DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMEA ~~DMA~~ Docket No. 2347

DO NOT DETACH THIS SLIP

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This document has been recorded as

EXPLORATION PROJECT

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.

Copies sent to USGS & BM.

Routing Slip

To: CODE 700 Rm. 4640 Date 1-28-52

To: Mails & Files R. 4070 Date 5-19-52

To: _____ Date _____

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CONTROLLED DOCUMENT

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

13771

REFERENCE SLIP

DATE 5-19-52

REFERRED TO:

1. Mails & Files, Rm. 4070
2.
3.
4.

DMEA-2347

FOR:

- Action
- Approval
- Comment
- Conference
- Consideration
- X Filing
- Instructions
- Investigation
- Initials
- Mailing
- Previous correspondence
- Recommendation
- Record of
- Referring to
- Ready for signature of
- Rewriting
- Signature
- Suggestions
- Your informtion

REMARKS: 60 days have expired since notice to applicant of March 19, and no response received. Close docket.

Check (X) before the items needing attention.

gla
Initial of sender

INT.-DUP. SEC., WASH., D.C.

FILE COPY
TO SURNAME:

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

AIR MAIL

MAR 19 1952

Mr. Charles L. Crowder
402 Mitsu Building
Sacramento, California

Re: Docket No. DMEA-2347 (Copper)
Farnham-Cooney Copper Property
Harney County, California

Dear Mr. Crowder:

This will acknowledge receipt of your letter of March 13, 1952, concerning the subject application.

We have taken note of your statement that "we are not in a position to proceed at the present time." As you requested we shall retain your docket in the active file for a period of 60 days. If at the end of that period you have not advised us that you wish to proceed with the application we shall be obliged to retire it from the active file. However, after that date, if you find that you are in a position to proceed with an exploration project, you may file a new application or request that the original application be reactivated.

Sincerely yours,

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

3/19

HFKeller/jem
3/18/52
cc to: Adm. Reading File
Docket
Messrs. Johnson, C.H. Rm. 3621
Nelson, Ned Rm. 4216 GS
Ellis
Keller
Field Team, Region III (3)

3/17/52 gla

March 13, 1952

In Re: DMEA - 2347

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 17 1952

Mr. Robert E. Adams
c/o Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Adams:

Thank you for your letter just received.

We spent several years trying to get a big hydraulic property on the Klamath River underway and were just about ready to begin operations when World War II broke out with its moratorium and complications; some of which we were able to get released, but all of the resulting conditions were such that it was impossible to operate. In standing idle the property deteriorated and what work that had been done had been wasted. The result was that we came out of there with a loss of about $75,000, which is the chief reason we are not in a position to proceed at the present time; in fact without that loss we would not have had to appeal to you. While I was up there the Bradley Mining Company of San Francisco asked me to examine the property for them in Northern Nevada. Farnam Cooney heard of my work and chased me all over Northern California to tell me about the property we have been writing you about. The laws which tie your hands apparently are such that they do not help us at this time. We could probably sell part or all of this property but could only do so at a great disadvantage because of its present condition. If we could open it up, we could then proceed either on borrowed money or with outside help. This is too good a property to give away for a few dollars.

I think we would like to suggest at this time that you keep this application in the active file. You may have to hold it in reserve for two or three years when we will be able to develop it ourselves, or maybe something will come about in the near future that will enable us to go ahead.

Thank you for your kindness.

Yours very truly,

Chas I. Crowder

FILE COPY
SURNAME:

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

MAR 5 1952

IN REPLY

Mr. Charles L. Crowder
402 Titus Building
Sacramento, California

Re: Docket DMA-2347 (Copper)
Farnham-Cooney Copper Property
Harney County, Oregon

Dear Mr. Crowder:

We are pleased to acknowledge receipt of your letter of February 24, 1952, containing additional information on the subject application.

For your information we are enclosing a copy of DMA Circular 6 which explains in part the data requested in Clause 4 of your letter. In accordance with this circular the depreciation charge for the equipment that you would furnish for the project would be listed as follows:

Item	Total Value	Monthly Depreciation
Compressor & air tank	$ 2,160.00	$ 35.00
Gas stove	124.00	3.10
Pick-up truck	1,500.00	25.00
Kitchen and House equipment	195.00	3.25
Total	$ 3,979.00	
Total allowable Monthly Depreciation		$ 66.35

If the exploration project is completed in three months, your proportionate part of total cost of the project therefore would be credited with $199.05 (66.35 x 3). In other words, the amount of your participation would be 9,357.50 of which $9,158.45 would have to be in cash or its equivalent. The operator at the end of each month is required to present a monthly progress report which shall constitute the operator's invoice of costs incurred on the project during the period covered by the report. This invoice shall be processed by the government and payment is made to the operator to the extent approved by the government, which in your case would be 50% of the total approved invoice.

If there is any doubt about your ability to finance your proportionate part of the proposed exploration project, we would greatly appreciate it if you would so advise us.

Sincerely yours, E.L. 3/5/52

SIGNED

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

HFKeller/jem
2/28/52
cc to: Adm. Reading File
Docket
Messrs. Johnson, C.H. Rm. 3621
Nelson, Ned, Rm. 4216 GS
Ellis
Keller
Field Team, Region II (2)

MAR 5 1952

Air Mail

Mr. Charles L. Crowder
402 Sixth Building
Sacramento, California

Re: Docket DMA-2347 (Copper)
Farnham-Cooney Copper Property
Harney County, Oregon

Dear Mr. Crowder:

We are pleased to acknowledge receipt of your letter of February 24, 1952, containing additional information on the subject application.

For your information we are enclosing a copy of DMA Circular [illegible] which explains in part the data requested in Clause 4 of your letter. In accordance with this circular the depreciation charge for the equipment that you would furnish for the project would be listed as follows:

Item	Total Value	Monthly Depreciation
Compressor & Air tank	$ 2,160.00	$ 36.00
Gas stove	125.00	2.10
Pick-up truck	1,500.00	25.00
Kitchen and House equipment	195.00	3.25
Total	$ 3,980.00	
Total Allowable Monthly Depreciation		$ 66.35

If the exploration project is completed in three months, your proportionate part of total cost of the project therefore would be credited with $199.05 ($66.35 x 3). In other words, the amount of your participation would be $9,357.50 of which $9,158.45 would have to be in cash or its equivalent. The operator at the end of each month is required to present a monthly progress report which shall constitute the operator's invoice of costs incurred on the project during the period covered by the report. This invoice shall be processed by the government and payment is made to the operator to the extent approved by the government, which in your case would be 50% of the total approved invoice.

If there is any doubt about your ability to finance your proportionate part of the proposed exploration project, we would greatly appreciate it if you would so advise us.

Sincerely yours,

SIGNED

Ernest Am. Ellis, Chief
Rare and Disc. Metals Division
Defense Minerals Exploration
Administration

WKeller/jem
2/28/52
cc to: Adm. Reading File
Docket
Messrs. Johnson, U.S. Rm. 3621
Nelson, Ned, Rm. 4215 G
Ellis
Keller
Field Team, Region II (2)

2/27/52 gfa

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1952

February 25, 1952

Re: Docket DMEA-2347 (Copper)
Farnham-Cooney Copper Property
Harney County, Oregon

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

Dear Mr. Ellis:

Thank you for your prompt letter. In reply we will give you as much information as we can at the moment.

1. Enclosed herewith is a map we have drawn which is not exact as to distances, but it is suggestive of what we have in mind to open the property so it can be proven. We expect to open the Canfield tunnel and the Cooney tunnel as heretofore described. The exposed portion of both are now filled. The spots marked copper are either out-croppings or small excavations, the number of which could probably be multiplied by ten. When we get to work we will have to pick out such of these as look the best and will tell us most.

2. As to the sixty days rental for a bulldozer, as we suggested before, this is an estimate. We cannot tell a at this time how much work these tunnels will require, but we think the sixty days is ample and if things go well and we make good progress half that time might be sufficient. We don't want to be in the position of having to come back to you later for additional money. We shall certainly do everything in our power to keep the cost down. As to the drilling and blasting supplies these out-croppings will have to be blasted and we may have to some road building to get where we want to go as this is very rugged country. As to costs her again we have estimated, we will keep the costs down to a minimum.

3. I have mined more or less during the past 40 years, not continously but perhaps a total of 15 years. This work both prospecting and mining mostly gold and both placer and quartz and some copper. I have worked both for my self and others and could probably furnish all the references you want.

4. I have explained in our application there are no buildings or installations on the property. The items we listed to the value of about $4000 are all items which we have here and could move up there and are things which we would have to have to do its work. We have carefully read Section 9 of MO-5 and it appears to us that the price we have placed on this could be allowed. What would be the difference? If these figures we have put in are

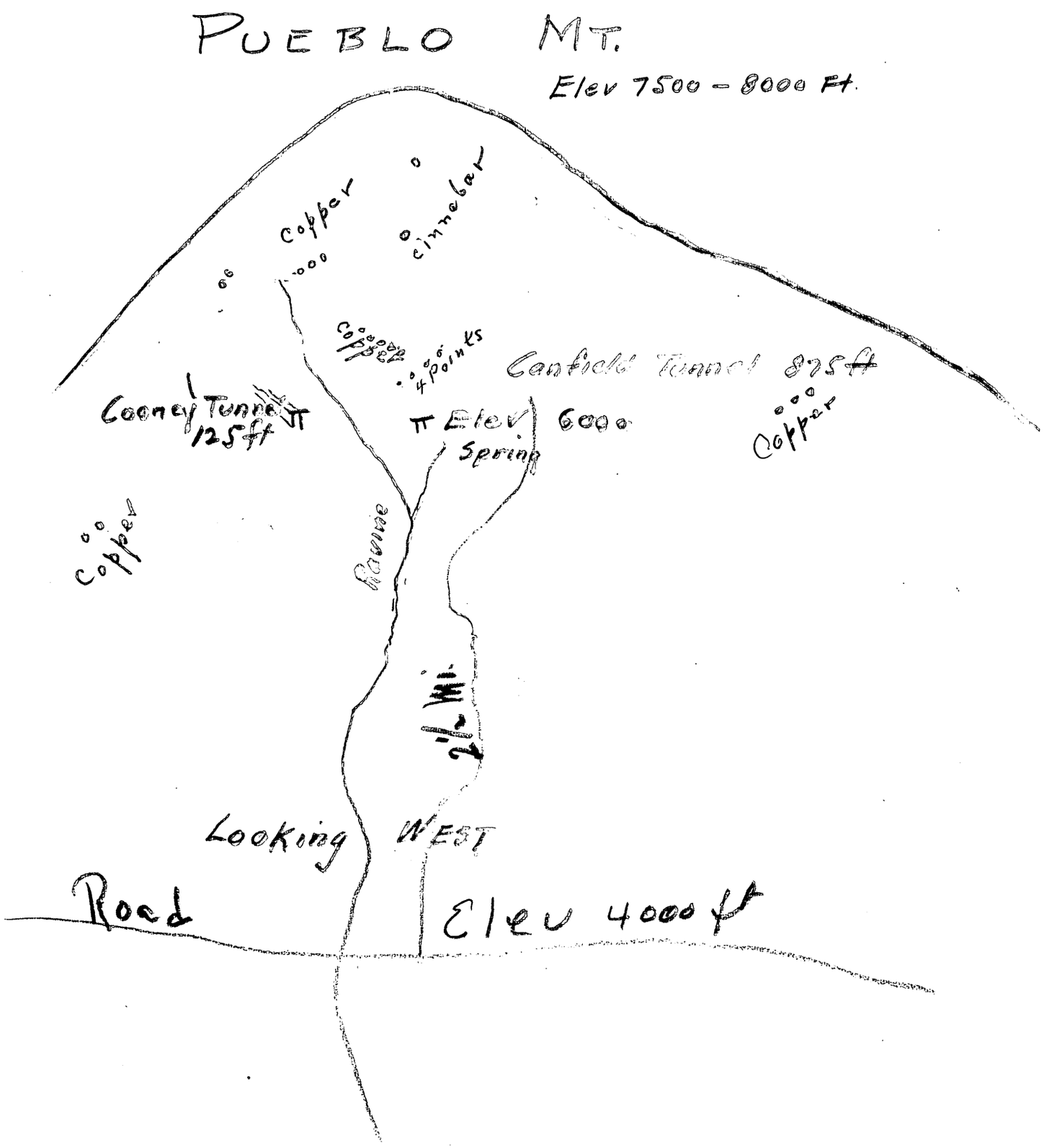
allowed or if instead we put in $4000 in cash and spent out of our pocket the money for these things except that would cost a good deal more than our figures.

I am not familiar with your procedure but I assume this money would not be distributed at one time. Our finances are very limited at the moment, as my associate has been ill for nearly five months and is just now on the road to recovery.. Income is picking up and we thought if you could match in cash from the loan an amount equal to what we are putting in now we would be able to go along with you dollar for dollar when this first installment is used up. We don't want anything out of line and if this doesn't match your program, please let us know.

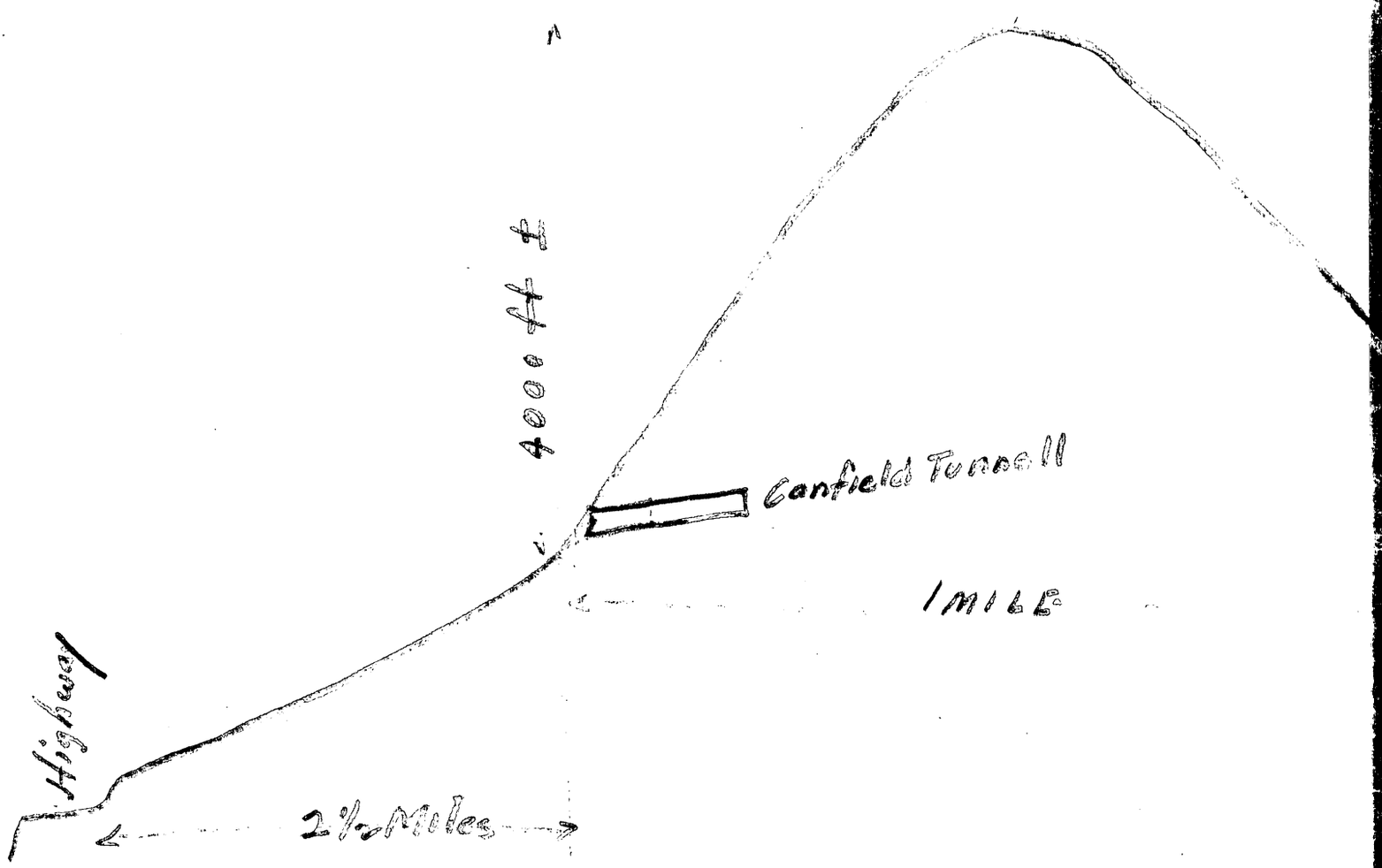
Yours very truly,

Chas L. Crowder

Enclosure


PUEBLO MT.
Elev 7500 – 8000 Ft.
Copper
Cinnabar
Copper
4 points
Canfield Tunnel 875 ft
Cooney Tunnel 125 ft
Elev 6000
Spring
Copper
Copper
Ravine
½ Mi
Looking West
Road
Elev 4000 ft

PUEBLO MT.



SECTION

FEB 1 8 1952

AIR MAIL

Mr. Charles T. Crowder
402 Mitau Building
Sacramento, California

Re: Docket DM 6-2347 (Copper)
Brunham-Cooney Copper Property
Harney County, Oregon

Dear Mr. Crowder:

We wish to acknowledge receipt of your letter of February 5, 1952, containing some additional information on your property.

After a careful review of the data that you have submitted in your application and letters we believe that the following points should be clarified:

1. For your exploration project you propose "to open these tunnels to inspection and open some of the outcrops to study and to level some of the ground higher up to see if you have an open-cut mine." Could it be possible for you to pinpoint the actual work you propose doing, and specify the tunnels other than the Canfield that you propose to open for inspection? Also, if you have a plan or map of the property, please indicate on it the location of the outcrops that would be sampled, the area that you wish to trench, and the work that would be done.

2. Under the heading in your application of "Machinery and tools needed" you estimate 60 days' rent for a bulldozer, which seems excessive for the work outlined, and you also propose the purchase of drilling and blasting supplies, although, from a study of the proposed project we can not determine where such supplies would be used. Please give us your opinion on these points.

3. We would appreciate it if you would kindly inform us as to your mining experience or knowledge and the qualifications of the person who would be in charge of the operations.

4. As the Government participation for the exploration for copper is 80% of the total cost of the project, the applicant must furnish the remainder which, in the case of your application, would be $9,357.50. The total value of any equipment that the applicant might furnish for such a project cannot be credited to the applicant's share of the expenses, but an equitable allowance, based on 60 month depreciation may be allowed in the estimated cost of the project. If, under these conditions, you are able to finance your proportion of the estimated costs, you should so inform us.

We are enclosing a sample copy of the contract form to permit you to obtain a clearer picture of the type of information that should be submitted.

We shall be pleased to continue processing your application which appears to have merit, as soon as we receive the information requested in this letter.

Sincerely yours,

SIGNED

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

Enclosure
1 Copy Sample Contract

EFKeller/jem
2/15/52
cc to: Adm. Reading File
Docket
Messrs. Johnson, CH Rm. 3621
Nelson, Ned Rm. 4216 GS
Ellis
Keller
Field Team, Region II (2)

2/12/52

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

February 11, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 12 1952

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, Bureau of Mines

Subject: DMEA - 2347, Charles L. Crowder and F. G. Buhler; Farnham-Cooney Claims, Harney County, Oregon; copper

I concur in the desirability of reopening the Canfield tunnel, but wish to point out some features of the project that seem to me to be objectionable.

The estimated cost is excessive. It should not take more than a week with a bulldozer and operator, plus two or three weeks more for two miners, to reopen and sample the tunnel, if it has not caved back of the portal. The cost should not be more than $5,000 or $6,000.

Applicant has no mining experience, so far as is shown.

Applicant has no money to start work with.

There is no justification for charging compressor rental against the project as part of Applicant's share of cost, as there will be no apparent need for it in reopening the portal.

Perhaps these and other points that doubtless will occur to your reviewer can be cleared up by correspondence with the Field Team and Applicant.

Your file on this case is returned herewith. Please have it discharged from my name.

C. H. Johnson

C. H. Johnson

Enclosure
Copy to N. E. Nelson, Room 4216, U.S.G.S.
Minerals Division
C. H. Johnson
Files

2/7/52 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
402 Mitau Building
Sacramento, California

RECEIVED
FEB 7 1952

February 5, 1952

In Re: DMEA - 2347

Mr. Robert Adams
c/o Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Sir:

Your letter in the above case at hand.

Our letter in considerable detail together with estimated cost and so forth should be in your file along with the application. If you do not have it please advise and I will secure a copy for you.

Set forth in this application our estimated cost is $18,750. Many of these items are merely estimates as we cannot tell at this time what the cost will be. We used our best judgement and we are sure our total cost will be somewhat less than the estimate.

The Canfield tunnel which we have to get into is important. Captain Canfield drove this tunnel about 875 feet into the hill, at which time he died of a heart attack. This was about 50 years ago. Their interest was gold as copper had little value at that time particularly so far from transportation. In driving the tunnel they cross-cut a 30 foot copper vein, but ignored it as they were going to a further point to contact a gold ore body.

Companies are interested in this 30 foot vein of copper, that today runs $45 per ton, and which we know is there but cannot prove it until we get access to the tunnel. The exterior portion of the tunnel is filled in and we have to move some dirt with a bull dozer to gain an entrance. The tunnel itself was open a few years ago and we feel sure that it still is or at least most of it.

The transportation cost of a bull-dozer from here up there and back is about $500. There is one near there now which was used for building a resevoir, which we could get and save this transportation cost; but, of course, we can't make any commitments at the present time.

Please advise us if there is any further details you require or any other information we can furnish you.

Yours very truly,

Chas L. Crowder

IN REPLY REFER TO:

2/6/52 gla

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

February 1, 1952

Memorandum

To: Mr. E. Wm. Ellis

From: Mr. N. E. Nelson

Subject: DMEA-2347, Farnham-Cooney Claims, Harney County, Oregon

Comment

As the Bureau of Mines engineer, D. W. Butner and E. R. Hatheway, presumedly an independent engineer, agree that this prospect has good possibilities and make it appear to be a neglected chance, a contract is believed to be in order.

N. E. Nelson

Ned E. Nelson
Geologist

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

February 1, 1952

Memorandum

To: Mr. E. Wm. Ellis

From: Mr. N. E. Nelson

Subject: DMEA-2347, Farnham-Cooney Claims, Harney County, Oregon

Comment

As the Bureau of Mines engineer, D. W. Butner and E. R. Hatheway, presumedly an independent engineer, agree that this prospect has good possibilities and make it appear to be a neglected chance, a contract is believed to be in order.

N. E. Nelson

Ned E. Nelson
Geologist

700 FILE COPY
SURNAME:

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

FEB 18 1952

Mr. Charles L. Crowder
402 Mitau Building
Sacramento, California

Re: Docket DM 7-2347 (Copper)
Barnham-Cooney Copper Property
Harney County, Oregon

Dear Mr. Crowder:

We wish to acknowledge receipt of your letter of February 5, 1952, containing some additional information on your property.

After a careful review of the data that you have submitted in your application and letters we believe that the following points should be clarified:

1. For your exploration project you propose "to open these tunnels to inspection and open some of the outcrops to study and to level some of the ground higher up to see if you have an open-cut mine." Could it be possible for you to pinpoint the actual work you propose doing, and specify the tunnels other than the Canfield that you propose to open for inspection? Also, if you have a plan or map of the property, please indicate on it the location of the outcrops that would be sampled, the area that you wish to trench, and the work that would be done.

2. Under the heading in your application of "Machinery and Tools Needed" you estimate 60 days' rent for a bulldozer, which seems excessive for the work outlined, and you also propose the purchase of drilling and blasting supplies, although, from a study of the proposed project we can not determine where such supplies would be used. Please give us your opinion on these points.

3. We would appreciate it if you would kindly inform us as to your mining experience or knowledge and the qualifications of the person who would be in charge of the operations.

4. As the Government participation for the exploration for copper is 50% of the total cost of the project, the applicant must furnish the remainder which, in the case of your application, would be $9,357.50. The total value of any equipment that the applicant might furnish for such a project cannot be credited to the applicant's share of the expenses, but an equitable allowance, based on 60 month depreciation may be allowed in the estimated cost of the project. If, under these conditions, you are able to finance your proportion of the estimated costs, you should so inform us.

We are enclosing a sample copy of the contract form to permit you to obtain a clearer picture of the type of information that should be submitted.

We shall be pleased to continue processing your application which appears to have merit, as soon as we receive the information requested in this letter.

Sincerely yours,

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

Enclosure
1 copy Sample Contract

HFKeller/jem
2/15/52
cc to: Adm. Reading File
Docket
Messrs. Johnson, CH Rm. 3621
Nelson, Ned Rm. 4216 GS
Ellis
Keller
Field Team, Region II (2)

E.L. FEB 18 1952

DMEA-2347

DE
Defense

1201 N. Division St.
Spokane 8, Wash.
January 18, 1952

JAN 2 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: Field Team, Region II

Subject: Fourbar-Gossny Claims, Harney County, Oregon, application for exploration assistance. Commodity: Copper

An application for exploration assistance at the subject property is forwarded herewith in quadruplicate. An examination report prepared in advance of docketing, by D. W. Hatney, mining engineer, Bureau of Mines, recommending that favorable consideration be given to the applicant's request is enclosed for review.

The Field Team is in agreement with the examining engineer's appraisal and recommendation. Although the chances favoring discovery of a large copper deposit apparently are not pronounced, available information does indicate that copper ore of minable grade very likely can be developed. The applicant's realistic proposal presents a logical and attractive approach for the investigation of a mineralized area in a relatively unknown and unexplored region.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

K. E. Volin, Member
(U. S. Bureau of Mines)

Enclosures

cc: VSCM, Spokane

EXPLORATION

Subject: DMEA-2347
Re: Exploration Loan
Farnham-Cooney Copper Property
January 28, 1952

Mr. Charles L. Crowder
402 Mizau Building
Sacramento, California

My dear Mr. Crowder:

This will acknowledge receipt of your application dated December 27, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2347 and referred to the Rare & Miscellaneous Metals Division.

Kindly refer to DMEA-2347 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

Please advise me of total cost of project.

7862

DMEA-2347

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1201 N. Division St.
Spokane 2, Wash.
January 18, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 25 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: Field Team, Region II

Subject: Farnham-Cooney Claims, Harney County, Oregon, application for exploration assistance.
Commodity: Copper

An application for exploration assistance at the subject property is forwarded herewith in quadruplicate. An examination report prepared in advance of docketing, by D. W. Butner, mining engineer, Bureau of Mines, recommending that favorable consideration be given to the applicant's request is enclosed for review.

The Field Team is in agreement with the examining engineer's appraisal and recommendation. Although the chances favoring discovery of a large copper deposit apparently are not pronounced, available information does indicate that copper ore of minable grade very likely can be developed. The applicant's realistic proposal presents a logical and attractive approach for the investigation of a mineralized area in a relatively unknown and unexplored region.

By Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

M. E. Volin

M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosures

cc: USGS, Spokane

DMEA-2347
Copper

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DEPARTMENT OF THE INTERIOR
RECEIVED
JAN 25 1952

Reviewed by
DMEA OPERATING COMMITTEE
2-1-52
(date)

Albany, Oregon
January 14, 1952

When examined, by whom, and use made?

MEMORANDUM

To: M.E. Volin, Member DMEA Field Team, Region II

From: D.W. Butner, Mining Engineer, U.S. Bureau of Mines

Subject: Farnham-Cooney Claims, Harney County, Oregon

Commodity - Copper

Recommendation

It is recommended that the DMEA field team consider favorably the applicant's request for an Exploration Contract on the subject property in the amount of $18,715.00. The amount of government participation would be $9,357.50.

Applicant

The applicant is C.L. Crowder, who acts on behalf of a partnership of F.G. Buhler and himself.

Location and Accessibility of Property

The deposit is on the eastern slope of the Pueblo Mountains, a southern extension of the Steens Mountain range, in southeastern Oregon, in sections 8 and 17, T. 40 S., R. 35 E., Harney County, Oregon. The best road to the property is from Winnamucca, Nevada about 100 miles south. From the north a fair dry weather road passes along the base of the mountains from Burns, Ore., which is about 145 miles away. This route is not good in the winter months. At the Wilson ranch house a dirt road leads westward a mile up the hillside to the claims.

Ownership

C.L. Crowder holds a deed to the property signed by Farnham and Cooney, who owned it for many years.

History

Ross 1/ states that quicksilver deposits had been known in the

1/ Ross, C.P., Quicksilver Deposits in the Steens and Pueblo Mountains, Southern Oregon, Bulletin 931-J, U.S. Geological Survey, pp 227-258, 1942

mountains for 40 years before he made his report, but that probable production did not exceed 10 flasks. Farnham told Ross that his claims contained "considerable copper". His chief interest in the ground, however, was gold, of which he mined enough to support meagerly a large family. This gold ore came from outcrops of fracture zones and dikes along the side of the mountain. Pre-Farnham claim owners had attempted to cut the gold bearing structures at considerable depth by driving a tunnel in a westerly direction lower on the hill. This is marked "Main Tunnel" on the claim map attached hereto. There is no evidence that the downward extension of the auriferous zone was found in the adit. The work may have stopped too soon to reach the objective. Farnham's son states that the tunnel was driven "about 400 feet". It is reported that the operators were not interested in 30 feet of copper mineralization which the tunnel passed through, and which was dumped as waste. During the second world war a part of the dump was sorted by trespassers and enough copper ore was thus recovered to make a smelter shipment, said to have assayed 12 percent copper. The portal of the main tunnel has been caved for many years.

The Proposed Exploration

The applicants propose to reopen the tunnel and develop the body of copper ore. The adit portal is under a steep hillside. A bulldozer is to be used to excavate the caved rock and soil to a solid face, from where the working can be cleared in the usual manner by hand. It is probable that the greater part of the tunnel is open, as much of the rock on the dump has a firm texture.

The rocks in the vicinity of the Farnham-Cooney claims are schists and altered volcanics. The detritus weathered from the east slope of the range contains fragments of these rocks and peices of porphyry. Underlying this are thick beds of tuff, best exposed in the gulch north of the mine road. Dikes outcrop along the east flank of the mountains trending roughly parallel with the course of the range. Intersection with one of these was presumably the objective in driving the adit. The copper ore encountered seemed to have little interest for the operators. A third sample, picked from a pit near the outcrop, high on the mountain, gave 8.13 percent copper and 0.26 ounces gold when assayed. This last sample contained more chalcopyrite and little oxidized mineral.

Three samples from picked-over dumps assayed as follows:

Sample No.	Location	Copper Percent	Gold oz./Ton
B1-1	Main tunnel dump	3.92	0.41
B1-2	Outcrop dump	7.25	0.02
B1-3	Outcrop dump - sulfides	8.13	0.26

Feasibility of Proposal

Many pits and short adits have been dug on the hillside near the outcrop. Sampling shows copper and gold . The main tunnel found copper minerals 300 feet lower. There are no probable ore reserves, but the project has a good chance to find ore in ground that is known to be mineralized. The region of the Pueblo and Steens Mountains has been only slightly developed and has had little mineral exploration.

Mining Method

Neither the method of mining nor the rate of production can be planned until the attitude and size of the orebody is known.

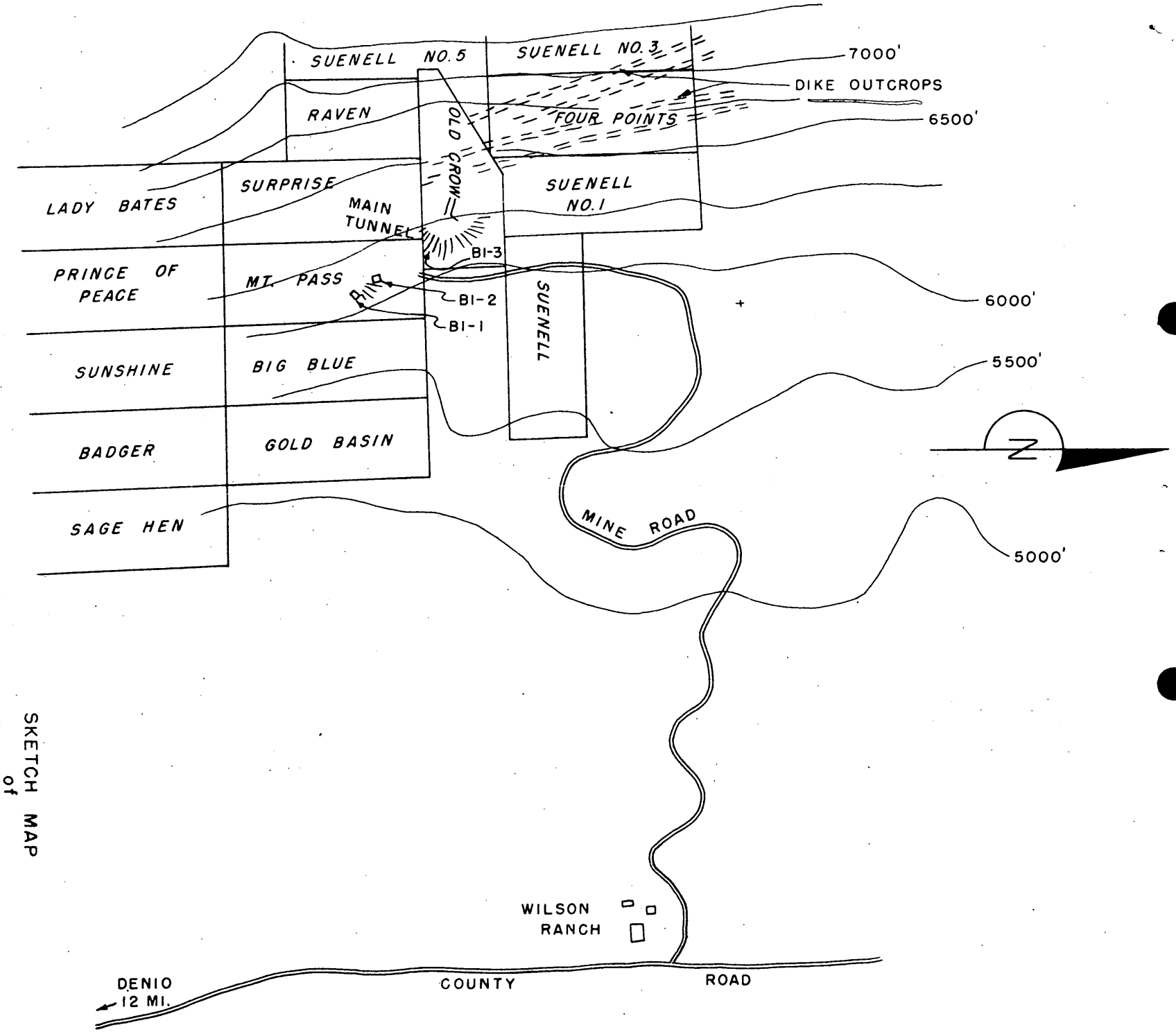
Applicants state that work will start as soon as the contract is approved.

Labor Supply

This part of Oregon and Nevada is desert country and is sparsely populated. The principal industry is stockraising. If a mining operation results from this exploration, workmen would be recruited from Winnemucca or other towns in Nevada. Wage rates would be high because of the remoteness of location and lack of comfortable living conditions.

Competence of Applicant

The applicant C.L. Crowder, has known the property for several years. He should be competent to supervise the proposed program. If the exploration is followed by mining of a deposit, more experienced management will be needed.



SKETCH MAP of FARNHAM-COOPER CLAIMS HARNEY COUNTY, OREGON

FROM OWNERS' SKETCH

Bureau of Mines Records Collection
RECEIVED
JAN 2 [illegible] 1952

Dmea 2347
Copper

Albany, Oregon
January 14, 1952

Reviewed by
DMEA OPERATING COMMITTEE
2-1-52
(date) hl

MEMORANDUM

To: M.E. Volin, Member DMEA Field Team, Region II

From: D.W. Butner, Mining Engineer, U.S. Bureau of Mines

Subject: Farnham Copper Claims, Harney County, Oregon

Commodity - Copper

Recommendation

It is recommended that the DMEA field team consider favorably the applicant's request for an Exploration Contract on the subject property in the amount of $18,715.00. The amount of government participation would be $9,357.50.

Applicant

The applicant is C.L. Crowder, who acts on behalf of a partnership of F.G. Buhler and himself.

Location and Accessibility of Property

The deposit is on the eastern slope of the Pueblo Mountains, a southern extension of the Steens Mountain range, in southeastern Oregon, in sections 8 and 17, T. 40 S., R. 35 E., Harney County, Oregon. The best road to the property is from Winnamucca, Nevada about 100 miles south. From the north a fair dry weather road passes along the base of the mountains from Burns, Ore., which is about 145 miles away. This route is not good in the winter months. At the Wilson ranch house a dirt road leads westward a mile up the hillside to the claims.

Ownership

C.L. Crowder holds a deed to the property signed by Farnham and Cooney, who owned it for many years.

History

Ross 1/ states that quicksilver deposits had been known in the

1/ Ross, C.P., Quicksilver Deposits in the Steens and Pueblo Mountains, Southern Oregon, Bulletin 931-J, U.S. Geological Survey, pp 227-258, 1952

mountains for 40 years before he made his report, but that probable production did not exceed 10 flasks. Farnham told Ross that his claims contained "considerable copper". His chief interest in the ground, however, was gold, of which he mined enough to support meagerly a large family. This gold ore came from outcrops of fracture zones and dikes along the side of the mountain. Pre-Farnham claim owners had attempted to cut the gold bearing structures at considerable depth by driving a tunnel in a westerly direction lower on the hill. This is marked "Main Tunnel" on the claim map attached hereto. There is no evidence that the downward extension of the auriferous zone was found in the adit. The work may have stopped too soon to reach the objective. Farnham's son states that the tunnel was driven "about 400 feet". It is reported that the operators were not interested in 30 feet of copper mineralization which the tunnel passed through, and which was dumped as waste. During the second world war a part of the dump was sorted by trespassers and enough copper ore was thus recovered to make a smelter shipment, said to have assayed 12 percent copper. The portal of the main tunnel has been caved for many years.

The Proposed Exploration

The applicants propose to reopen the tunnel and develop the body of copper ore. The adit portal is under a steep hillside. A bulldozer is to be used to excavate the caved rock and soil to a solid face, from where the working can be cleared in the usual manner by hand. It is probable that the greater part of the tunnel is open, as much of the rock on the dump has a firm texture.

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See map

Three samples from picked-over dumps assayed as follows:

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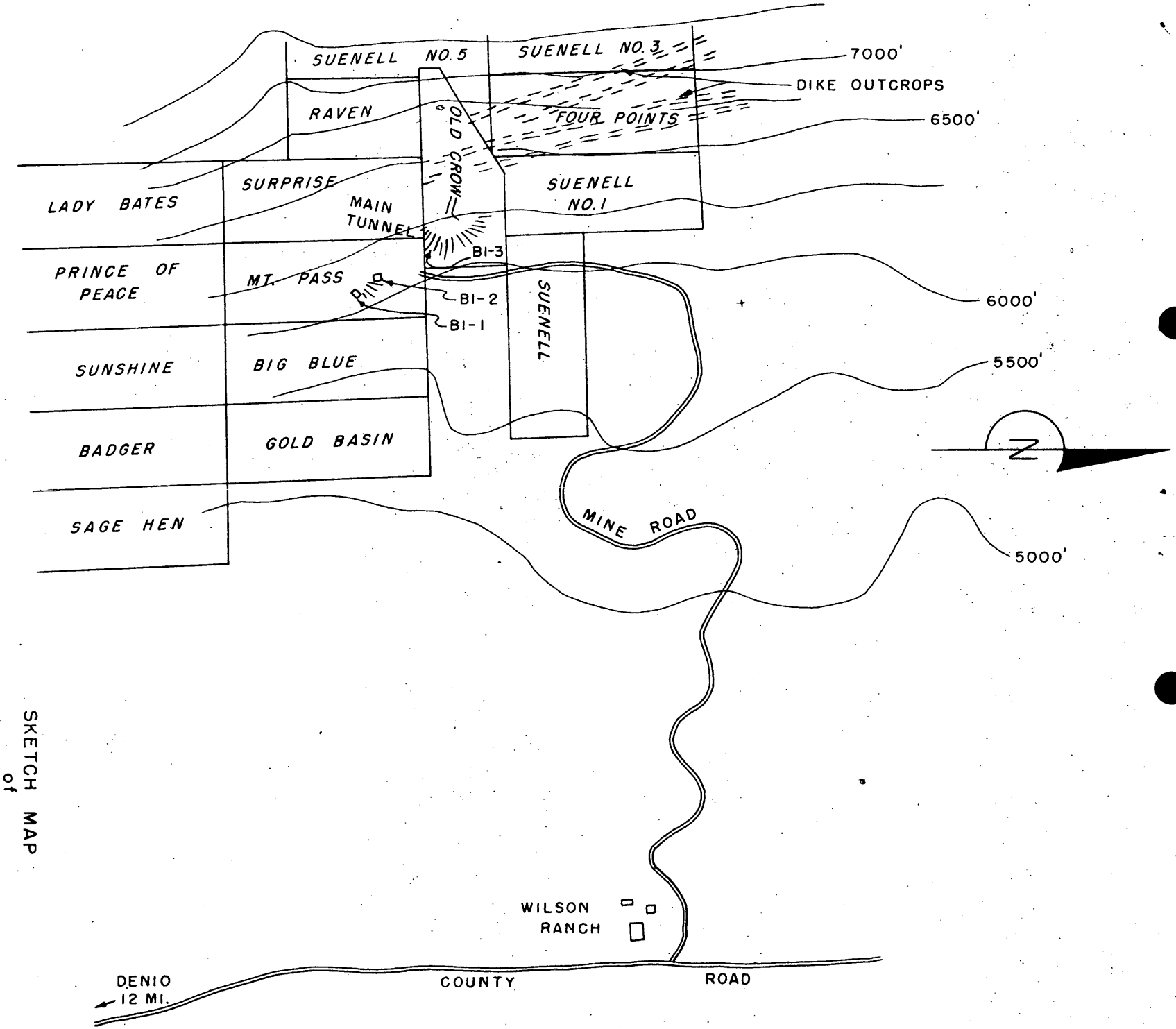

SKETCH MAP of FARNHAM-COOPER CLAIMS HARNEY COUNTY, OREGON

FROM OWNERS' SKETCH

DMCA-2347

Department of the Interior
Defense Minerals
RECEIVED
JAN 2 1952

Sacramento, Calif.
Dec. 28, 1951.

Mr. D. W. Butner
U.S. Bureau of Mines
PO Box 492
Albany, Oregon.

Dear Sir:

Long illness has prevented preperation of the loan forms, which are enclosed herewith and which we hope you will find to be in fair shape. If in looking over them you find anything wrong or which should be in or out you are authorized to make whatever minor changes necessary. It is difficult to prepare a set of questions to cover all types of situations, and it is also difficult to answer in such a way as to make your own position clear.

I regret that the weather was so bad at the time of your visit that we could get only a partial look at the property. We don't know how big it is but there is ample reason to believe that it is much larger even than we think; we have 2000 feet of backs. As to depth we have only the character of the country, type of ore etc to go by. In our opinion the property is so large that a lot of money will have to be made available to open it up, or a big Company will have to be brought in to operate it, or it will take a long time to put it into full production from the recoveries. All this will depend upon whether or not the Government will help to do this present work, what we uncover, and their desire in the matter.

We have been working on this property over two years and I would hate to estimate how much money we have spent, most of which does not show. Since it is not pertinent to this application we have not tried to look it up. You have some idea of what it might be. Because of all this expense and a long illness this application comes at a bad time for us, financially speaking.

The $3900. worth of equipment and supplies are all things we will need; we have a lot of other stuff much of which we shall doubtless need but cannot itemize at this time.

The season is about right to get started up there now. If there is anything more you need feel free to call upon us. Thanks for your interest.

Yours very truly,

F. G. Buhler

F. G. Buhler
402 Mitau Bldg.,
Sacramento, Calif.

P. S. If you find anything wrong, wire us and we will come to Albany.

C. L. Crowder

FGB:c

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMEA-2347
Metal or Mineral
Date Received 1-25-52
Amount $
Participation (Government %)

Name and address of applicant

Chas. L. Crowder, and
F.G.Buhler, Partners
402 Mivau Bldg.,
Sacramento, Calif.

Date 12/27/51

If you have already filed MF-100, give date filed Herewith, type of assistance requested Exploration loan,

DMA Docket Number (if available)

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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. Eighteen (18) Claims. See letter.

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Enclosed

   NOTE: (1) 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 (*c*) 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.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find? Copper. Some gold. Perhaps some Cinnabar.

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

   Engineers report enclosed.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

C. L. Crowder

(Name of company) By E. G. Buhler (Signature of authorized official)

(Date) Owners ~~(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.

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2347

Date received 1-25-52

CHAS. L. CROWDER
AND
F. G. BUHLER
402-Mitau Bldg. Sacramento, California

Name and address of applicant

Date

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products? Copper and gold
   (*b*) What are the byproducts, if any? Mercury
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts. 75' to 100'
   (*b*) Linear feet of ~~drifts and~~ crosscuts. 1100'
   (*c*) Linear feet of tunnels or adits. 1200' partly caved
   (*d*) Linear feet of other mine openings (explain briefly). Open cuts 60'. Not flooded

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. 135 miles No. Winnumucca, Nevada
   (*b*) Mining district. Pueblo Mining District
   (*c*) Township, Section, Range. TWP. 40 SO.,R.35 E. Sec. 8 and 17, Harney Co. Ore.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not in operation, being explored.
   (*b*) Are you operating this property as:
   - ☒ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production no production. (See letter)

   If not in production or operation, estimated date when production will begin Within 6 mths. after funds available
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project. (See letter)
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation. (See letter)
   (*b*) State briefly the known history and production of adjoining and neighboring properties. (None)
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. Report enclosed

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
CHARLES L. CROWDER	PARTNERS	1400.	3200.				
F. G. BUHLER		7000.	29600.				
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production: None

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	None. Copper shipped from dumps resulting from gold exploration unknown but several truck-loads, high grade but value unknown. (See letter)				
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. No basis of estimation.

12. Ore or Mineral Reserves: (Report and letter attached)

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve. No plan of assays .

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows: Not sufficiently developed to calculate possible tonnage.

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	Not developed. Further exploration and development needed. Report attached.				
Indicated (probable)					

(*c*) If placer: Not placer.

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, even or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads: 135 miles No.Winnemucca,Nev.85 miles paved,balance good desert roads.

Give road distances to shipping, supply and residence points, stating kind and condition of roads. Remote but accessible.

Winnemucca,135 miles.SPRY& Western Pacific. (See letter)

14. Water Supply: Plenty of spring water for all operations.

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power: No electric power available; deisel power only.

State amount of power used, rate per hour, and source thereof.

16. Labor: (See letter)

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities: (See letter)

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

No.

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.

C.L. Crowder

By C.L. Crowder

(Name of company) (Signature of authorized official) Owners

(Date) (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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

This property consists of eighteen (18) claims located in Harney County, Oregon, just North of the Nevada line, one hundred and thirty-five (135) miles north of Winnemucca, Nevada. About ninety (90) miles of the road is highway, and the balance good desert road. It is remote but accessable. The nearest post office is located at Denio, Nevada, right on the State line.

About fifty years ago a Captain Sanfield mined this property for gold . He drove a tunnel about eight hundred feet into the face of this hillside to strike a vein which apparently outcrops about four hundred feet above. During the driving of this tunnel, he cross-cut a thirty foot vein of copper ore, but he was interested only in gold, and besides, the price of copper at that time made such mining impractical. At about that time he died suddenly and all work on the mine ceased. L ater the portal of this tunnel caved in and it has so lain all this time. Shorter tunnels were also run. These copper ores were thrown on the dumps along with the rest of the debris. During World War II, when copper was scarce, men drove up there and hauled off this ore for shipment. The assays we are sending you herewith were made from what we could find of the remains on these dumps, together with samples of various outcroppings etc. We are advised that not only has our sampling been conservative but that virgin ore and deeper ore should carry even higher values.

The purpose of this proposed work is to open these tunnels to inspection, to open some of the outcroppings to study, and to level some of the ground higher up to see if perhaps we have an open-cut mine.

The cost of this work has to be estimated as we cannot tell how much work there will be, nor just what it will cost. In arriving at out cost figures we have tried to be realistic and still keep the cost as low as we dared. Overall they will probably be close.

Yours very truly,

C. L. Crowder

Sacramento, California

MORSE LABORATORIES

March 26, 1961.

Mr. F. G. Buhler
Sacramento, Calif.

Assay for Copper & Gold.

Copper	---	5.95% Cu
Gold	---	$30.80 per ton

Signed

G. H. Morse

Sacramento, California

MORSE LABORATORIES.

April I2, I95I.

Buhler:

Cooney Cut #I - open cut ledge 4' wide	$7.70 per ton Au No Silver 5.09% Cu No Lead No Zinc
Cooney Blowout Grab Sample	$I.75 per ton Au No Silver 6.52% Cu
Cooney Shaft #3 -- Ore from dump from four different shafts	$6.30 per ton Au No Silver 6.02% Cu
Farnham Property #I -- Dump from Canfield Tunnel	$0.I7 per ton Au No Silver 5.60% Cu
Farnham Property #2 -- Composite sample I00' across hill side	$3.I5 per ton Au No Silver 8.75% Cu
Single Rock Sample	$0.I7 per ton Au No Silver I.49% Cu

Signed

G. H. Morse

3(b) We can start this work as soon as money is available and thin we can complete what is proposed here within four months.

C. L. Crowder

4. The only rough map of the property was taken by your representative from Albany, Oregon, when he met Mr. Crowder there. He was going to make a map and enclose it with the material he sent to you. An engineers report is enclosed and doubtless from these you will be able to get any needed information.

5. There are no existing buildings or installations on the property at this time.

C. L. Crowder

6. There is a seven room house on the road two miles below this place which we have arranged to rent, and which, to gether with two or three tents, will take care of our men during the time we are doing this work. A tool house, ten feet square, on the property for storage purposes will be all that is required at the present time in the way of buildings, lumber for which is included in our 4000 ft. item. Work will be done by our regular men.

C. L. Crowder

7 & 8. Itemized lists attached hereto.

C. L. Crowder

Totals of Itemized Sheets 7 to II.

Labor	$6360.00
Camp Equipment & Supplies	1950.00
Machinery & Tools	5725.00
Engineering etc.	700.00
Machinery & Equipment we can supply . .	3980.00
	$18715.00

C L Crowder

LABOR

Labor	7 men, 60 days @ $13.00 per day . .	$ 5460.00
"	1 Foreman 60 days @ $15.00 per day .	900.00
		$ 6360.00

C. L. Crowder

CAMP EQUIP. & SUPPLIES

3 Heating Stoves	$ 75.00
6 Cots & Pads	I75.00
Fuel	200.00
Groceries & Supplies	I000.00
Miscellaneous	500.00
	$ I950.00

C. L. Crowder

MACHINERY & TOOLS NEEDED

I.	Caterpiller bulldozer, Rent 60 days	$ 2000.00
I.	Dump Truck Rent 60 days	800.00
I.	Jack Hammer	365.00
	Drill Steel for Hammer	35.00
2.	Wheel Barrows	65.00
500'	I½" Compressor Air-Pipe	220.00
200'	I½" Hose (air)	250.00
IO Box Powder, Caps & Fuse		I55.00
300# Nails, assorted		35.00
4000' Lumber IxI2", Ix6", 2x6", 2x4"		300.00
Oil & Gas		500.00
Miscellaneous		I000.00
		$ 5725.00

C. L. Crowder

MACHINERY WE CAN SUPPLY

I.	Compressor	$ 2100.00
I.	Gas Stove	125.00
I.	Pick-up Truck	1500.00
I.	Compressor Air-tank	60.00
2.	Coleman Lanterns	20.00
	Kitchen & Dining Room Equipent . .	175.00
		$ 3980.00

C. L. Crowder

10(a). We can put in the land and the $3900.00 listed on the Equip. & Supply sheet, which is clear and all of which we will need, We also have a lot of other stull which we may need later but which is not apparent now. We can furnish no money now but will be able to take care of our part during the life of the Agreement.

C L. Crowder

9.	Engineering,	$400.00
	Assaying,	200.00
	Accounting,	100.00
		$700.00

C. L. Crowder

REPORT

OF

FARNHAM-COONEY COPPER PROPERTY

LOCATION:

The property is located on the eastern flank of Pueblo mountain in the Pueblo Range in south central Oregon near the Nevada state line. It is approximately 16 miles by road north and slightly west of the town of Denio on the Nevada Oregon border. It can be reached through Winnemucca ~~best~~ good road to Denio and beyond.

PROPERTY:

The property is known as the Farnham-Cooney Copper property and consists of 18 claims held under location.

HISTORY:

This property was prospected and opened forty odd years ago for gold. Some free gold was found and a small mill was erected. The old arastra can still be seen. Copper ore was encountered in most of the workings but nothing was done about it as the old miners were interested only in gold. To date detailed information on the copper formations is not available as these men paid no attention to the copper.

GENERAL GEOLOGY AND PRESENT DAY SURFACE SHOWING:

The western flank of the Pueblo Mountains is a series of shallow lava flows most likely ryholite and andesite with a rather thick capping of basalt. The core of the range running north and south is granitic and the eastern flank at the location of this property is schist. At this point this shear zone or schist is from 600 to 1000 ft. wide and contains numerous highly siliceous outcroppings. The general strike parrallels the crest of the range, the schists standing at about 70° and dipping to the west.

Very noticeable fault escarpments appear high on the east flank near the crest of the range. Further faulting at right angles to the general strike of the schist formation is evidenced by the deep canyons and marked distortion of the schist.

REPORT
(Continued)

The main workings on the property were in the schist starting at an elevation of about 6000 ft. and continuing up to about 8000 ft. at the 6000 ft. level, the schist is mainly a greenstone. Further up the slope the schist changes to a chlorite and at about 8000 it is sericitic. Quartz has been injected along the plane of schistocity and in some places the outcroppings appear as large quartz veins. It was towards one of these that the main tunnel on the property was driven. The Canfield tunnel a cross-cut was started at an elevation of 6000 ft. and was driven in a distance of 300 ft. The objective the quartz vein or siliceous formation outcrops at about 6700 ft. This outcropping formation stands at about 70° dipping west and the slope of the mountain side is east at about 30°. This tunnel could not reach its objective in 300 ft. This work was abandoned. The parties who did this work stated that at 172 feet in from the portal they cut through a copper formation 30 feet in width. No attempt was made to place this copper ore on a separate pile but it went out on the dump with the rest of the waste. It is therefore impossible to determine the nature of this copper formation and the miners have no recollection of its characteristics. During the last war this dump was hand sorted and some high grade copper ore shipped. There still remains considerable copper ore scattered over the dump and most any sort of a sample could be picked containing anywheres from a trace to 15 or 18% copper and from $1.75 to $7.70 per ton in gold. One picked sample ran 5.95% copper and $30.80 per ton in gold. The gangue is quartz and greenstone schist and the copper minerals are mainly chalcopyrite with some chalcocite and Bornite. Staining the rock and coating some of the sulphides is malachite and some Chrysocolla. The sulphide mineralization is heavy.

The outcroppings though prominent do not contain any copper other than a small amount of Chrysocolla. Oxidation and leaching of the surface and outcrops has left limonite and Hematite but no

REPORT
(continued)

great masses of gossan were in evidence at the higher elevation. On the slope of the mountain and in the flat below the 6000 ft. level many good sized pieces of gossan float were noticed. From the topography and general geology it would appear that the copper ore has resulted from a pyritic replacement of the schist. Since all of the outcroppings at 7000 to 8000 ft, and they are numerous, have been highly oxidized and leached enrichment at the lower limits of the zone of oxidation might be considerable.

Unfortunately at the time of this visit the portal of the Canfield tunnel was caved. The portal is in a heavy wash and it would appear that the caving does not extend very far back. Examination of other small tunnels on the property show the ground to be standing well and it is likely that a small amount of work with a bulldozer would clear away the debris at the portal and open the Canfield tunnel for examination. A study of the copper formation in this tunnel might well be the answer as to what might be expected on further exploration of the property, other small tunnels of some 20 or 30 ft. at much higher elevation run primarily to crosscut highly siliceous outcrops in search of gold did not expose any copper ore but it was noted that the formation was oxidized and leached and for the most part contained small bands of Chrysocolla.

The short time given to this examination, the size and complexity of the area did not permit any detailed study. All that could be done was to acquire the general overall geological picture with structures and conditions for ore deposition. Mineralization over a wide area in the schist is indicated and the conditions for secondary enrichment are ideal. The structural geology indicates the possibilities of ore bodies of considerable magnitude. This property justifies further exploration but it would be well to keep in mind that it is not likely to be a property for the small operator.

August 16, 1951

E. R. Hatheway

E. R. HATHEWAY

MINING ENGINEER

MORGAN E. LA RUE
EXECUTIVE VICE-PRESIDENT

M. R. TAGGART
SECRETARY

SACRAMENTO ABSTRACT AND TITLE CO.
919 8TH STREET
SACRAMENTO, CALIFORNIA

SACRAMENTO ABSTRACT AND TITLE CO.

ORDER NO. _____

WHEN RECORDED MAIL TO

_____

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DMEA-2347

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 2 1 1952

1201 N. Division St.
Spokane 2, Wash.
January 18, 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: Field Team, Region II

Subject: Farnham-Cooney Claims, Harney County, Oregon, application for exploration assistance.
Commodity: Copper

An application for exploration assistance at the subject property is forwarded herewith in quadruplicate. An examination report prepared in advance of docketing, by B. W. Butner, mining engineer, Bureau of Mines, recommending that favorable consideration be given to the applicant's request is enclosed for review.

The Field Team is in agreement with the examining engineer's appraisal and recommendation. Although the chances favoring discovery of a large copper deposit apparently are not pronounced, available information does indicate that copper ore of minable grade very likely can be developed. The applicant's realistic proposal presents a logical and attractive approach for the investigation of a mineralized area in a relatively unknown and unexplored region.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

M. E. Velin, Member
(U. S. Bureau of Mines)

Enclosures

cc: USGS, Spokane

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMEA-2347
Metal or Mineral
Date Received 1-25-52
Amount $
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 25 1952

Name and address of applicant

Chas. L. Crowder, and
F.C.Buhler, Partners
402 Miyau Bldg.,
Sacramento, Calif.

Date 12/27/51

If you have already filed MF-100, give date filed Herewith, type of assistance requested Exploration loan

DMA Docket Number (if available)

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application. Eighteen (18) Claims. See letter.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Enclosed

   NOTE: (1) 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 (*c*) 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.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned. Copper, Silver, Gold

16—64067-2

Engineers report enclosed.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

C L. Crowder

By H. J. Buhler

(Name of company) (Signature of authorized official)

Owner

(Date) (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.

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2347

Date received 1-25-52

CHAS. L. CROWDER
AND
F. C. BUILER
402-Mitau Bldg. Sacramento, California

Name and address of applicant

Date _____

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products? Copper and gold
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet ~~[illegible]~~ 1100'
   (*b*) Linear feet of drifts and crosscuts 1200' partly caved
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly). Open cuts 60'. Not flooded

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. 135 miles No. Winnemucca, Nevada
   (*b*) Mining district. Twin Springs District
   (*c*) Township, Section, Range. TWP. 40 SO., R.36 E. Sec. 8 and 17,
   (*d*) County, State. Harney Co. Ore.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not in operation, being explored.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.

   no production. (See letter)
5. Number of years in production _____ Within 6 mths. after funds available

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators: (See letter)

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History: (See letter)
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation. (None)
   (*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, reports of mine examinations, recommended exploration and development, and metallurgical investigations. Reports enclosed

16—63792-2

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
CHARLES L. CROWDER	PARTNERS	1400.	3200.				
F. G. BUHLER		7000.	29500.				
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production: None

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	None. Copper shipped from dumps resulting from gold exploration unknown but several truck-loads, high grade but value unknown. (See letter)				
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change No basis of estimation.

12. Ore or Mineral Reserves: (Report and letter attached)

(*a*) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve. No plan of assays.

(2) State the tonnage (indicate type of ton) and grade of ore reserve as above, and show how computed. Tabulated total ore reserve as follows: Not sufficiently developed to calculate possible tonnage.

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	Not developed. Further exploration and development needed. Report attached.				
Indicated (probable)					

(*c*) If placer: Not placer.

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, even or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads: 135 miles No.Winnemucca,Nev.85 miles paved,balance good desert roads.

Give road distances to shipping, supply and residence points, stating kind and condition of roads. Remote but accessible.

Winnemucca,135 miles.SPRR Western Pacific. (See letter)

14. Water Supply: Plenty of spring water for all operations.

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power: No electric power available; deisel power only.

State amount of power used, rate per hour, and source thereof.

16. Labor: (See letter)

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities: (See letter)

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain. No.

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.

C.L. Crowder

By L.G. Buhler

(Name of company) (Signature of authorized official) Owners

(Date) (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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

This property consists of eighteen (18) claims located in Harney County, Oregon, just North of the Nevada line, one hundred and thirty-five (135) miles north of Winnemucca, Nevada. About ninety (90) miles of the road is highway, and the balance good desert road. It is remote but accessable. The nearest post office is located at Denio, Nevada, right on the State line.

About fifty years ago a Captain Canfield mined this property for gold . He drove a tunnel about eight hundred feet into the face of this hillside to strike a vein which apparently outcrops about four hundred feet above. During the driving of this tunnel, he cross-cut a thirty foot vein of copper ore, but he was interested only in gold, and besides, the price of copper at that time made such mining impractical. At about that time he died suddenly and all work on the mine ceased. L ater the portal of this tunnel caved in and it has so lain all this time. Shorter tunnels were also run. These copper ores were thrown on the dumps along with the rest of the debris. During World War II, when copper was scarce, men drove up there and hauled off this ore for shipment. The assays we are sending you herewith were made from what we could find of the remains on these dumps, together with samples of various outcroppings etc. We are advised that not only has our sampling been conservative but that virgin ore and deeper ore should carry even higher values.

The purpose of this proposed work is to open these tunnels to inspection, to open some of the outcroppings to study, and to level some of the ground higher up to see if perhaps we have an open-cut mine.

The cost of this work has to be estimated as we cannot tell how much work there will be, nor just what it will cost. In arriving at out cost figures we have tried to be realistic and still keep the cost as low as we dared. Overall they will probably be close.

Yours very truly,

G L. Crowder

REPORT

OF

FARNHAM-COONEY COPPER PROPERTY

LOCATION:

The property is located on the eastern flank of Pueblo mountain in the Pueblo Range in south central Oregon near the Nevada state line. It is approximately 16 miles by road north and slightly west of the town of Denio on the Nevada Oregon border. It can be reached through Winnemucca over good road to Denio and beyond.

PROPERTY:

The property is known as the Farnham-Cooney Copper property and consists of 18 claims held under location.

HISTORY:

This property was prospected and opened forty odd years ago for gold. Some free gold was found and a small mill was erected. The old arastra can still be seen. Copper ore was encountered in most of the workings but nothing was done about it as the old miners were interested only in gold. To date detailed information on the copper formations is not available as these men paid no attention to the copper.

GENERAL GEOLOGY AND PRESENT DAY SURFACE SHOWING:

The western flank of the Pueblo Mountains is a series of shallow lava flows most likely ryholite and andesite with a rather thick capping of basalt. The core of the range running north and south is granitic and the eastern flank at the location of this property is schist. At this point this shear zone or schist is from 600 to 1000 ft. wide and contains numerous highly siliceous outcroppings. The general strike parrallels the crest of the range, the schists standing at about 70° and dipping to the west.

Very noticeable fault escarpments appear high on the east flank near the crest of the range. Further faulting at right angles to the general strike of the schist formation is evidenced by the deep canyons and marked distortion of the schist.

REPORT
(Continued)

The main workings on the property were in the schist starting at an elevation of about 6000 ft. and continuing up to about 8000 ft. at the 6000 ft. level, the schist is mainly a greenstone. Further up the slope the schist changes to a chlorite and at about 8000 it is sericitic. Quartz has been injected along the plane of schistocity and in some places the outcroppings appear as large quartz veins. It was towards one of these that the main tunnel on the property was driven. The Canfield tunnel a cross-cut was started at an elevation of 6000 ft. and was driven in a distance of 300 ft. The objective the quartz vein or siliceous formation outcrops at about 6700 ft. This outcropping formation stands at about 70° dipping west and the slope of the mountain side is east at about 30°. This tunnel could not reach its objective in 300 ft. This work was abandoned. The parties who did this work stated that at 172 feet in from the portal they cut through a copper formation 30 feet in width. No attempt was made to place this copper ore on a separate pile but it went out on the dump with the rest of the waste. It is therefore impossible to determine the nature of this copper formation and the miners have no recollection of its characteristics. During the last war this dump was hand sorted and some high grade copper ore shipped. There still remains considerable copper ore scattered over the dump and most any sort of a sample could be picked containing anywheres from a trace to 15 or 18% copper and from $1.75 to $7.70 per ton in gold. One picked sample ran 5.95% copper and $30.80 per ton in gold. The gangue is quartz and greenstone schist and the copper minerals are mainly chalcopyrite with some chalcocite and Bornite. Staining the rock and coating some of the sulphides is malachite and some Chrysocolla. The sulphide mineralization is heavy.

The outcroppings though prominent do not contain any copper other than a small amount of Chrysocolla. Oxidation and leaching of the surface and outcrops has left limonite and Hematite but no

REPORT
(continued)

great masses of gossan were in evidence at the higher elevation. On the slope of the mountain and in the flat below the 6000 ft. level many good sized pieces of gossan float were noticed. From the topography and general geology it would appear that the copper ore has resulted from a pyritic replacement of the schist. Since all of the outcroppings at 7000 to 8000 ft, and they are numerous, have been highly oxidized and leached enrichment at the lower limits of the zone of oxidation might be considerable.

Unfortunately at the time of this visit the portal of the Canfield tunnel was caved. The portal is in a heavy wash and it would appear that the caving does not extend very far back. Examination of other small tunnels on the property show the ground to be standing well and it is likely that a small amount of work with a bulldozer would clear away the debris at the portal and open the Canfield tunnel for examination. A study of the copper formation in this tunnel might well be the answer as to what might be expected on further exploration of the property, other small tunnels of some 20 or 30 ft. at much higher elevation run primarily to crosscut highly siliceous outcrops in search of gold did not expose any copper ore but it was noted that the formation was oxidized and leached and for the most part contained small bands of Chrysocolla.

The short time given to this examination, the size and complexity of the area did not permit any detailed study. All that could be done was to acquire the general overall geological picture with structures and conditions for ore deposition. Mineralization over a wide area in the schist is indicated and the conditions for secondary enrichment are ideal. The structural geology indicates the possibilities of ore bodies of considerable magnitude. This property justifies further exploration but it would be well to keep in mind that it is not likely to be a property for the small operator.

E. R. Hatheway

August 16, 1951

E. R. HATHEWAY

MINING ENGINEER

E. L. Lorenzen

SACRAMENTO ABSTRACT AND TITLE CO.

ORDER No. _____

WHEN RECORDED MAIL TO

_____

_____

_____

MORGAN E. LA RUE
EXECUTIVE VICE-PRESIDENT

M. R. TAGGART
SECRETARY

SACRAMENTO ABSTRACT
AND TITLE CO.
919 8TH STREET
SACRAMENTO, CALIFORNIA

Sacramento, California

MORSE LABORATORIES

March 26, 1951.

Mr. F. G. Buhler
Sacramento, Calif.

Assay for Copper & Gold.

Copper	---	5.95% Cu
Gold	---	$30.80 per ton

Signed

G. H. Morse

Sacramento, California

MORSE LABORATORIES.

April I2, I95I.

Buhler:

Cooney Cut #I - open cut ledge 4' wide	$7.70 per ton Au No Silver 5.09% Cu No Lead No Zinc
Cooney Blowout Grab Sample	$I.75 per ton Au No Silver 6.52% Cu
Cooney Shaft #3 -- Ore from dump from four different shafts	$6.30 per ton Au No Silver 6.02% Cu
Farnham Property #I -- Dump from Canfield Tunnel	$0.I7 per ton Au No Silver 5.60% Cu
Farnham Property #2 -- Composite sample I00' across hill side	$3.I5 per ton Au No Silver 8.75% Cu
Single Rock Sample	$0.I7 per ton Au No Silver I.49% Cu

Signed

G. H. Morse

3(b) We can start this work as soon as money is available and thin we can complete what is proposed here within four months.

G L. Crowder

4. The only rough map of the property was taken by your representative from Albany, Oregon, when he met Mr. Crowder there. He was going to make a map and enclose it with the material he sent to you. An engineers report is enclosed and doubtless from these you will be able to get any needed information.

G. L. Crowder

5. There are no existing buildings or installations on the property at this time.

C. L. Crowder

6. There is a seven room house on the road two miles below this place which we have arranged to rent, and which, together with two or three tents, will take care of our men during the time we are doing this work. A tool house, ten feet square, on the property for storage purposes will be all that is required at the present time in the way of buildings, lumber for which is included in our 4000 ft. item. Work will be done by our regular men.

C. L. Crowder

7 & 8. Itemized lists attached hereto.

C. L. Crowder

Totals of Itemized Sheets 7 to II.

Labor	$6360.00
Camp Equipment & Supplies	1950.00
Machinery & Tools	5725.00
Engineering etc.	700.00
Machinery & Equipment we can supply . .	3980.00
	$18715.00

C.L. Crowder

LABOR

Labor	7 men, 60 days @ $13.00 per day . .	$ 5460.00
"	1 Foreman 60 days @ $15.00 per day .	900.00
		$ 6360.00

C L. Crowder

CAMP EQUIP. & SUPPLIES

3 Heating Stoves	$ 75.00
6 Cots & Pads	175.00
Fuel	200.00
Groceries & Supplies	1000.00
Miscellaneous	500.00
	$ 1950.00

C. L. Crowder

MACHINERY & TOOLS NEEDED

I.	Caterpiller bulldozer, Rent 60 days . .	$ 2000.00
I.	Dump Truck Rent 60 days	800.00
I.	Jack Hammer	365.00
	Drill Steel for Hammer	35.00
2.	Wheel Barrows	65.00
500'	I½" Compressor Air-Pipe	220.00
200'	I½" Hose (air)	250.00
IO Box Powder, Caps & Fuse	. . . .	I55.00
300# Nails, assorted	. . . . .	35.00
4000' Lumber IxI2", Ix6", 2x6", 2x4"	. . . .	300.00
Oil & Gas	. . . . .	500.00
Miscellaneous	. . . . .	I000.00
		$ 5725.00

C L. Crowder

MACHINERY WE CAN SUPPLY

I.	Compressor	$ 2100.00
I.	Gas Stove	125.00
I.	Pick-up Truck	1500.00
I.	Compressor Air-tank	60.00
2.	Coleman Lanterns	20.00
	Kitchen & Dining Room Equipent . .	175.00
		$ 3980.00

C. L. Crowder

9.	Engineering,	$400.00
	Assaying,	200.00
	Accounting,	100.00
		$ 700.00

C. L. Crowder

10(a). We can put in the land and the $3900.00 listed on the Equip. & Supply sheet, which is clear and all of which we will need, We also have a lot of other stull which we may need later but which is not apparent now. We can furnish no money now but will be able to take care of our part during the life of the Agreement.

G L Crowder

DMEA-2347

DEPARTMENT OF THE INTERIOR
Defense Materials Administration
WASHINGTON
JAN 28 1952

1261 N. Division St.
Spokane 2, Wash.
January 18, 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: Field Team, Region II

Subject: Farnham-Cooney Claims, Harney County, Oregon, application for exploration assistance.
Commodity: Copper

An application for exploration assistance at the subject property is forwarded herewith in quadruplicate. An examination report prepared in advance of docketing, by D. W. Bulmer, mining engineer, Bureau of Mines, recommending that favorable consideration be given to the applicant's request is enclosed for review.

The Field Team is in agreement with the examining engineer's appraisal and recommendation. Although the chances favoring discovery of a large copper deposit apparently are not pronounced, available information does indicate that copper ore of minable grade very likely can be developed. The applicant's realistic proposal presents a logical and attractive approach for the investigation of a mineralized area in a relatively unknown and unexplored region.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosures

cc: USGS, Spokane

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMFA-2347
Metal or Mineral
Date Received 1-25-52
Amount $
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JAN 28 1952

Name and address of applicant

Chas. L. Crowder, and
F.G.Buhler, Partners
402 Miyau Bldg.,
Sacramento, Calif.

Date 12/27/51

If you have already filed MF-100, give date filed Herewith, type of assistance requested Exploration loan

DMA Docket Number (if available)

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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.
Eighteen (18) Claims. See letter.

(*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

(*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Enclosed

NOTE: (1) 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 (*c*) 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.

(2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find?
Copper. Some gold. Perhaps some Cinnabar.

(*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

Engineers report enclosed.

16—64067-2

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

G. L. Crowder

By G. L. Crowder

(Name of company) (Signature of authorized official)

(Date) Owner

~~(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.

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2347

Date received 1-25-52

CHAS. L. CROWDER
AND
F. G. BUHLER
402-Mitau Bldg. Sacramento, California

Name and address of applicant

Date

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products? Copper and gold
   (*b*) What are the byproducts, if any? Mercury
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts. 75' to 100'
   (*b*) Linear feet of drifts and crosscuts. 1100'
   (*c*) Linear feet of tunnels or adits. 1200' partly caved
   (*d*) Linear feet of other mine openings (explain briefly). Open cuts 60'. Not flooded

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. 136 miles No. Winnemucca, Nevada
   (*b*) Mining district. Pueblo Mining District
   (*c*) Township, Section, Range. TWP. 40 SO., R.35 E. Sec. 8 and 17, Harney Co. Ore.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not in operation, being explored.
   (*b*) Are you operating this property as:
   - [x] Owner.
   - [ ] Lessee.
   - [ ] Contractor.
5. Number of years in production no production. (See letter)

   If not in production or operation, estimated date when production will begin Within 6 mths. after funds available
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project. (See letter)
7. History:
   (*a*) Give a statement, as complete as possible, of prior exploration, development, operation, and production of property, with reasons for suspension of operation. (See letter)
   (*b*) State briefly the known history and production of adjoining and neighboring properties. (None)
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. Report enclosed

16—63792-2

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
CHARLES L. CROWDER	PARTNERS	1400.	3200.				
F. G. BUHLER		7000.	29500.				
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production: None

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	None. Copper shipped from dumps resulting from gold exploration unknown but several truck-loads, high grade but value unknown. (See letter)				
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. No basis of estimation.

12. Ore or Mineral Reserves: (Report and letter attached)

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve. No plan of assays.

(2) State the tonnage (indicate type of ton) and grade computed. Tabulated total ore reserve as follows: Not sufficiently developed, to calculate possible tonnage.

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	Not developed. Further exploration and development needed. Report attached.				
Indicated (probable)					

(*c*) If placer: Not placer.

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads: 135 miles No.Winnemucca,Nev.85 miles paved,balance good desert roads. Remote but accessible.

Give road distances to shipping, supply and residence points, stating kind and condition of roads. Winnemucca,135 miles.Sierra Western Pacific. (See letter)

14. Water Supply: Plenty of spring water for all operations.

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power: No electric power available; deisel power only.

State amount of power used, rate per hour, and source thereof.

16. Labor: (See letter)

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities: (See letter)

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain. No.

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.

C.L. Crowder

By G.J. Bulen

(Name of company) (Signature of authorized official) Owners

(Date) (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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

This property consists of eighteen (18) claims located in Harney County, Oregon, just North of the Nevada line, one hundred and thirty-five (135) miles north of Winnemucca, Nevada. About ninety (90) miles of the road is highway, and the balance good desert road. It is remote but accessable. The nearest post office is located at Denio, Nevada, right on the State line.

About fifty years ago a Captain Canfield mined this property for gold . He drove a tunnel about eight hundred feet into the face of this hillside to strike a vein which apparently outcrops about four hundred feet above. During the driving of this tunnel, he cross-cut a thirty foot vein of copper ore, but he was interested only in gold, and besides, the price of copper at that time made such mining impractical. At about that time he died suddenly and all work on the mine ceased. L ater the portal of this tunnel caved in and it has so lain all this time. Shorter tunnels were also run. These copper ores were thrown on the dumps along with the rest of the debris. During World War II, when copper was scarce, men drove up there and hauled off this ore for shipment. The assays we are sending you herewith were made from what we could find of the remains on these dumps, together with samples of various outcroppings etc. We are advised that not only has our sampling been conservative but that virgin ore and deeper ore should carry even higher values.

The purpose of this proposed work is to open these tunnels to inspection, to open some of the outcroppings to study, and to level some of the ground higher up to see if perhaps we have an open-cut mine.

The cost of this work has to be estimated as we cannot tell how much work there will be, nor just what it will cost. In arriving at out cost figures we have tried to be realistic and still keep the cost as low as we dared. Overall they will probably be close.

Yours very truly,

G.L. Crowder

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Yours very truly,

REPORT

OF

FARNHAM-COONEY COPPER PROPERTY

LOCATION:

The property is located on the eastern flank of Pueblo mountain in the Pueblo Range in south central Oregon near the Nevada state line. It is approximately 16 miles by road north and slightly west of the town of Denio on the Nevada Oregon border. It can be reached through Winnemucca over good road to Denio and beyond.

PROPERTY:

The property is known as the Farnham-Cooney Copper property and consists of 18 claims held under location.

HISTORY:

This property was prospected and opened forty odd years ago for gold. Some free gold was found and a small mill was erected. The old arastra can still be seen. Copper ore was encountered in most of the workings but nothing was done about it as the old miners were interested only in gold. To date detailed information on the copper formations is not available as these men paid no attention to the copper.

GENERAL GEOLOGY AND PRESENT DAY SURFACE SHOWING:

The western flank of the Pueblo Mountains is a series of shallow lava flows most likely ryholite and andesite with a rather thick capping of basalt. The core of the range running north and south is granitic and the eastern flank at the location of this property is schist. At this point this shear zone or schist is from 600 to 1000 ft. wide and contains numerous highly siliceous outcroppings. The general strike parrallels the crest of the range, the schists standing at about 70° and dipping to the west.

Very noticeable fault escarpments appear high on the east flank near the crest of the range. Further faulting at right angles to the general strike of the schist formation is evidenced by the deep canyons and marked distortion of the schist.

REPORT
(Continued)

The main workings on the property were in the schist starting at an elevation of about 6000 ft. and continuing up to about 8000 ft. At the 6000 ft. level, the schist is mainly a greenstone. Further up the slope the schist changes to a chlorite and at about 8000 it is sericitic. Quartz has been injected along the plane of schistocity and in some places the outcroppings appear as large quartz veins. It was towards one of these that the main tunnel on the property was driven. The Canfield tunnel a cross-cut was started at an elevation of 6000 ft. and was driven in a distance of 300 ft. The objective the quartz vein or siliceous formation outcrops at about 6700 ft. This outcropping formation stands at about 70° dipping west and the slope of the mountain side is east at about 30°, This tunnel could not reach its objective in 300 ft. This work was abandoned. The parties who did this work stated that at 172 feet in from the portal they cut through a copper formation 30 feet in width. No attempt was made to place this copper ore on a separate pile but it went out on the dump with the rest of the waste. It is therefore impossible to determine the nature of this copper formation and the miners have no recollection of its characteristics. During the last war this dump was hand sorted and some high grade copper ore shipped. There still remains considerable copper ore scattered over the dump and most any sort of a sample could be picked containing anywheres from a trace to 15 or 18% copper and from $1.75 to $7.70 per ton in gold. One picked sample ran 5.95% copper and $30.80 per ton in gold. The gangue is quartz and greenstone schist and the copper minerals are mainly chalcopyrite with some chalcocite and Bornite. Staining the rock and coating some of the sulphides is malachite and some Chrysocolla. The sulphide mineralization is heavy.

The outcroppings though prominent do not contain any copper other than a small amount of Chrysocolla. Oxidation and leaching of the surface and outcrops has left limonite and Hematite but no

REPORT
(continued)

great masses of gossan were in evidence at the higher elevation. On the slope of the mountain and in the flat below the 6000 ft. level many good sized pieces of gossan float were noticed. From the topography and general geology it would appear that the copper ore has resulted from a pyritic replacement of the schist. Since all of the outcroppings at 7000 to 8000 ft, and they are numerous, have been highly oxidized and leached enrichment at the lower limits of the zone of oxidation might be considerable.

Unfortunately at the time of this visit the portal of the Canfield tunnel was caved. The portal is in a heavy wash and it would appear that the caving does not extend very far back. Examination of other small tunnels on the property show the ground to be standing well and it is likely that a small amount of work with a bulldozer would clear away the debris at the portal and open the Canfield tunnel for examination. A study of the copper formation in this tunnel might well be the answer as to what might be expected on further exploration of the property, other small tunnels of some 20 or 30 ft. at much higher elevation run primarily to crosscut highly siliceous outcrops in search of gold did not expose any copper ore but it was noted that the formation was oxidized and leached and for the most part contained small bands of Chrysocolla.

The short time given to this examination, the size and complexity of the area did not permit any detailed study. All that could be done was to acquire the general overall geological picture with structures and conditions for ore deposition. Mineralization over a wide area in the schist is indicated and the conditions for secondary enrichment are ideal. The structural geology indicates the possibilities of ore bodies of considerable magnitude. This property justifies further exploration but it would be well to keep in mind that it is not likely to be a property for the small operator.

August 16, 1951

E. R. Hatheway

E. R. HATHEWAY

MINING ENGINEER

SACRAMENTO ABSTRACT AND TITLE CO.

ORDER NO._____

WHEN RECORDED MAIL TO

_____

_____

_____

MORGAN E. LA RUE
EXECUTIVE VICE-PRESIDENT

M. R. TAGGART
SECRETARY

SACRAMENTO ABSTRACT
AND TITLE CO.
919 8TH STREET
SACRAMENTO, CALIFORNIA

Sacramento, California

MORSE LABORATORIES

March 26, 1951.

Mr. F. G. Buhler
Sacramento, Calif.

Assay for Copper & Gold.

Copper	---	5.95% Cu
Gold	---	$30.80 per ton

Signed

G. H. Morse

Sacramento, California

MORSE LABORATORIES.

April I2, I95I.

Buhler:

Cooney Cut #I - open cut ledge 4' wide	$7.70 per ton Au No Silver 5.09% Cu No Lead No Zinc
Cooney Blowout Grab Sample	$I.75 per ton Au No Silver 6.52% Cu
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C. L. Crowder

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C. L. Crowder

CAMP EQUIP. & SUPPLIES

3 Heating Stoves	$ 75.00
6 Cots & Pads	I75.00
Fuel	200.00
Groceries & Supplies	I000.00
Miscellaneous	500.00
	$ I950.00

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MACHINERY & TOOLS NEEDED

I.	Caterpiller bulldozer, Rent 60 days	$ 2000.00
I.	Dump Truck Rent 60 days	800.00
I.	Jack Hammer	365.00
	Drill Steel for Hammer	35.00
2.	Wheel Barrows	65.00
500'	I½" Compressor Air-Pipe	220.00
200'	I½" Hose (air)	250.00
IO Box Powder, Caps & Fuse		I55.00
300# Nails, assorted		35.00
4000' Lumber IxI2", Ix16", 2x6", 2x4"		300.00
Oil & Gas		500.00
Miscellaneous		I000.00
		$ 5725.00

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MACHINERY WE CAN SUPPLY

I.	Compressor	$ 2100.00
I.	Gas Stove	125.00
I.	Pick-up Truck	1500.00
I.	Compressor Air-tank	60.00
2.	Coleman Lanterns	20.00
	Kitchen & Dining Room Equipent . .	175.00
		$ 3980.00

C. L. Carroder

9.	Engineering,	$400.00
	Assaying,	200.00
	Accounting,	100.00
		$ 700.00

C. L. Crowder

10(a). We can put in the land and the $3900.00 listed on the Equip. & Supply sheet, which is clear and all of which we will need, We also have a lot of other stuff which we may need later but which is not apparent now. We can furnish no money now but will be able to take care of our part during the life of the Agreement.

L. L. Crowder