	Feb. 27, 1957
To:	Nelson	Date	
To:	Opr. Comm	Date	3-3-52
To:	Mittenday	Date	
To:	Mail & Files	Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

A.a.
3-6-52

FILE COPY
SURNAME:

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

FEJohnson

AIR MAIL

MAR 5 1952

Mr. Albert E. Barton
1629 E. 87th Street
Los Angeles 2, California

Re: Docket No. DMEA-1804X (Copper)
Red Copper Prospect
San Bernardino County, California

Dear Mr. Barton:

Your application for aid in an exploration project on the Red Copper Prospect has received our careful consideration.

Projects approved by the Defense Minerals Exploration Administration must show promise of producing material of sufficient value and quantity to significantly improve the mineral supply for National Defense.

A careful study of your application and the property concerned reveals that the probability of accomplishing this is not considered sufficiently promising to justify Government assistance.

Under these circumstances we regret to inform you that the application for aid amounting to 50% of $20,000 has been denied. If future work at your property reveals evidence which could materially alter this opinion, please be assured we will be glad to consider a new application.

Sincerely yours,

C. O. Mittendorf (fw) 3/5/52

Acting Administrator
Defense Minerals Exploration
Administration

FSchmidt/jem/FEJohnson/hb

Copy to: Adm. Reading File
✓Docket
Messrs. Johnson, CH, Rm. 3621
Nelson, Ned, Rm. 4216 GS
Ellis
Schmidt
Field Team, Region III(2)
DMEA Operating Committee

FILE COPY
SURNAME:

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

Schmidt
Ellis
Johnson
Nelson
Thayer
Hedges
Johnson

AIR MAIL

Mr. Albert E. Marion
1629 E. 87th Street
Los Angeles 2, California

Re: Docket No. [illegible] (Copper)
Red Copper Prospect
San Bernardino County, California

Dear Mr. Marion:

Your application for aid in an exploration project on the Red Copper Prospect, has received our careful consideration.

Projects approved by the Defense Minerals Exploration Administration must show promise of producing material of sufficient value and quantity to improve the mineral supply for National Defense.

A careful study of your application and the property concerned reveals that the probability of accomplishing this is not considered sufficiently promising to justify Government assistance.

Under these circumstances we regret to inform you that the application for aid amounting to 50% of $20,000 has been denied. If further work at your property reveals evidence which could materially alter this opinion, please be assured we will be glad to consider a new application.

Sincerely yours,

Acting Administrator
Defense Minerals Exploration
Administration

F Schmidt/jem
2/27/52

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

cc to: Adm. Reading File
Docket
Messrs. Johnson, CM Rm. 3621
Nelson, Ned Rm. 4216 GS
Ellis
Schmidt
Field Team, Reg. III (2)

2/26/52 gla

OFFICE OF THE ADMINISTRATOR

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

Office of
Executive Officer
DMEA Field Team
Region III

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

February 11, 1952

Memorandum

To: Defense Minerals Exploration Administration, Interior Building, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA- 1804 (Copper) - Red Copper Prospect, San Bernardino County, California - Albert E. Barton, 1629 East 87th Street, Los Angeles 2, California $20,000.

Reference is made to subject "Review of Application for Exploration Assistance", dated October 12, 1951, signed by A. B. Parsons for Chairman, Coordinating Committee.

Attached are the original and three copies of a report, "DMEA-1804, Red Copper Prospect, San Bernardino County, California", by William P. Irwin, Geologist, U. S. Geological Survey, dated February 7, 1952.

Mr. Irwin concludes that the loan should be denied as there is little indication that the deposit contains copper-bearing material of economic grade.

Docket is being returned herewith.

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

Attachments

Copy to E. H. Bailey, USGS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 15 1952

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

Reviewed by
DMEA OPERATING COMMITTEE
2-25-52
(date) (MB)

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 1804, Red Copper Prospect

San Bernardino County, California

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 1 1 1952

William P. Irwin, Geologist
U. S. Geological Survey

February 7, 1952

Introduction

The Red Copper prospect was examined on December 27, 1951 by W. P. Irwin of the Geological Survey, at the request of the Defense Minerals Administration. The owner of the prospect, Mr. A. E. Barton, had applied for Government participation in a $20,000 program to explore the deposit, and accompanied Irwin during the examination. As a result of the examination, it is recommended that the Government not participate in further exploration of the deposit, as the indicated grade of the deposit is far too low to be economic at this time.

Location

The prospect is at an altitude of 2500 feet in SE¼ sec. 32, R. 9 E., T. 17 N., SBBM, at the east end of the Silurian Hills, Avawatz Mountains Quadrangle, San Bernardino County, California. It is accessible by driving easterly on a fair gravel road from Riggs, an abandoned station on the former Tonopah and Tidewater Railroad, about 4½ airline miles north of Baker, California.

The property consists of four contiguous claims that cover an area measuring about 1200 feet in a westerly direction and 3000 feet in a northerly direction. The claims are the Red Copper No. 1, 2, 3, and 4, and are numbered counter-clockwise beginning in the southeast corner of the area.

Workings

The workings are covered by the Red Copper No. 1 claim. They are on a steep, easterly-facing hillside, and consist of a short inclined shaft and a small open cut. The shaft is at the south end-center of the Red Copper No. 1 claim. It is inclined to the west at an angle of about 20 degrees, and is 15 feet deep. The open cut is approximately 210 feet north of the shaft. It is about 5 feet wide and extends 25 feet to the west.

Geology

The area is underlain by marble. The attitude of the marble was not discernable in the immediate vicinity of the prospect, but in hills nearby to the northwest and southeast the bedding is nearly horizontal.

A shear zone in the marble trends northerly. It is opened by the two workings and can be traced for more than 1000 feet north of the south end of the property by thin silicified seams that are more resistant to erosion than the enclosing marble. In the shaft it dips 30° W., and is an average of about 1½ feet thick; in the open cut it dips 45° to 65° W., and is about 7 feet thick.

The main seams in the shear zone are silicified, and in a few places contain relict pyrite cubes. The workings are in the zone of oxidation and no sulfide minerals were observed. Malachite and chrysocolla form thin coatings on some of the seams, and in places a minor amount of barite is present.

Ore Reserves

Two samples were cut across the shear zone where it appeared to be most highly mineralized, one on the north wall of the shaft and one on the south wall of the open cut. The samples were assayed by the Bureau of Mines at Reno, Nevada.

Location	Width (ft.)	Pb (%)	Cu (%)	Zn (%)	Au (oz/T)	Ag (oz/T)
Shaft	1.5	*0.1	2.53	2.7	0.34	1.05
Open cut	6.0	*0.1	1.42	1.7	0.025	0.60

* Less than

The assay results indicate that the material sampled does not contain sufficient metal to be of economic grade, although the samples were cut across the highest grade material. Considering the locality, structure, and mineralogy of the deposit, a grade of 5 percent copper seems reasonable as a minimum grade for material to be termed ore.

It is possible that a zone of secondary enrichment exists at a depth determined by the water table. The paucity of relict sulfide minerals, however, in the zone of oxidation suggests that secondary enrichment would be slight if a similar paucity of sulfide minerals exists at depth. The depth to the water table is not known.

Exploration

The applicant plans to intersect the shear zone about 100 feet below its outcrop by driving three parallel adits spaced at 300-foot intervals. Each of the adits is to be approximately 300 feet in length.

The proposed plan is not reasonable, as the same points in the shear zone would be explored by driving only the center adit and drifting 300 feet along the zone both to the north and south from the end of the adit. The advantage would be a continuous exposure of the shear zone for 600 feet, rather than three isolated exposures at 300-foot intervals.

It is doubtful, however, that 900 feet of workings is necessary to determine the potential value of the prospect. A single adit with a short drift in the shear zone should be sufficient to determine the general tenor of the shear zone at that level.

Recommendations

It is recommended that the loan be denied, as there is little indication that the deposit contains copper-bearing material of economic grade. Furthermore, the applicant's exploration plan is illogical.

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

Reviewed by
DMEA OPERATING COMMITTEE
2-25-52
(date) 2-13

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 1804, Red Copper Prospect

San Bernardino County, California

William P. Irwin, Geologist
U. S. Geological Survey

February 7, 1952

Department of the Interior
Defense Minerals Administration
RECEIVED
FEB 1 . 1952

Introduction

The Red Copper prospect was examined on December 27, 1951 by W. P. Irwin of the Geological Survey, at the request of the Defense Minerals Administration. The owner of the prospect, Mr. A. E. Barton, had applied for Government participation in a $20,000 program to explore the deposit, and accompanied Irwin during the examination. As a result of the examination, it is recommended that the Government not participate in further exploration of the deposit, as the indicated grade of the deposit is far too low to be economic at this time.

Location

The prospect is at an altitude of 2500 feet in SE¼ sec. 32, R. 9 E., T. 17 N., SBBM, at the east end of the Silurian Hills, Avawatz Mountains Quadrangle, San Bernardino County, California. It is accessible by driving easterly on a fair gravel road from Riggs, an abandoned station on the former Tonopah and Tidewater Railroad, about 4½ airline miles north of Baker, California.

The property consists of four contiguous claims that cover an area measuring about 1200 feet in a westerly direction and 3000 feet in a northerly direction. The claims are the Red Copper No. 1, 2, 3, and 4, and are numbered counter-clockwise beginning in the southeast corner of the area.

Workings

The workings are covered by the Red Copper No. 1 claim. They are on a steep, easterly-facing hillside, and consist of a short inclined shaft and a small open cut. The shaft is at the south end-center of the Red Copper No. 1 claim. It is inclined to the west at an angle of about 20 degrees, and 15 feet deep. The open cut is approximately 210 feet north of the shaft. It is about 5 feet wide and extends 25 feet to the west.

Geology

The area is underlain by marble. The attitude of the marble was not discernable in the immediate vicinity of the prospect, but in hills nearby to the northwest and southeast the bedding is nearly horizontal.

A shear zone in the marble trends northerly. It is opened by the two workings and can be traced for more than 1000 feet north of the south end of the property by thin silicified seams that are more resistant to erosion than the enclosing marble. In the shaft it dips 30° W., and is an average of about 1½ feet thick; in the open cut it dips 45° to 65° W., and is about 7 feet thick.

The main seams in the shear zone are silicified, and in a few places contain relict pyrite cubes. The workings are in the zone of oxidation and no sulfide minerals were observed. Malachite and chrysocolla form thin coatings on some of the seams, and in places a minor amount of barite is present.

Ore Reserves

Two samples were cut across the shear zone where it appeared to be most highly mineralized, one on the north wall of the shaft and one on the south wall of the open cut. The samples were assayed by the Bureau of Mines at Reno, Nevada.

Location	Width (ft.)	Pb (%)	Cu (%)	Zn (%)	Au (oz/T)	Ag (oz/T)
Shaft	1.5	*0.1	2.53	2.7	0.34	1.05
Open cut	6.0	*0.1	1.42	1.7	0.025	0.60

* Less than

The assay results indicate that the material sampled does not contain sufficient metal to be of economic grade, although the samples were cut across the highest grade material. Considering the locality, structure, and mineralogy of the deposit, a grade of 5 percent copper seems reasonable as a minimum grade for material to be termed ore.

It is possible that a zone of secondary enrichment exists at a depth determined by the water table. The paucity of relict sulfide minerals, however, in the zone of oxidation suggests that secondary enrichment would be slight if a similar paucity of sulfide minerals exists at depth. The depth to the water table is not known.

Exploration

The applicant plans to intersect the shear zone about 100 feet below its outcrop by driving three parallel adits spaced at 300-foot intervals. Each of the adits is to be approximately 300 feet in length.

The proposed plan is not reasonable, as the same points in the shear zone would be explored by driving only the center adit and drifting 300 feet along the zone both to the north and south from the end of the adit. The advantage would be continuous exposure of the shear zone for 600 feet, rather than three isolated exposures at 300-feet intervals.

It is doubtful, however, that 900 feet of workings is necessary to determine the potential value of the prospect. A single adit with a short drift in the shear zone should be sufficient to determine the general tenor of the shear zone at that level.

Recommendations

It is recommended that the loan be denied, as there is little indication that the deposit contains copper-bearing material of economic grade. Furthermore, the applicant's exploration plan is illogical.

310

FILE COPY
SURNAME:

DMA-Docket
Waugh
Gowen
Nelson
Johnson-Hous
Ron
McLaren

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

Q. E. C.

OCT 12 1951

Mr. Albert E. Barton
1629 87th Street
Los Angeles.2, California

Re: DMA Docket 1804X

Dear Mr. Barton

This is to acknowledge your letter of September 29 and also to inform you that your application for an exploration project has been referred to the field team for further study. You will hear from Mr. H. C. Miller, 1012 Flood Building, 870 Market Street, San Francisco 2, California or one of his staff when they are ready to visit your property.

Very truly yours,

Signed 10/12

A. B. Parsons, Acting Director
Supply Division

RVWaugh:pk
10/5/51

Copy to: Administrator's Reading File
Executive Officer, Region III
J. B. Gowen
C. H. Johnson
D. MacLaren
Files-DMA Docket

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

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
OCT 16 1951
SAN FRANCISCO, CALIFORNIA

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

OCT 12 1951

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. 1804X

Commodity Copper

Applicant Mr. Albert E. Barton-1629 E. 87th Street, Los Angeles 2, ~~San Francisco 2,~~ California

Please expedite the consideration of this application with particular reference to the points raised in the attached "Review."

Very truly yours,

For Chairman
Coordinating Committee

For the Bureau of Mines

For the Geological Survey

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 1 1952

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1804X

Commodity COPPER

Total Amount $20,000

Govt. Participation $10,000

1. Name and Address of Applicant ALBERT E BARTON
1629 E. 87th St. LOS ANGELES 2 CALIF

2. Location of Property SEC 26 & 27 T17N R10E
SILVER LAKE MINING DIST. SAN BERNARDINO
COUNTY, CALIF.

3. Mineral or metal COPPER Is it listed in Section 9 of MO-5? YES

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination ✓

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? YES—OWNER
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? —

Does the lease have sufficient time to run to cover a future

productive period? —

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? —

b) MF-202 —

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower PROBABLY - NO MENTION MADE

b) Equipment and supplies To be Rented or Bought.
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Does not state

d) Water (question 13)* Yes

e) Power (question 13)* YES

Is a field check needed on any of these points? YES - Road.

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* YES

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? " : No. If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? YES

If not, what part of it is?

Is this part a worthwhile exploration project? —

d) Are the cost estimates detailed? YES

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? YES If so, attach a draft.

e) Are the cost estimates reasonable? YES

f) Should more information be requested from applicant? YES Maps Outline project

g) Is a field examination necessary to complete Exhibit A? NO

11. Exhibit B (question 23-d)*

a) Is it applicable? No gas lines

b) If so, are sufficient data furnished? — If so, attach a draft.

c) Is a field check needed? NO

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? is not applicable funds are

b) Sufficient data? YES If so, attach a draft.

c) Are rents and charges reasonable? YES

d) Is a field check needed? NO

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? YES

b) Is the schedule adequate for the work proposed? Can't say - length of tunnels not given.

c) Is the schedule excessive for the work proposed? SAME

d) Are the proposed wages and salaries reasonable? wages seem high

e) Is a field check needed? YES (wages & schedual

EXHIBIT A

21. Applicant proposes to drive 3 tunnels on that ch property can be properly estimated in regard to tonnages and or values - 4 months.

LABOR plus ROOM & BOARD	$17,300.00
RENTAL OF EQUIPMENT	960.00
RENTAL OF EQUIPMENT OWNED BY APPLICANT	960.00
SUPPLIES	883.00
TOTAL	$20,103.00

23 d. Not applicable

e. Not applicable

f. RENT COMPRESSOR FOR $6/DAY 120 DAYS $720.00

RENT 1000 WATT, 110 V.AC 60 CYCLE gasoline DRIVEN GENERATOR FOR $2/DAY 240.00

g. TO BE RENTED BY APPLICANT - 50 TON STEEL BUNKERS, ONE MINE CAR

h. POWDER - 20 lbs/6 ft. ROUND @ $9.60/100 lbs. 288.00

CAPS - 6 CAPS/ROUND @ 5¢/CAP. BOX OF 1000 50.00

FUSE - $20/1000 ft. ROLL. 3 ROLLS NEEDED 60.00

BITS - THREE BITS/ROUND @ 25¢ EACH 125.00

DISTILLATE - 20¢/HR. OR ABOUT $2/DAY 240.00

OIL - 120 GALS. @ $1/GAL 120.00

a. MINERS @ $14/DAY, UNION SCALE, & $6/DAY/MAN FOR ROOM & BOARD, FOR 4 MONS OR 120 DAYS $17,300.00

b. NO SUPERVISOR, BARTON WILL BE HEAD MINER

c. NOT APPLICABLE

14. Exhibit F (question 22-a)

a) Is it applicable? No

b) Sufficient data? —

c) Reasonable? —

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? Cannot judge - length of time not given

(All exploration must be completed within two years.)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing questions? Check feasibility of project as well as geology.

Have applicant submit detailed account of proposed operations

Any other information [illegible]

Capital? If project a good one, see if applicant can finance his share, including initial outlay

Reviewed by: [illegible]

[illegible]

D.L. McCraven

C.H. Johnson

J.B. Gower

Date

Page 4 of 4 pages

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1804X

Date received 7-9-51

Participation

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
JUN 22 1951
SAN FRANCISCO, CALIFORNIA

No [illegible]

Name and address of applicant

Albert E. Barton
1629 E. 87th St.
Los Angeles 2, Calif.

Date June 18, 1951

FILL IN THIS BLOCK

Date of application June 5, 1951

Estimated cost $20,000

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine Silver Lake Mining District, San Bernardino County, Calif.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 9 - 1951
LAMOR F. STRABEL
Executive Secretary

Date of filing MF-100

DMA Docket Number, if available 1804X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

All answers are on appended sheets pages 1, and 2.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

---------- (Name of company)	By Albert E. Barton, partner (Signature of authorized official)
---------- (Date)	Leon Arrow, partner (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Albert E. Barton
1629 E. 87th St.
Los Angeles, 2, Calif.

APPENDED ANSWERS FOR FORM MF-103

1. Applicant is a partnership.
2. Albert E. Barton 1629 E. 87th St. Los Angeles, 2, Calif.
   Leon Arrow 11318 Braddock Dr. Culver City, Calif.
3. Applicant is not a corporation.

4. Albert E. Barton will manage the project. Has had about 20 years experience in all phases of mine and mill work. As a mucker at the Silver King Mine, Park City, Utah. As a machine foreman in charge of all pnuematic tools, jack hammers etc., at Tintac, Utah; was pit boss at the Canadian Western Coal and Coke Co., at Tabor, Alberta, Canada. Helped install a mill at Silver Lake, Calif., in 1947. These are the main items.

5. Owner of the property.

6. No claims, liens, or encumbrances are against the property.

7. No lessee.

8. None.

9. Prepared to invest labor and equipment rental to value of $10,000. It is sufficient to pay our part of the cost of the project. This will be the owner's contribution.

10. Red Copper Nos. 1, 2, 3, & 4 Mining Claims. (a) and (b) are the same. Situated on the northeast slope of Silurian Mts. Sec. 26 and 27, T 17 N R10 E.S.B.M., in the Silver Lake Mining District of San Bernardino County

11. Red Copper Nos. 1, 2, 3, & 4.

12. The property is 9 miles east of the old Tonapah Tidewater railroad station of Riggs. It is 14 miles east of highway 127. It is 27 miles east of Baker, Calif., and 44 miles from the loading platform at Dunn on the Union Pacific railroad, along highways 127 and 91. There are 10 miles of desert road to highway 127, 9 miles of which are good and 1 mile is under construction.

13. There is a good spring with water available in all seasons, within one mile of the property and readily accessible. The only power needed is for a 200 cu.ft. compressor, which will be distillate powered, and a 1000 watt 60 cycle generator for lights, which will be gasoline driven.

14. No existing facilities.

15. Ore will be hauled by truck to Dunn's, and then by rail, Union Pacific, to Midvale, Utah. This is the location of the U.S. Smelting and Refining Co.

16. History:
    (a) At present this is a prospect.
    (b) These claims are located ½ mile east of the Alta mine, and about one mile from Riggs mine. Also, 1½ miles from the Silver Hill mine, all of these have been large commercial producers.
    (c) None

Albert E. Barton
1629 E. 87th St.
Los Angeles 2, Calif.

17. Mine is not in production.

18. Property is not now, and has not been operating.

19. None.

20. For copper, lead, zinc, silver, and gold.

21. To drive three tunnels so that property can be properly estimated in regard to tonnages and ore values. It is estimated that this can be completed in four months.

22. Samples have been sent to the U.S. Smelting, refining and Mining Co., Newhouse Building, Salt Lake City 13, Utah. The assay report hand sample serial number is 15237. Copper runs 4.8%, lead is 2.2%, zinc is 0.5%, silver runs 3.1 ozs. per ton, gold runs 0.03 ozs. per ton, sulphur is 0.2%, and iron is 6.8%. Assay report is from the Union Assay Office, Inc., Salt Lake City 11, Utah.

23. (a) Seven miners at $14 per day, union scale, and $6 per day per man for room and board, for four months or 120 days, total $17,300.
(b) No supervisor, Barton will be head miner.
(c) None.
(d) None.
(e) None.
(f) Rent compressor for $6 per day, 120 days, total $720.
Rent 1000 watt, 110 V.AC 60 cycle gasoline driven generator for $2 per day, total $240.
(g) We own two 50 ton steel bunkers, one mine car, 600 ft. of 36" track, 8 lb. rail, all small mining tools, 6000 ft. of ½ inch steel cable, and 4000 ft. of 5/8 inch steel cable. Rental value $8 per day, total $960.
(h) Powder - 20 lbs. per six foot round, at $9.60/100 lbs. $288.
Caps - 6 caps per round at 5¢ per cap. Box of 1000 $50.
Fuse - $20 per 1000 ft. roll. Three rolls needed. $60.
Bits - Three bits per round at 25¢ each $125.
Distillate - 20¢ per hour, or about $2 per day $240.
Oil - 120 gallons at $1 per gal. $120.
$20,103.

24. We consider that we can drive three tunnels, about 300 feet each, in four months. This is at the rate of 12 feet in 2 eight hour shifts per day, or two 6 foot rounds per day. We expect that it will cost about $22 per lineal foot of 6' X 8' tunnel or $19,800.

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.

OCT 4 9 09 AM '51

1629 E. 87th St.
Los Angeles 2, Calif.
Sept. 29, 1951

Mr. J. B. Gowen, Chief,
Copper Branch
U.S. Department of the Interior
Defense Minerals Administration,
Washington, D. C.

Subject: DMA-1804X
Re: Exploration Loan-
Red Copper No. 1, 2, 3,
and 4 Mines

Dear Sir:

In our application and attachments of June 18, 1951, we believe we made note of the fact that weather conditions during the summer months precluded any activity as far as exploration of the properties was concerned. At the present time weather conditions now are good and it is permissible for us to proceed.

We are ready at any time to make arrangements with your engineer or other personnel, either to inspect the property, or take any other steps that you deem advisable or necessary.

Thanking you very much and awaiting your reply, we remain,

Sincerely yours,

Albert E. Barton
Albert E. Barton

Leon Arrow
Leon Arrow

OFFICAL FILE COPY

To	Init.	Date
3.10	A.R.C.	10-4
Rec'd	BK	10-4
210		

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

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

OCT 12 1951

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. 1804X

Commodity Copper

Applicant Mr. Albert E. Barton-1629 E. 87th Street
San Francisco 2, California

Please expedite the consideration of this application with particular reference to the points raised in the attached "Review."

Very truly yours,

Chairman
Coordinating Committee

For the Bureau of Mines

For the Geological Survey

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1804X

Commodity COPPER

Total Amount $20,000

Govt. Participation $10,000

1. Name and Address of Applicant ALBERT E BARTON
1629 E. 87th St. Los Angeles 2 Calif

2. Location of Property SEC 26 & 27 T17N R10E
SILVER LAKE MINING DIST. SAN BERNARDINO
COUNTY, CALIF.

3. Mineral or metal COPPER Is it listed in Section 9 of MO-5? YES

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination ✓

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? YES — OWNER
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? —

Does the lease have sufficient time to run to cover a future

productive period? —

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? —

b) MF-202 —

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower PROBABLY - NO MENTION MADE

b) Equipment and supplies To be Rented & Bought.
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Does not state

d) Water (question 13)* Yes

e) Power (question 13)* YES

Is a field check needed on any of these points? YES - Road.

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* YES

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? ~~YES~~ NO If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? YES

If not, what part of it is?

Is this part a worthwhile exploration project? —

d) Are the cost estimates detailed? YES

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? YES If so, attach a draft.

e) Are the cost estimates reasonable? YES

f) Should more information be requested from applicant? YES Wages Outdoor project

g) Is a field examination necessary to complete Exhibit A? NO

11. Exhibit B (question 23-d)*

a) Is it applicable? Not applicable

b) If so, are sufficient data furnished? — If so, attach a draft.

c) Is a field check needed? NO

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? e not applicable family are

b) Sufficient data? YES If so, attach a draft.

c) Are rents and charges reasonable? YES

d) Is a field check needed? NO

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? YES

b) Is the schedule adequate for the work proposed? Can't say - length of time not given.

c) Is the schedule excessive for the work proposed? SAME

d) Are the proposed wages and salaries reasonable? wages seem high

e) Is a field check needed? YES (wages & schedual)

EXHIBIT A

21. Applicant proposes to drive 3 tunnels so that the property can be properly estimated in regard to tonnages and ore values - 4 months

LABOR plus ROOM + BOARD	$17,300.00
RENTAL OF EQUIPMENT	960.00
RENTAL OF EQUIPMENT OWNED BY APPLICANT	960.00
SUPPLIES	883.00
TOTAL	$20,103.00

23 d. Not applicable

e. Not applicable

f. RENT COMPRESSOR FOR $6/DAY 120 DAYS $720.00

RENT 1000 WATT, 110 V.AC 60 CYCLE GASOLINE DRIVEN GENERATOR FOR $2/DAY 240.00

g. TO BE RENTED BY APPLICANT - 50 TON STEEL BUNKERS, ONE MINE CAR

h. POWDER - 20 lbs/6 ft ROUND @ $9.60/100 lbs. 288.00

CAPS - 6 CAPS/ROUND @ 5¢/CAP BOX OF 1000 50.00

FUSE - $20/1000 ft ROLL 3 ROLLS NEEDED 60.00

BITS - THREE BITS/ROUND @ 25¢ EACH 135.00

DISTILLATE - 20¢/HR OR ABOUT $2/DAY 240.00

OIL - 120 GALS. @ $1/GAL 120.00

a. 7 MINERS @ $14/DAY, UNION SCALE, + $6/DAY/MAN FOR ROOM & BOARD, FOR 4 MONS OR 120 DAYS $17,300.00

b. NO SUPERVISOR, BARTON WILL BE HEAD MINER

c. NOT APPLICABLE

14. Exhibit F (paragraph 23-c)

a) Is it applicable? No

b) Sufficient data? —

c) Reasonable? —

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? Cannot judge; - length of tunnel not given

(All exploration must be completed within two years.)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing questions? Check feasibility of project as well as the geology.

Have the applicant's engineers studied feasibility of proposed exploration.

Check [illegible] in [illegible] in the [illegible] [illegible]. If project is a good one, see if applicant can finance his plan, including initial outlay.

Reviewed by: [illegible]

D. P. MacIver

[illegible]

J. P. Gowan

Date: [illegible]

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1864X

Commodity COPPER

Total Amount $20,000

Govt. Participation $10,000

1. Name and Address of Applicant ALBERT E BARTON
1139 E 87th St Los Angeles 2 Calif

2. Location of Property Sec 26 & 27 T17N R10E
Silver Lake Mining Dist San Bernardino
County Calif.

3. Mineral or metal COPPER Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination ✓

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes - Owner
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? —

Does the lease have sufficient time to run to cover a future

productive period? —

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? —

b) MF-202 —

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower Probably - a Mexican Name

b) Equipment and supplies To be Rented & Brought Out
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Does not state

d) Water (question 13)* Yes

e) Power (question 13)* Yes

Is a field check needed on any of these points? Yes - Road

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? ~~Yes~~ No If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? YES

If not, what part of it is?

Is this part a worthwhile exploration project? —

d) Are the cost estimates detailed? YES

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? YES If so, attach a draft.

e) Are the cost estimates reasonable? YES

f) Should more information be requested from applicant? YES Proper [illegible]

g) Is a field examination necessary to complete Exhibit A? No

11. Exhibit B (question 23-d)*

a) Is it applicable? No applicants

b) If so, are sufficient data furnished? — If so, attach a draft.

c) Is a field check needed? No

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Is not applicable family are

b) Sufficient data? YES If so, attach a draft.

c) Are rents and charges reasonable? YES

d) Is a field check needed? No

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? YES

b) Is the schedule adequate for the work proposed? Can't say - [illegible] amounts not given.

c) Is the schedule excessive for the work proposed? SAME

d) Are the proposed wages and salaries reasonable? ~~YES~~ wages seem high

e) Is a field check needed? YES (wages & schedule

EXHIBIT A

21 Applicant proposes to do 3 tunnels on which the property can be proved, estimated in regard to tonnages and ore values - 4 months

LABOR plus ROOM + BOARD	$17,300.00
RENTAL OF EQUIPMENT	760.00
RENTAL OF EQUIPMENT OWNED BY APPLICANT	910.00
SUPPLIES	583.00
TOTAL	$20,103.00

22 a. not applicable

b. not applicable

f. REAR COMPRESSOR for 3 faces 120 CFM $770.00

ONE 100 WATT, 110 VOLT 60 CYCLE GASOLINE DRIVEN GENERATOR for 3 faces 240.00

g. to be furnished by contractor - 50 TON STEEL BUNKERS, ONE STATIONAL

h. POWDER - 20 lbs/ft ft round @ $.60/100 lbs 288.00

CAPS - 6 caps/round @ 5¢/100 box of 1000 50.00

FUSE - 30/100 ft coil 3 rolls/round 60.00

BITS - THREE BITS/ROUND @ 25¢ EACH 135.00

DISTILLATE - 20¢/gal or ABOUT 2 faces 240.00

OIL - 120 GALS - @ $1/gal 120.00

a. MINERS $14/day - CAMP STOVE + 2 foremen for ROOM + BOARD FOR 4 MONTHS or 120 DAYS $17,300.00

b. No SUPERVISOR, BARTON WILL BE HEAD MINER

c. NOT APPLICABLE

[illegible]

a) [illegible] No

b) [illegible] —

c) [illegible] —

d) [illegible] No

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Lawrence judge - length of trench and type

[illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

Check feasibility of project and on the geology.

Have organized [illegible] of proposed [illegible]

Any other [illegible]

If project is a good one, can if applicant can finance by his share, including initial outlay.

[illegible]

Wood,

DR Macdonald

C S Johnson

J B Gowen

[illegible]

Graph

Chile produces ? % of world prod.

1950 World Mine production (excluding U.S.S.R. and satellites) 2280 000 metric tons

Mine production in Chile 376,000 " "

Chile, percent of total

Chile — $\frac{367\,000}{\cancel{2235}}$ $\frac{367}{2035}$ =

2235
200
2035

$\frac{448\,300}{\cancel{233}}$
2152

2332
180
2152

1948 —	20.8 —	448300	2035
1949 —	18.0 —	367000	2032
1950 —	16.5 —	376000	2280

FILE COPY
SURNAME:

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

July 12, 1951

Mr. Albert E. Barton
1629 E. 87th Street
Los Angeles 2, California

Subject: DMA-1804X
Re: Exploration Loan -
Red Copper No. 1, 2, 3,
and 4 Mines

My dear Mr. Barton:

Receipt is acknowledged of your application and attachments of June 18, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1804X and referred to Mr. J. B. Gowen, Chief, Copper Branch on July 10, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1804X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

L. F. Strobel:jc
cc: Strobel
File
Gowen
Lyon

DMA 1804

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

Office of
Executive Officer
DMA Field Team
Region III

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

June 25, 1951

DMA
1804X

Mr. Albert E. Barton
1629 E. 87th Street
Los Angeles 2, Calif.

Dear Mr. Barton:

This office acknowledges four executed copies of MF-103 forms, dated June 18, 1951, by means of which you are making application for Government aid in the amount of $20,000 for an exploration project at your copper property in the Silver Lake Mining District, San Bernardino County, California.

As the deadline date for filing MF-103 forms was May 31, we are holding your application pending the passing of an extension to the Defense Production Act of 1950 by the Congress. If the extension Act passes and the President signs it, we will undoubtedly again be able to process loan applications! Yours then will be submitted to the Washington Office as soon as we receive such instructions from the Defense Minerals Administration Office in Washington, D. C.

Sincerely yours,

H. C. Miller

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

HCMiller:ejs

Chrono
Files

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 9 - 1951
LANDON F. STROBEL
Executive Secretary

OQR

999.530.02

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1804X

Date received 7-9-51

Participation

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
JUN 22 1951
SAN FRANCISCO, CALIFORNIA

Albert E. Barton
1629 E. 87th St.
Los Angeles 2, Calif.

Name and address of applicant

Date June 18, 1951

FILL IN THIS BLOCK

Date of application June 5, 1951

Estimated cost $20,000

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine Silver Lake Mining District, San Bernardino County, Calif.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 9 - 1951
LANDON TIMMERMEL
Executive Secretary

Date of filing MF-100

DMA Docket Number, if available 1804X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

All answers are on appended sheets pages 1, and 2.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

(Name of company)	By Albert E Barton partner (Signature of authorized official)
(Date)	Len Arrow, partner (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Albert E. Barton
1629 E. [illegible]th St.
Los Angeles,2, Calif.

APPENDED ANSWERS FOR FORM EF-103

1. Applicant is a partnership.
2. Albert E. Barton 1629 E. 87th St. Los Angeles,2, Calif.
   Leon Arrow 11318 Braddock Dr. Culver City, Calif.
3. Applicant is not a corporation.

4. Albert E. Barton will manage the project. Has had about 20 years experience in all phases of mine and mill work. As a mucker at the Silver King Mine, Park City, Utah. As a machine foreman in charge of all pnuematic tools, jack hammers etc., at Tintac, Utah; was pit boss at the Canadian Western Coal and Coke Co., at Tabor, Alberta, Canada. Helped install a mill at Silver Lake, Calif., in 1947. These are the main items.

5. Owner of the property.

6. No claims, liens, or encumbrances are against the property.

7. No lessee.

8. None.

9. Prepared to invest labor and equipment rental to value of $10,000. It is sufficient to pay our part of the cost of the project. This will be the owner's contribution.

10. Red Copper Nos. 1, 2, 3, & 4 Mining Claims. (a) and (b) are the same. Situated on the northeast slope of Silurian Mts. Sec. 26 and 27, T 17 N R10 E.S.B.M., in the Silver Lake Mining District of San Bernardino County

11. Red Copper Nos. 1, 2, 3, & 4.

12. The property is 9 miles east of the old Tonapah Tidewater railroad station of Riggs. It is 14 miles east of highway 127. It is 27 miles east of Baker, Calif., and 44 miles from the loading platform at Dunn on the Union Pacific railroad, along highways 127 and 91. There are 10 miles of desert road to highway 127, 9 miles of which are good and 1 mile is under construction.

13. There is a good spring with water available in all seasons, within one mile of the property and readily accessible. The only power needed is for a 200 cu.ft. compressor, which will be distillate powered, and a 1000 watt 60 cycle generator for lights, which will be gasoline driven.

14. No existing facilities.

15. Ore will be hauled by truck to Dunn's, and then by rail, Union Pacific, to Midvale, Utah. This is the location of the U.S. Smelting and Refining Co.

16. History:
    (a) At present this is a prospect.
    (b) These claims are located ½ mile east of the Alta mine, and about one mile from Riggs mine. Also, 1½ miles from the Silver Hill mine, all of these have been large commercial producers.
    (c) None

Albert E. Barton
1629 E. 97th St.
Los Angeles 2, Calif.

17. Mine is not in production.

18. Property is not now, and has not been operating.

19. None.

20. For copper, lead, zinc, silver, and gold.

21. To drive three tunnels so that property can be properly estimated in regard to tonnages and ore values. It is estimated that this can be completed in four months.

22. Samples have been sent to the U.S. Smelting, refining and Mining Co., Newhouse Building, Salt Lake City 13, Utah. The assay report hand sample serial number is 15237. Copper runs 4.9%, lead is 2.2%, zinc is 0.5%, silver runs 3.1 ozs. per ton, gold runs 0.03 ozs. per ton, sulphur is 0.2%, and iron is 6.8%. Assay report is from the Union Assay Office, Inc., Salt Lake City 11, Utah.

23. (a) Seven miners at $14 per day, union scale, and $6 per day per man for room and board, for four months or 120 days, total $17,300.
(b) No supervisor, Barton will be head miner.
(c) None.
(d) None.
(e) None.
(f) Rent compressor for $6 per day, 120 days, total $720.
Rent 1000 watt, 110 V.AC 60 cycle gasoline driven generator for $2 per day, total $240.
(g) We own two 50 ton steel bunkers, one mine car, 600 ft. of 30" track, 8 lb. rail, all small mining tools, 6000 ft. of ½ inch steel cable, and 4000 ft. of 5/8 inch steel cable. Rental value $8 per day, total $960.
(h) Powder - 20 lbs. per six foot round, at $9.60/100 lbs. $288.
Caps - 6 caps per round at 5¢ per cap. Box of 1000 $50.
Fuse - $20 per 1000 ft. roll. Three rolls needed. $60.
Bits - Three bits per round at 25¢ each $125.
Distillate - 20¢ per hour, or about $2 per day $240.
Oil - 120 gallons at $1 per gal. $120.
$20,103.

24. We consider that we can drive three tunnels, about 300 feet each, in four months. This is at the rate of 12 feet in 2 eight hour shifts per day, or two 6 foot rounds per day. We expect that it will cost about $22 per lineal foot of 6' X 8' tunnel or $19,800.

Form MF-103
(April 1951)

U. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1804X

Date received 7-9-51

Participation

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
JUN 22 1951
SAN FRANCISCO, CALIFORNIA

Name and address of applicant

Albert E. Barton
1629 E. 87th St.
Los Angeles 2, Calif.

Date June 18, 1951

FILL IN THIS BLOCK

Date of application June 5, 1951

Estimated cost $20,000

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine Silver Lake Mining District, San Bernardino County, Calif.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 9 - 1951
LANDON F. STROBEL
Executive Secretary

Date of filing MF-100

DMA Docket Number, if available 1804X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

All answers are on appended sheets pages 1, and 2.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

---------- (Name of company)	By Albert E. Barton, partner (Signature of authorized official)
---------- (Date)	Lem Arrow, partner (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Albert E. Barton
1629 E. [illegible]th St.
Los Angeles, 2, Calif.

APPENDED ANSWERS FOR FORM MF-103

1. Applicant is a partnership.
2. Albert E. Barton 1629 E. 87th St. Los Angeles, 2, Calif.
   Leon Arrow 11318 Braddock Dr. Culver City, Calif.
3. Applicant is not a corporation.

4. Albert E. Barton will manage the project. Has had about 20 years experience in all phases of mine and mill work. As a mucker at the Silver King Mine, Park City, Utah. As a machine foreman in charge of all pnuematic tools, jack hammers etc., at Tintac, Utah; was pit boss at the Canadian Western Coal and Coke Co., at Tabor, Alberta, Canada. Helped install a mill at Silver Lake, Calif., in 1947. These are the main items.

5. Owner of the property.

6. No claims, liens, or encumbrances are against the property.

7. No lessee.

8. None.

9. Prepared to invest labor and equipment rental to value of $10,000. It is sufficient to pay our part of the cost of the project. This will be the owner's contribution.

10. Red Copper Nos. 1, 2, 3, & 4 Mining Claims. (a) and (b) are the same. Situated on the northeast slope of Silurian Mts. Sec. 26 and 27, T 17 N R10 E.S.B.M., in the Silver Lake Mining District of San Bernardino County

11. Red Copper Nos. 1, 2, 3, & 4.

12. The property is 9 miles east of the old Tonapah Tidewater railroad station of Riggs. It is 14 miles east of highway 127. It is 27 miles east of Baker, Calif., and 44 miles from the loading platform at Dunn on the Union Pacific railroad, along highways 127 and 91. There are 10 miles of desert road to highway 127, 9 miles of which are good and 1 mile is under construction.

13. There is a good spring with water available in all seasons, within one mile of the property and readily accessible. The only power needed is for a 200 cu.ft. compressor, which will be distillate powered, and a 1000 watt 60 cycle generator for lights, which will be gasoline driven.

14. No existing facilities.

15. Ore will be hauled by truck to Dunn's, and then by rail, Union Pacific, to Midvale, Utah. This is the location of the U.S. Smelting and Refining Co.

16. History:
    (a) At present this is a prospect.
    (b) These claims are located ½ mile east of the Alta mine, and about one mile from Riggs mine. Also, 1½ miles from the Silver Hill mine, all of these have been large commercial producers.
    (c) None

Albert E. Barton
1629 [illegible] 87th St.
Los Angeles 2, Calif.

17. Mine is not in production.

18. Property is not now, and has not been operating.

19. None.

20. For copper, lead, zinc, silver, and gold.

21. To drive three tunnels so that property can be properly estimated in regard to tonnages and ore values. It is estimated that this can be completed in four months.

22. Samples have been sent to the U.S. Smelting, refining and Mining Co., Newhouse Building, Salt Lake City 13, Utah. The assay report hand sample serial number is 15237. Copper runs 4.8%, lead is 2.2%, zinc is 0.5%, silver runs 3.1 ozs. per ton, gold runs 0.03 ozs. per ton, sulphur is 0.2%, and iron is 6.8%. Assay report is from the Union Assay Office, Inc., Salt Lake City 11, Utah.

23. (a) Seven miners at $14 per day, union scale, and $6 per day per man for room and board, for four months or 120 days, total $17,300.
(b) No supervisor, Barton will be head miner.
(c) None.
(d) None.
(e) None.
(f) Rent compressor for $6 per day, 120 days, total $720.
Rent 1000 watt, 110 V.AC 60 cycle gasoline driven generator for $2 per day, total $240.
(g) We own two 50 ton steel bunkers, one mine car, 600 ft. of 36" track, 8 lb. rail, all small mining tools, 6000 ft. of ½ inch steel cable, and 4000 ft. of 5/8 inch steel cable. Rental value $8 per day, total $960.
(h) Powder - 20 lbs. per six foot round, at $9.60/100 lbs. $288.
Caps - 6 caps per round at 5¢ per cap. Box of 1000 $50.
Fuse - $20 per 1000 ft. roll. Three rolls needed. $60.
Bits - Three bits per round at 25¢ each $125.
Distillate - 20¢ per hour, or about $2 per day $240.
Oil - 120 gallons at $1 per gal. $120.
$20,103.

24. We consider that we can drive three tunnels, about 300 feet each, in four months. This is at the rate of 12 feet in 2 eight hour shifts per day, or two 6 foot rounds per day. We expect that it will cost about $22 per lineal foot of 6' X 8' tunnel or $19,800.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. .....

Date received .....

Participation .....

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
JUN 22 1951
SAN FRANCISCO, CALIFORNIA

Name and address of applicant

Albert E. Barton
1629 E. 87th St.
Los Angeles 2, Calif.

Date June 18, 1951

FILL IN THIS BLOCK

Date of application June 5, 1951

Estimated cost $20,000

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine Silver Lake Mining District, San Bernardino County, Calif.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 9 - 1951
LAYTON D. MASCHEK
Executive Secretary

Date of filing MF-100 ..... Docket Number, if available .....

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

All answers are on appended sheets pages 1, and 2.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

---------- (Name of company)	By Albert E. Barton, partner (Signature of authorized official)
---------- (Date)	Leon Arrow, partner (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Albert E. Barton
1629 E. 87th St.
Los Angeles, 2, Calif.

APPENDED ANSWERS FOR FORM MF-103

1. Applicant is a partnership.
2. Albert E. Barton 1629 E. 87th St. Los Angeles, 2, Calif.
   Leon Arrow 11318 Braddock Dr. Culver City, Calif.
3. Applicant is not a corporation.

4. Albert E. Barton will manage the project. Has had about 20 years experience in all phases of mine and mill work. As a mucker at the Silver King Mine, Park City, Utah. As a machine foreman in charge of all pnuematic tools, jack hammers etc., at Tintac, Utah; was pit boss at the Canadian Western Coal and Coke Co., at Tabor, Alberta, Canada. Helped install a mill at Silver Lake, Calif., in 1947. These are the main items.

5. Owner of the property.

6. No claims, liens, or encumbrances are against the property.

7. No lessee.

8. None.

9. Prepared to invest labor and equipment rental to value of $10,000. It is sufficient to pay our part of the cost of the project. This will be the owner's contribution.

10. Red Copper Nos. 1, 2, 3, & 4 Mining Claims. (a) and (b) are the same. Situated on the northeast slope of Silurian Mts. Sec. 26 and 27, T 17 N R10 E.S.B.M., in the Silver Lake Mining District of San Bernardino County

11. Red Copper Nos. 1, 2, 3, & 4.

12. The property is 9 miles east of the old Tonapah Tidewater railroad station of Riggs. It is 14 miles east of highway 127. It is 27 miles east of Baker, Calif., and 44 miles from the loading platform at Dunn on the Union Pacific railroad, along highways 127 and 91. There are 10 miles of desert road to highway 127, 9 miles of which are good and 1 mile is under construction.

13. There is a good spring with water available in all seasons, within one mile of the property and readily accessible. The only power needed is for a 200 cu.ft. compressor, which will be distillate powered, and a 1000 watt 60 cycle generator for lights, which will be gasoline driven.

14. No existing facilities.

15. Ore will be hauled by truck to Dunn's, and then by rail, Union Pacific, to Midvale, Utah. This is the location of the U.S. Smelting and Refining Co.

16. History:
    (a) At present this is a prospect.
    (b) These claims are located ½ mile east of the Alta mine, and about one mile from Riggs mine. Also, 1½ miles from the Silver Hill mine, all of these have been large commercial producers.
    (c) None

Albert E. Barton
1629 E. 87th St.
Los Angeles 2, Calif.

17. Mine is not in production.

18. Property is not now, and has not been operating.

19. None.

20. For copper, lead, zinc, silver, and gold.

21. To drive three tunnels so that property can be properly estimated in regard to tonnages and ore values. It is estimated that this can be completed in four months.

22. Samples have been sent to the U.S. Smelting, refining and Mining Co., Newhouse Building, Salt Lake City 13, Utah. The assay report hand sample serial number is 15237. Copper runs 4.8%, lead is 2.2%, zinc is 0.5%, silver runs 3.1 ozs. per ton, gold runs 0.03 ozs. per ton, sulphur is 0.2%, and iron is 6.8%. Assay report is from the Union Assay Office, Inc., Salt Lake City 11, Utah.

23. (a) Seven miners at $14 per day, union scale, and $6 per day per man for room and board, for four months or 120 days, total $17,300.
(b) No supervisor, Barton will be head miner.
(c) None.
(d) None.
(e) None.

(f)	Rent compressor for $6 per day, 120 days, total	$720.
	Rent 1000 watt, 110 V.AC 60 cycle gasoline driven generator for $2 per day, total	$240.
(g)	We own two 50 ton steel bunkers, one mine car, 600 ft. of 36" track, 8 lb. rail, all small mining tools, 6000 ft. of ½ inch steel cable, and 4000 ft. of 5/8 inch steel cable. Rental value $8 per day, total	$960.
(h)	Powder - 20 lbs. per six foot round, at $9.60/100 lbs.	$288.
	Caps - 6 caps per round at 5¢ per cap. Box of 1000	$50.
	Fuse - $20 per 1000 ft. roll. Three rolls needed.	$60.
	Bits - Three bits per round at 25¢ each	$125.
	Distillate - 20¢ per hour, or about $2 per day	$240.
	Oil - 120 gallons at $1 per gal.	$120.
		$20,103.

24. We consider that we can drive three tunnels, about 300 feet each, in four months. This is at the rate of 12 feet in 2 eight hour shifts per day, or two 6 foot rounds per day. We expect that it will cost about $22 per lineal foot of 6' X 8' tunnel or $19,800.