C
O
P
Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

So. 157 Howard Street
Spokane 4, Washington

December 6, 1951

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Washington 25, D. C.

Dear Mr. Mittendorf:

I have your letter of November 27 with reference to the Pine Creek antimony deposits in the Coeur d'Alene district, Shoshone County, Idaho, docket DMA-1595X.

Our latest information is that the applicant intends to change his program to diamond drilling and to submit a new application. However, no further word has been heard from him. I think, therefore, that the docket could be regarded as closed and any further material submitted by Mr. Dunkel, the applicant, could be considered as a new application.

Sincerely yours,

/s/ A. E. Weissenborn
A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: U.S.B.M.

FILE COPY
SURNAME:

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

Gordon
Mittendorf

NOV 27 1951

Mr. A. E. Weissenborn, Executive Officer
South 157 Howard Street
Spokane 8, Washington

Re: Coeur D'Alene
Pine Creek Antimony
DMA docket 1595X

Dear Mr. Weissenborn:

Further to our letter of July 25, 1951, we inquire regarding the status of subject application. In view of the time elapsed, it is possible that the applicant has decided to drop the matter, in which case we should regard the docket as closed. Your comments will be appreciated.

Sincerely yours,

C. O. Mittendorf (for) 11/27

Administrator
Defense Minerals Exploration
Administration

ERGordon:lm
11/26/51

cc: Admn. Reading File
Reports and Records
Mr. Moon
Mr. Rennick
Mr. McKnight
Docket
Field Team Reg. II

62

700

Form 6-95

UNITED STATES
DEPARTMENT OF THE INTERIOR
~~BUREAU OF MINES~~ DMEA

REFERENCE SLIP

DATE Dec. 13-'51

REFERRED TO:
DMA-1595X

1. Mails & Files Branch
2. Code 230
3. Rm. 4626
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: Sup Ivor (Executive Officer) Dec. 6-'51.

Check (X) before the items needing attention.

Initials of sender.
Rm. 4070

GPO 16—51162-1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
RECEIVED
DEC 1 1 1951
Defense Minerals Administration,
Production Expansion Division.

December 6, 1951

Antimony

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Washington 25, D. C.

Dear Mr. Mittendorf:

I have your letter of November 27 with reference to the Pine Creek antimony deposits in the Coeur d'Alene district, Shoshone County, Idaho, docket DMA-1595x.

Our latest information is that the applicant intends to change his program to diamond drilling and to submit a new application. However, no further word has been heard from him. I think, therefore, that the docket could be regarded as closed and any further material submitted by Mr. Dunkel, the applicant, could be considered as a new application. C.C.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: U.S.B.M.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 1 0 1951

Noted

Re DMA 1595X
Antimony

Memo to Mr Bennett

From E. T. Hettinger

Subject: DMA 1595, application of C.C. Dumble, Pinehurst Idaho, for exploration loan of $40,000 (Gov't to supply 75% of it) to explore the Coeur d'Alene Antimony mine on Pine Creek, Coeur d'Alene distrct.

Property is described in U.S.G.S. Bulletin 710A, pp 32-33, and is most important of past producers in Pine Creek area. It is discussed on pp 7-8 of attached report by Don White, who is pessimistic as to the feasibility of reopening the mine for production. He also states that "the impression was received that the mine may have been worked out." One of his main objections to the proposal to reopen is the expense that would be entailed to put it back into the condition it was in when the last mining was done, and the cost estimated by the applicant (DMA 1595) bears out this fear.

However, as a prospect for exploration, I suspect that the property might hold promise, to judge from its past history, but whether applicant's proposal to rehabilitate shaft and drifts is the correct solution might be questioned. Unfortunately, White's "impression" that the deposit is worked out is too vague a statement on which to base a sound decision, so I don't believe it can be used to condemn the property. Applicant has maps and assay data that will be supplied upon request

and that might show trends of ore shoots.

Applicant's description of the exploration (answer to question #1) as rehabilitation of the old workings" and preparing for the mining of antimony" is not a very good description of an exploration proposal. I think it can be conceded that he carelessly failed to mention that he would sink or drift, depending upon what was shown by the rehabilitation. His answer to question 22 would appear to bear out this surmise. He should give more specific details that can be used in formulating exhibit A of the contract. For $40,000, it seems that he should be able to accomplish something besides the rehabilitation of 300 ft of shaft and 300 ft of drift.

In summary, my feeling is that this might be a favorable deposit for exploration but very expensive if all he is going to do for $40,000 is rehabilitate. Unless the workings have stoping ore left in them, which seems improbable, there would still have to be work done to locate mineable ore after the rehabilitation is accomplished. Certainly the "maps and assay data" that he will supply upon request should be examined before this project should be approved. ~~If he doesn't want to send the material here, perhaps the field team could~~ ~~go~~

E.T. McKnight

FILE COPY
SURNAME:

Gordon
Bourret

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

July 25, 1951

Mr. A. E. Weissenborn, Executive Officer
Region II
South 157 Howard St.
Spokane, Washington

Re: Coeur D'Alene
Pine Creek Antimony
DMA docket 1595x

Dear Mr. Weissenborn:

Confirming your telephone conversation of July 17, with Mr. Gordon, we herewith enclose one copy of MF-200 and corresponding exhibits. We confirm that we wish to have Mr. Dunkle reform the costs per foot of the different types of work proposed and also provide supporting detailsin a new reply to question 23, form MF-103. It is understood, by the nature of the work involved, that these will be estimates. He should, if at all possible, submit maps showing the extent of the mine workings and assay data thereon, and also required are four copies of his purchase option as well as Landlords Subordination Agreement in sextuplicate.

We suggest that the new, June, form MF-200 be used in resubmitting the contract and exhibits.

Yours very truly,

Tom Lyon
Chairman, Coordinating Committee

Approved:

Lowell B. Moon
For the Bureau

Olaf N. Rove
For the Survey

EGordon/mh
cc: Adm. Read. File
Reports and Records
Lyon
Moon
Field Team II
Bourret
Files

FILE COPY
SURNAME:

Bourret

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

AIR MAIL

June 22, 1951

Mr. C. C. Dunkle
Pinehurst, Idaho

Re: Pine Creek Antimony
DMA docket 1595x

Dear Mr. Dunkle:

Your application of May 29, 1951 for an exploration project in the amount of $40,000 has been received by the Minor And Rare Metals Branch, Supply Division.

I am attaching hereto contract form MF-200 which I suggest you review carefully at this time. In the event your project is given preliminary clearance the next step is the negotiation of a contract; unless the various exhibits referred to (Exhibits A to E inclusive) are complete in all details, including maps, some delay will obviously result in processing your application. I would suggest therefore that you prepare six copies each of this material and forward to my office at your early convenience. With reference to the various mine plans, assay maps and other material on file in your office I would suggest you incorporate as much of this material as possible into Exhibit A.

Also I would suggest that you prepare as detailed a breakdown of your cost estimates as possible in working up Exhibits C and D so that future correspondence may be held to a minimum.

Yours very truly,

Weston Bourret M.N.

Weston Bourret, Chief
Minor and Rare Metals Branch

Attachment
WBourret/bf
cc: Adm. Reading File
Lyon
Strobel
Field Team (2) II
McKnight
Renick
Bourret
Files

FILE COPY
SURNAME:

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

June 16, 1951

Mr. C. C. Dunkle
Pinehurst, Idaho

Subject: DMA-1595X
Re: Exploration Loan
Coeur d'Alene and
Pine Creek Antimony

My dear Mr. Dunkle:

Receipt is acknowledged of your application and attachments of May 29, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1595X and was referred to Mr. Weston G. Bourret, Chief, Minor and Rare Metals Branch on June 11, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1595X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:js
cc: Strobel-2
Files
Bourret
Lyon

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma 1595 X

Date received 6-5-51

Participation

C. C. Dunkle
Pinehurst, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 5-1951
LANDON F. STROBEL
Executive Secretary

Date

Name and address of applicant

FILL IN THIS BLOCK

Date of application May 29, 1951

Estimated cost $40,000.00

Mineral or metal Antimony

Percentage of Government participation 75%

Location of mine Pine Creek, Idaho

Date of filing MF-100 May 29, 1951

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

THE EXPLORATION

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

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

THE REQUIREMENTS AND COSTS

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

CERTIFICATION

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

C. C. Dunkle
(Name of ~~company~~ individual)

By C C Dunkle
(Signature of authorized official)

May 29, 1951
(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.

*Same as footnote on page 1.

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

C. C. Dunkle
Pinehurst, Idaho

FORM MF-103 ANSWERS

THE APPLICANT

1. The applicant is an individual, C. C. Dunkle, Pinehurst, Idaho.

2. Not applicable.

3. No applicable.

4. C. C. Dunkle, who is the applicant as well as the person who will be in charge of the development, has been actively engaged in mining in the Coeur d'Alene District for over 40 years. Mr. Dunkle is presently Vice President and Manager of the Nabob Silver-Lead Company.

5. Applicant is the owner of a one-third interest in the property with an option to purchase the remaining two-thirds interest.

6. There are no claims, liens, or encumbrances against the property.

7. Not applicable.

8. Applicant has no financial statements on this venture. Mr. Dunkle has purchased a one-third interest for cash and has personally paid the expense of preliminary investigation of the property.

9. Applicant is prepared to invest twenty-five per cent of the proposed project or approximately $10,000. This amount is in accordance with the regulation on Government participation (Section 9 of Mineral Order 5).

THE PROPERTY

10. (a) Two unpatented claims and 300 acres of surrounding patented ground including mineral rights.

    (b) Two unpatented claims and 300 acres of patented ground in Section 6, T 48 N, R 2 E.

11. The present name is Coeur d'Alene and Pine Creek Antimony.

12. Property is located near Pinehurst, Idaho six miles from Kellogg, Idaho, which is the nearest shipping point. Roads are excellent and open the year around.

13. Adequate shallow well water supply for year around operations is available. Electric power may be obtained from the Washington Water Power Company at the usual mining rate.

14. No facilities, equipment or buildings of any consequence are available.

15. Ore could be milled at nearby custom mill and could be shipped by rail to smelters.

16. History:

(a) Property has had past production but information is not available.
(b) The Star Antimony property three miles south has had antimony production.
(c) Applicant knows of no private reports.

17. Production:

Mine is idle and not producing at the present time.

18. Ore or mineral reserves:

(a) Shoots of antimony in vein type deposit.
(b) Maps and assay data will be supplied upon request.
(c) Ore reserves are not possible to ascertain at the present time.

19. There are no conditions not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. Exploration will be conducted in search for antimony deposits.

21. The proposed work consists of rehabilitating 300 feet of shaft and 300 feet of drifts on the lower level and the preparing for the mining of antimony. It will take approximately one year to complete this work.

22. A strong antimony bearing fracture which has been mined previously to a depth of 300 feet and insofar as known the bottom of the ore shoot had not been reached. Maps and assays are available at the applicant's place of business.

THE REQUIREMENTS AND COSTS

23. Cost:

(a)	Labor: 3 miners at $400 per month	$14,400.00
(b)	Supervision: 1 shift boss at $400.00 per month	4,800.00
(c)	Cost of necessary repairs to existing facilities, structures and buildings	2,000.00
(d)	Cost of necessary installation or construction of additional facilities, structures and buildings	

-0-

FORM MF-103 ANSWERS
C. C. Dunkle
Pinehurst, Idaho
May 29, 1951

23.	(e)	Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more	$5,000.00
	(f)	Cost of rental for equipment	-0-
	(g)	Rental value of items of equipment which the operator now owns and will be devoted to the work	-0-
	(h)	Cost of materials and supplies, including items of equipment less than $50 each	10,000.00
	(i)	Cost of power, water, utilities and other items not provided above	3,800.00
		Total cost	$40,000.00

24. It is estimated that it will take three months to rehabilitate the shaft and nine months to rehabilitate the lower mine drifts.

Progress at end of:	Cost
Third month - rehabilitate shaft and equipment	$25,000.00
Sixth month - one-third rehabilitation of drifts	5,000.00
Ninth month - two-thirds rehabilitation of drifts	5,000.00
End of one year - complete rehabilitation of mine workings	5,000.00
Total	$40,000.00

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane, Washington

May 31, 1951

Mr. E. F. Strobel
Executive Secretary
Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Strobel:

Included are three copies of an application by Mr. C. C. Dunkel of Pinehurst, Idaho, for an exploration contract on an antimony prospect near Pine Creek, Idaho, in the Coeur d'alene district.

The application is quite complete and detailed, except that the applicant has not broken down the cost of equipment, materials, and supplies in Item 23. This has been called to his attention and he has stated that he will submit detailed costs as soon as possible.

Sincerely yours,

A. B. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

cc: W. L. Volin

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 5-1951
LANDON F. STROBEL
Executive Secretary

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

South 157 Howard Street,
Spokane, Washington

June 27, 1951

DMA-1595X

MEMORANDUM

To: Weston Bourret, Chairman
Minor and Rare Metals Branch

From: Field Team, Region II

Subject: Coeur d' Alene and Pine Creek Antimony, Shoshone County, Idaho

Enclosed herewith are four copies of a memorandum, with maps, on the Coeur d' Alene and Pine Creek Antimony property, Shoshone County, Idaho written by S. Warren Hobbs. Also enclosed are six copies of a signed contract and Exhibits "A", "B", "C", "D" and "E".

As noted in the memorandum by Hobbs, the underground workings are now caved as are the surface exposures so that very little antimony is now visible; however, the mine and general area have produced antimony ore in the past.

The footage costs for rehabilitation and drifting appear to be somewhat high but do include all costs including track and pipe which have been figured separately in other contracts. On the other hand, the footage cost of rehabilitating the caved shaft appears somewhat low.

On the basis of past antimony production of the mine and the belief that the estimated costs can be shaded during actual operations, it is recommended that this exploration application be approved.

A. E. Weissenborn, Executive Officer
(Geological Survey)

E. E. Volin, Member
(Bureau of Mines)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Mullan, Idaho

June 23, 1951

Memorandum:

To: A. E. Weissenborn, Executive Officer, Field Team Region II,
Defense Minerals Administration,
S. 157 Howard St.
Spokane 4, Washington

DMA-1595X

From: S. Warren Hobbs

Subject: Coeur d'Alene and Pine Creek Antimony

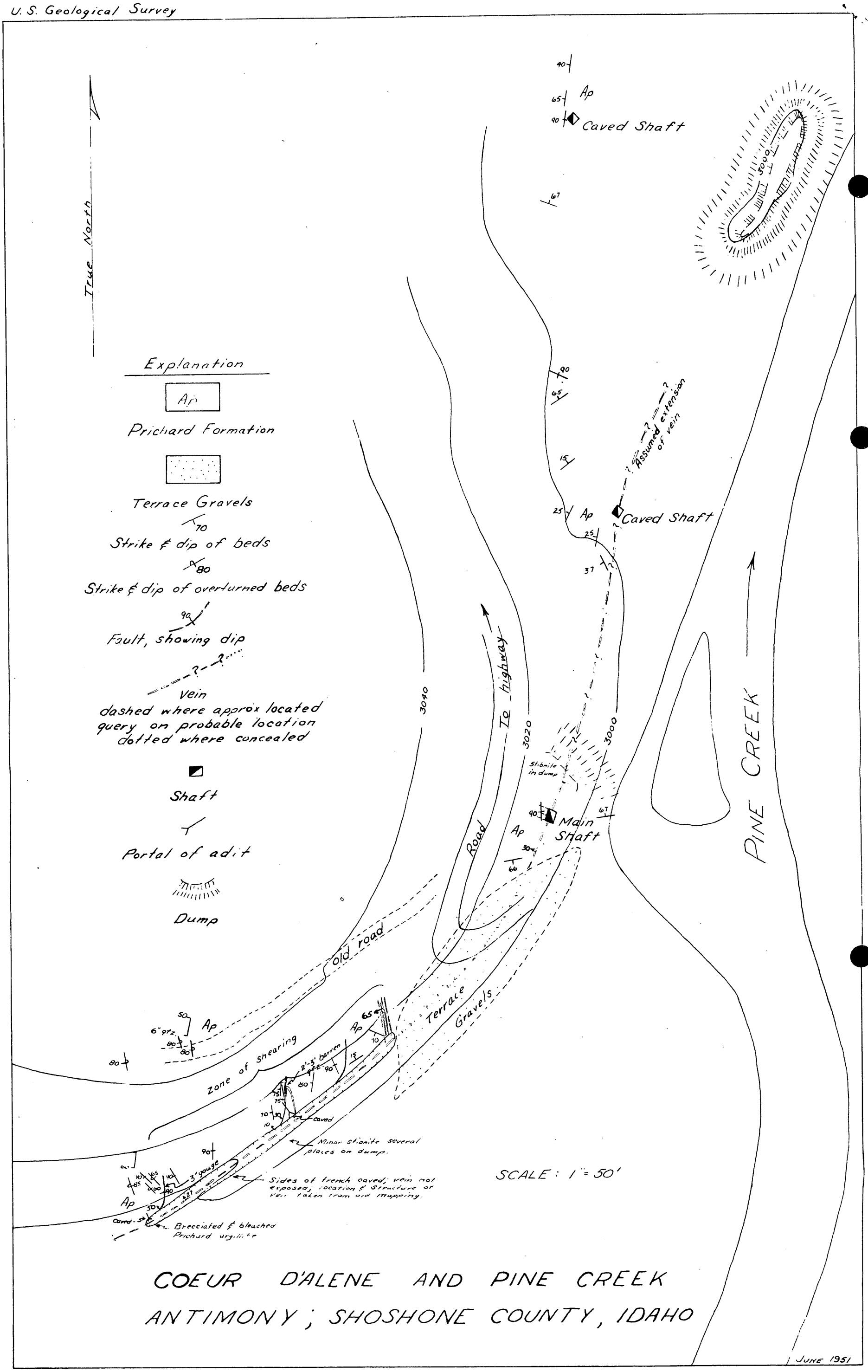
The Coeur d'Alene and Pine Creek Antimony property was last operated in 1935. The underground workings are all caved and the surface cuts and exposures are so weathered and sluffed that very little can be seen of the actual vein and the character of the mineralization. The presence of minor amounts of stibnite on the dumps, together with reliable reports of actual production of antimony from the mine leaves little doubt that stibnite occurs in the structure in significant amounts. A modest exploration program on this property is probably warranted.

The general geology of the area is nearly as obscure as the vein itself. A plane table map (attached) was prepared of the mineralized area adjacent to the Main Shaft. The vein occurs in Prichard argillite and strikes about N. 20° E. and dips about 30° to the N.W. at the surface. The inclined shaft follows the vein and is reported to steepen from 30° near the surface to about 40° or 45° near the bottom, 300 feet down the dip. Presumably, the vein also steepens down the dip. The structure of the argillite is much contorted in the vicinity of the "vein". Along the large bulldozer cut southwest of the Main Shaft, the bedding appears to be dragged to the S.W. along the "vein", and quartz stringers and small faults follow the same pattern. It appears that the mineralized structure is a low-angle fault, possibly reverse, and the stibnite occurs along it, both in the fault zone itself and in the small vein stringers that split off from it.

The evidence on this proposal is purely circumstantial. The reports on past production are fairly reliable, but cannot be documented. Geologically, the area presents a strong structure that without question carries some antimony. It is in a district in which several small antimony prospects occur over an area of several miles long by a mile wide. It seems possible that minable amounts of antimony ore may very well occur in this structure.

S. Warren Hobbs
Geologist, U.S.G.S.

Department of the Interior
U. S. Geological Survey



COEUR D'ALENE AND PINE CREEK ANTIMONY; SHOSHONE COUNTY, IDAHO

JUNE 1951

1595 X

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Mullan, Idaho

June 23, 1951

Memorandum:

To: A. E. Weissenborn, Executive Officer, Field Team Region II,
Defense Minerals Administration,
S. 157 Howard St.
Spokane 4, Washington

From: S. Warren Hobbs

Subject: Coeur d'Alene and Pine Creek Antimony

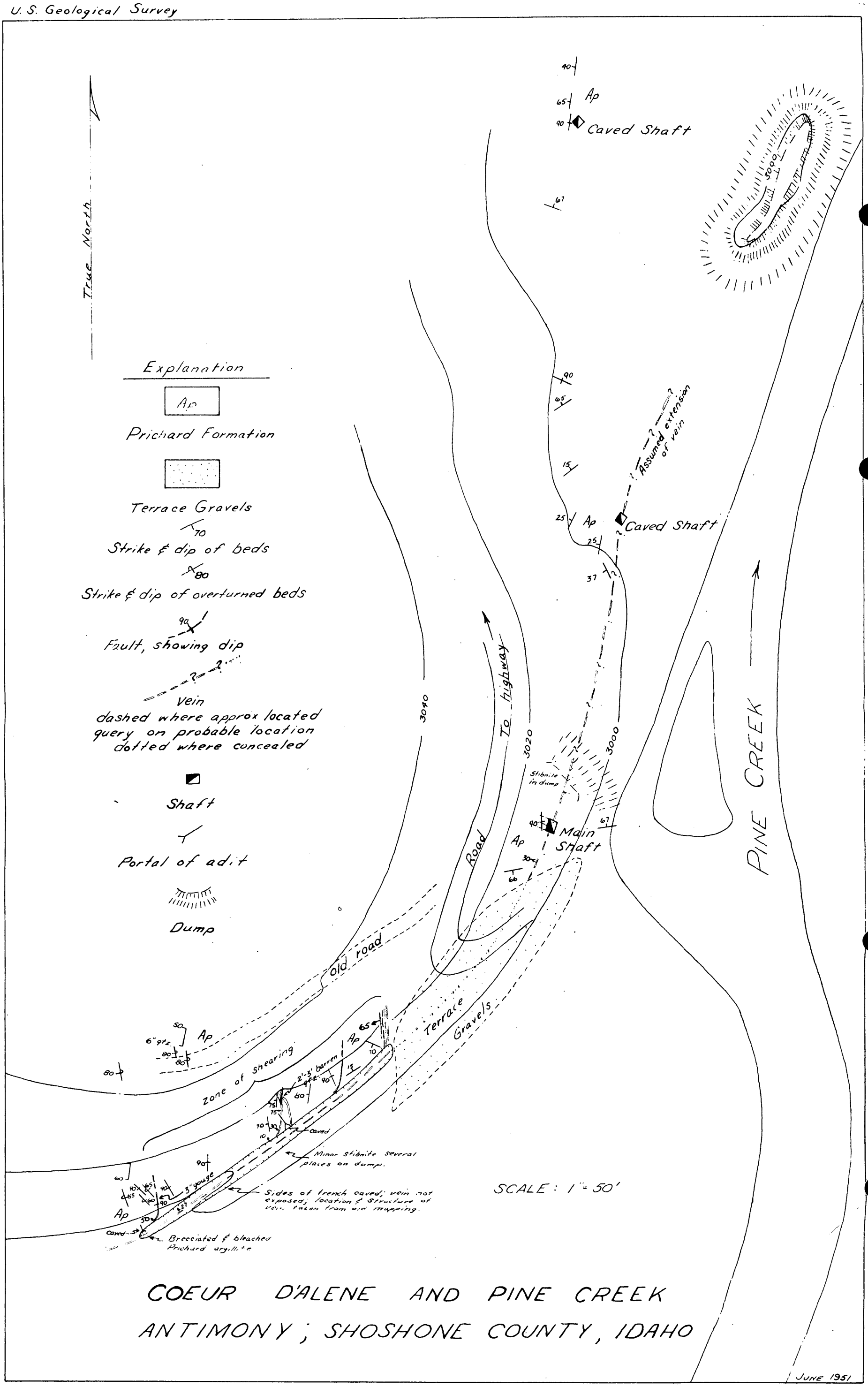
The Coeur d'Alene and Pine Creek Antimony property was last operated in 1935. The underground workings are all caved and the surface cuts and exposures are so weathered and sluffed that very little can be seen of the actual vein and the character of the mineralization. The presence of minor amounts of stibnite on the dumps, together with reliable reports of actual production of antimony from the mine leaves little doubt that stibnite occurs in the structure in significant amounts. A modest exploration program on this property is probably warranted.

The general geology of the area is nearly as obscure as the vein itself. A plane table map (attached) was prepared of the mineralized area adjacent to the Main Shaft. The vein occurs in Prichard argillite and strikes about N. 20° E. and dips about 30° to the N.W. at the surface. The inclined shaft follows the vein and is reported to steepen from 30° near the surface to about 40° or 45° near the bottom, 300 feet down the dip. Presumably, the vein also steepens down the dip. The structure of the argillite is much contorted in the vicinity of the "vein". Along the large bulldozer cut southwest of the Main Shaft, the bedding appears to be dragged to the S.W. along the "vein", and quartz stringers and small faults follow the same pattern. It appears that the mineralized structure is a low-angle fault, possibly reverse, and the stibnite occurs along it, both in the fault zone itself and in the small vein stringers that split off from it.

The evidence on this proposal is purely circumstantial. The reports on past production are fairly reliable, but cannot be documented. Geologically, the area presents a strong structure that without question carries some antimony. It is in a district in which several small antimony prospects occur over an area of several miles long by a mile wide. It seems possible that minable amounts of antimony ore may very well occur in this structure.

S. Warren Hobbs
Geologist, U.S.G.S.

Department of the Interior
U. S. Geological Survey



COEUR D'ALENE AND PINE CREEK ANTIMONY; SHOSHONE COUNTY, IDAHO

Defense Minerals Administration
Reference Slip

Date 6-9-51

To: 1. Mr. Barnett

2. _____

3. _____

4. _____

DMA 1595X

For Action ✓
Reply _____
Information _____
Remarks: _____

Sender Strobel (bl)

3
Mr. Strobel DMA
Forwarded to

Branch _____

Date _____

Sender _____

2
Mr. Strobel DMA
Forwarded to

Branch _____

Date _____

Sender _____

1
Mr. Strobel DMA
Forwarded to

Branch _____

Date _____

Sender _____

92758

dma 1595X

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington

May 31, 1951

Mr. L. F. Strobel
Executive Secretary
Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Strobel:

Included are three copies of an application by Mr. C. C. Dunkel of Pinehurst, Idaho, for an exploration contract on an antimony prospect near Pine Creek, Idaho, in the Coeur d'alene district.

The application is quite complete and detailed, except that the applicant has not broken down the costs of equipment, materials, and supplies in Item 23. This has been called to his attention and he has stated that he will submit detailed costs as soon as possible.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

cc: M. E. Volin

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 5 - 1951
LANDON F. STROBEL
Executive Secretary

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington

May 31, 1951

Mr. L. F. Strobel
Executive Secretary
Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Strobel:

Included are three copies of an application by Mr. C. C. Dunkel of Pinehurst, Idaho, for an exploration contract on an antimony prospect near Pine Creek, Idaho, in the Coeur d'alene district.

The application is quite complete and detailed, except that the applicant has not broken down the costs of equipment, materials, and supplies in Item 23. This has been called to his attention and he has stated that he will submit detailed costs as soon as possible.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

cc: M. E. Volin

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane, Washington

May 31, 1951

Mr. E. F. Strobel
Executive Secretary
Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Strobel:

Included are three copies of an application by Mr. C. C. Dunkel of Pinehurst, Idaho, for an exploration contract on an antimony prospect near Pine Creek, Idaho, in the Coeur d'alene district.

The application is quite complete and detailed, except that the applicant has not broken down the costs of equipment, materials, and supplies in Item 23. This has been called to his attention and he has stated that he will submit detailed costs as soon as possible.

Sincerely yours,

A. B. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

cc: M. G. Volin

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma 1595 X

Date received 6-5-51

Participation

C. C. Dunkle
Pinehurst, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 5 - 1951
LANDON F. STROBEL
Executive Secretary
Date

Name and address of applicant

FILL IN THIS BLOCK

Date of application May 29, 1951

Estimated cost $40,000.00

Mineral or metal Antimony

Percentage of Government participation 75%

Location of mine Pine Creek, Idaho

Date of filing MF-100 May 29, 1951

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

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

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

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

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

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

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

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

CERTIFICATION

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

C. C. Dunkle
(Name of ~~company~~ individual)

By C C Dunkle
(Signature of authorized official)

May 29, 1951
(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.

*Same as footnote on page 1.

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

C. C. Dunkle
Pinehurst, Idaho

FORM MF-103 ANSWERS

THE APPLICANT

1. The applicant is an individual, C. C. Dunkle, Pinehurst, Idaho.

2. Not applicable.

3. No applicable.

4. C. C. Dunkle, who is the applicant as well as the person who will be in charge of the development, has been actively engaged in mining in the Coeur d'Alene District for over 40 years. Mr. Dunkle is presently Vice President and Manager of the Nabob Silver-Lead Company.

5. Applicant is the owner of a one-third interest in the property with an option to purchase the remaining two-thirds interest.

6. There are no claims, liens, or encumbrances against the property.

7. Not applicable.

8. Applicant has no financial statements on this venture. Mr. Dunkle has purchased a one-third interest for cash and has personally paid the expense of preliminary investigation of the property.

9. Applicant is prepared to invest twenty-five per cent of the proposed project or approximately $10,000. This amount is in accordance with the regulation on Government participation (Section 9 of Mineral Order 5).

THE PROPERTY

10. (a) Two unpatented claims and 300 acres of surrounding patented ground including mineral rights.

    (b) Two unpatented claims and 300 acres of patented ground in Section 6, T 48 N, R 2 E.

11. The present name is Coeur d'Alene and Pine Creek Antimony.

12. Property is located near Pinehurst, Idaho six miles from Kellogg, Idaho, which is the nearest shipping point. Roads are excellent and open the year around.

13. Adequate shallow well water supply for year around operations is available. Electric power may be obtained from the Washington Water Power Company at the usual mining rate.

14. No facilities, equipment or buildings of any consequence are available.

FORM MF-103 ANSWERS
C. C. Dunkle
Pinehurst, Idaho
May 29, 1951

15. Ore could be milled at nearby custom mill and could be shipped by rail to smelters.

16. History:

(a) Property has had past production but information is not available.
(b) The Star Antimony property three miles south has had antimony production.
(c) Applicant knows of no private reports.

17. Production:

Mine is idle and not producing at the present time.

18. Ore or mineral reserves:

(a) Shoots of antimony in vein type deposit.
(b) Maps and assay data will be supplied upon request.
(c) Ore reserves are not possible to ascertain at the present time.

19. There are no conditions not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. Exploration will be conducted in search for antimony deposits.

21. The proposed work consists of rehabilitating 300 feet of shaft and 300 feet of drifts on the lower level and the preparing for the mining of antimony. It will take approximately one year to complete this work.

22. A strong antimony bearing fracture which has been mined previously to a depth of 300 feet and insofar as known the bottom of the ore shoot had not been reached. Maps and assays are available at the applicant's place of business.

THE REQUIREMENTS AND COSTS

23. Cost:

(a)	Labor: 3 miners at $400 per month	$14,400.00
(b)	Supervision: 1 shift boss at $400.00 per month	4,800.00
(c)	Cost of necessary repairs to existing facilities, structures and buildings	2,000.00
(d)	Cost of necessary installation or construction of additional facilities, structures and buildings	-0-

FORM MF-103 ANSWERS
C. C. Dunkle
Pinehurst, Idaho
May 29, 1951

23.	(e)	Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more	$5,000.00
	(f)	Cost of rental for equipment	-0-
	(g)	Rental value of items of equipment which the operator now owns and will be devoted to the work	-0-
	(h)	Cost of materials and supplies, including items of equipment less than $50 each	10,000.00
	(i)	Cost of power, water, utilities and other items not provided above	3,800.00
		Total cost	$40,000.00

24. It is estimated that it will take three months to rehabilitate the shaft and nine months to rehabilitate the lower mine drifts.

Progress at end of:	Cost
Third month - rehabilitate shaft and equipment	$25,000.00
Sixth month - one-third rehabilitation of drifts	5,000.00
Ninth month - two-thirds rehabilitation of drifts	5,000.00
End of one year - complete rehabilitation of mine workings	5,000.00
Total	$40,000.00

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma 1595 X

Date received 6-5-51

Participation

C. C. Dunkle
Pinehurst, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 5 - 1951
LANDON F. STROBEL
Executive Secretary

Date

Name and address of applicant

FILL IN THIS BLOCK

Date of application May 29, 1951

Estimated cost $40,000.00

Mineral or metal Antimony

Percentage of Government participation 75%

Location of mine Pine Creek, Idaho

Date of filing MF-100 May 29, 1951

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

THE EXPLORATION

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

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

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

THE REQUIREMENTS AND COSTS

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

CERTIFICATION

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

C. C. Dunkle
(Name of ~~company~~ individual)

By C C Dunkle
(Signature of authorized official)

May 29, 1951
(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.

*Same as footnote on page 1.

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

C. C. Dunkle
Pinehurst, Idaho

FORM MF-103 ANSWERS

THE APPLICANT

1. The applicant is an individual, C. C. Dunkle, Pinehurst, Idaho.

2. Not applicable.

3. No applicable.

4. C. C. Dunkle, who is the applicant as well as the person who will be in charge of the development, has been actively engaged in mining in the Coeur d'Alene District for over 40 years. Mr. Dunkle is presently Vice President and Manager of the Nabob Silver-Lead Company.

5. Applicant is the owner of a one-third interest in the property with an option to purchase the remaining two-thirds interest.

6. There are no claims, liens, or encumbrances against the property.

7. Not applicable.

8. Applicant has no financial statements on this venture. Mr. Dunkle has purchased a one-third interest for cash and has personally paid the expense of preliminary investigation of the property.

9. Applicant is prepared to invest twenty-five per cent of the proposed project or approximately $10,000. This amount is in accordance with the regulation on Government participation (Section 9 of Mineral Order 5).

THE PROPERTY

10. (a) Two unpatented claims and 300 acres of surrounding patented ground including mineral rights.

    (b) Two unpatented claims and 300 acres of patented ground in Section 6, T 48 N, R 2 E.

11. The present name is Coeur d'Alene and Pine Creek Antimony.

12. Property is located near Pinehurst, Idaho six miles from Kellogg, Idaho, which is the nearest shipping point. Roads are excellent and open the year around.

13. Adequate shallow well water supply for year around operations is available. Electric power may be obtained from the Washington Water Power Company at the usual mining rate.

14. No facilities, equipment or buildings of any consequence are available.

FORM MF-103 ANSWERS
C. C. Dunkle
Pinehurst, Idaho
May 29, 1951

15. Ore could be milled at nearby custom mill and could be shipped by rail to smelters.

16. History:

(a) Property has had past production but information is not available.
(b) The Star Antimony property three miles south has had antimony production.
(c) Applicant knows of no private reports.

17. Production:

Mine is idle and not producing at the present time.

18. Ore or mineral reserves:

(a) Shoots of antimony in vein type deposit.
(b) Maps and assay data will be supplied upon request.
(c) Ore reserves are not possible to ascertain at the present time.

19. There are no conditions not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. Exploration will be conducted in search for antimony deposits.

21. The proposed work consists of rehabilitating 300 feet of shaft and 300 feet of drifts on the lower level and the preparing for the mining of antimony. It will take approximately one year to complete this work.

22. A strong antimony bearing fracture which has been mined previously to a depth of 300 feet and insofar as known the bottom of the ore shoot had not been reached. Maps and assays are available at the applicant's place of business.

THE REQUIREMENTS AND COSTS

23. Cost:

(a)	Labor: 3 miners at $400 per month	$14,400.00
(b)	Supervision: 1 shift boss at $400.00 per month	4,800.00
(c)	Cost of necessary repairs to existing facilities, structures and buildings	2,000.00
(d)	Cost of necessary installation or construction of additional facilities, structures and buildings	-0-

FORM MF-103 ANSWERS
C. C. Dunkle
Pinehurst, Idaho
May 29, 1951

23.	(e)	Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more	$5,000.00
	(f)	Cost of rental for equipment	-0-
	(g)	Rental value of items of equipment which the operator now owns and will be devoted to the work	-0-
	(h)	Cost of materials and supplies, including items of equipment less than $50 each	10,000.00
	(i)	Cost of power, water, utilities and other items not provided above	3,800.00
		Total cost	$40,000.00

24. It is estimated that it will take three months to rehabilitate the shaft and nine months to rehabilitate the lower mine drifts.

Progress at end of:	Cost
Third month - rehabilitate shaft and equipment	$25,000.00
Sixth month - one-third rehabilitation of drifts	5,000.00
Ninth month - two-thirds rehabilitation of drifts	5,000.00
End of one year - complete rehabilitation of mine workings	5,000.00
Total	$40,000.00

Mr. A. E. Weissenborn, Executive Officer
South 157 Howard Street
Spokane 8, Washington

Re: Coeur D'Alene
Pine Creek Antimony
DMA docket 15951

Dear Mr. Weissenborn:

Further to our letter of July 25, 1951, we inquire regarding the status of subject application. In view of the time elapsed, it is possible that the applicant has decided to drop the matter, in which case we should regard the docket as closed. Your comments will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator
Defense Minerals Exploration
Administration

EHGordon'lm
11/26/51

cc: Adm. Reading File
Reports and Records
Mr. Moon
Mr. Rennick
Mr. McKnight
Docket
Field Team Reg. II

DMA-1595X

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

June 27, 1951

Mr. L. F. Strobel, Executive Secretary
Defense Minerals Administration
Department of Interior
Washington 25, D.C.

Dear Mr. Strobel:

Enclosed herewith are 4 copies of a memorandum, with maps, on the Coeur d' Alene and Pine Creek Antimony property, Shoshone County, Idaho, written by S. Warren Hobbs. Also enclosed are 6 copies of a signed contract and Exhibits "A", "B", "C", "D", and "E".

Will you please forward this to the Chairman of the Minor and Rare Metals Branch.

Sincerely yours,

V. C. Fryklund

V. C. Fryklund
For: A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

cc: U.S. Bur. Mines
Spokane, Wash.

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

July 25, 1951

Mr. A. E. Weissenborn, Executive Officer
Region II
South 157 Howard St.
Spokane, Washington

Re: Coeur D'Alene
Pine Creek Antimony
DMA docket 1595x

Dear Mr. Weissenborn:

Confirming your telephone conversation of July 17, with Mr. Gordon, we herewith enclose one copy of MF-200 and corresponding exhibits. We confirm that we wish to have Mr. Dunkle reform the costs per foot of the different types of work proposed and also provide supporting details in a new reply to question 23, form MF-103. It is understood, by the nature of the work involved, that these will be estimates. He should, if at all possible, submit maps showing the extent of the mine workings and assay data thereon, and also required are four copies of his purchase option as well as Landlords Subordination Agreement in sextuplicate.

We suggest that the new, June, form MF-200 be used in resubmitting the contract and exhibits

Yours very truly,

Chairman, Coordinating Committee

Approved:

For the Survey

For the Bureau

15952

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

South 157 Howard Street,
Spokane, Washington

June 27, 1951

MEMORANDUM

To: Weston Bourret, Chairman
Mines and Rare Metals Branch

From: Field Team, Region II

Subject: Coeur d' Alene and Pine Creek Antimony, Shoshone County, Idaho

Enclosed herewith are four copies of a memorandum, with maps, on the Coeur d' Alene and Pine Creek Antimony property, Shoshone County, Idaho written by S. Warren Hobbs. Also enclosed are six copies of a signed contract and Exhibits "A", "B", "C", "D" and "E".

As noted in the memorandum by Hobbs, the underground workings are now caved as are the surface exposures so that very little antimony is now visible; however, the mine and general area have produced antimony ore in the past.

The footage costs for rehabilitation and drifting appear to be somewhat high but do include all costs including track and pipe which have been figured separately in other contracts. On the other hand, the footage cost of rehabilitating the caved shaft appears somewhat low.

On the basis of past antimony production of the mine and the belief that the estimated costs can be shaded during actual operations, it is recommended that this exploration application be approved.

A. E. Weissenborn

A. E. Weissenborn, Executive Officer
(Geological Survey)

M. E. Volin

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

South 157 Howard Street,
Spokane, Washington

June 27, 1951

MEMORANDUM

To: Weston Bourret, Chairman
Mines and Rare Metals Branch

From: Field Team, Region II

Subject: Coeur d' Alene and Pine Creek Antimony, Shoshone County, Idaho

Enclosed herewith are four copies of a memorandum, with maps, on the Coeur d' Alene and Pine Creek Antimony property, Shoshone County, Idaho written by S. Warren Hobbs. Also enclosed are six copies of a signed contract and exhibits "A", "B", "C", "D" and "E".

As noted in the memorandum by Hobbs, the underground workings are now caved as are the surface exposures so that very little antimony is now visible; however, the mine and general area have produced antimony ore in the past.

The footage costs for rehabilitation and drifting appear to be somewhat high but do include all costs including track and pipe which have been figured separately in other contracts. On the other hand, the footage cost of rehabilitating the caved shaft appears somewhat low.

On the basis of past antimony production of the mine and the belief that the estimated costs can be shaded during actual operations, it is recommended that this exploration application be approved.

A. E. Weissenborn, Executive Officer
(Geological Survey)

A. E. Volin, Member
(Bureau of Mines)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

South 157 Howard Street,
Spokane, Washington

June 27, 1951

MEMORANDUM

To: Weston Bourret, Chairman
Minor and Rare Metals Branch

From: Field Team, Region II

Subject: Coeur d' Alene and Pine Creek Antimony, Shoshone County, Idaho

Enclosed herewith are four copies of a memorandum, with maps, on the Coeur d' Alene and Pine Creek Antimony property, Shoshone County, Idaho written by S. Warren Hobbs. Also enclosed are six copies of a signed contract and Exhibits "A", "B", "C", "D" and "E".

As noted in the memorandum by Hobbs, the underground workings are now caved as are the surface exposures so that very little antimony is now visible; however, the mine and general area have produced antimony ore in the past.

The footage costs for rehabilitation and drifting appear to be somewhat high but do include all costs including track and pipe which have been figured separately in other contracts. On the other hand, the footage cost of rehabilitating the caved shaft appears somewhat low.

On the basis of past antimony production of the mine and the belief that the estimated costs can be shaded during actual operations, it is recommended that this exploration application be approved.

A. E. Weissenborn, Executive Officer
(Geological Survey)

E. L. Volin, Member
(Bureau of Mines)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Wallan, Idaho

June 23, 1951

Memorandum:

To: A. F. Weissenborn, Executive Officer, Field Team Region II,
Defense Minerals Administration,
N. 157 Howard St.
Spokane 4, Washington

From: G. Warren Hobbs

Subject: Coeur d'Alene and Pine Creek Antimony

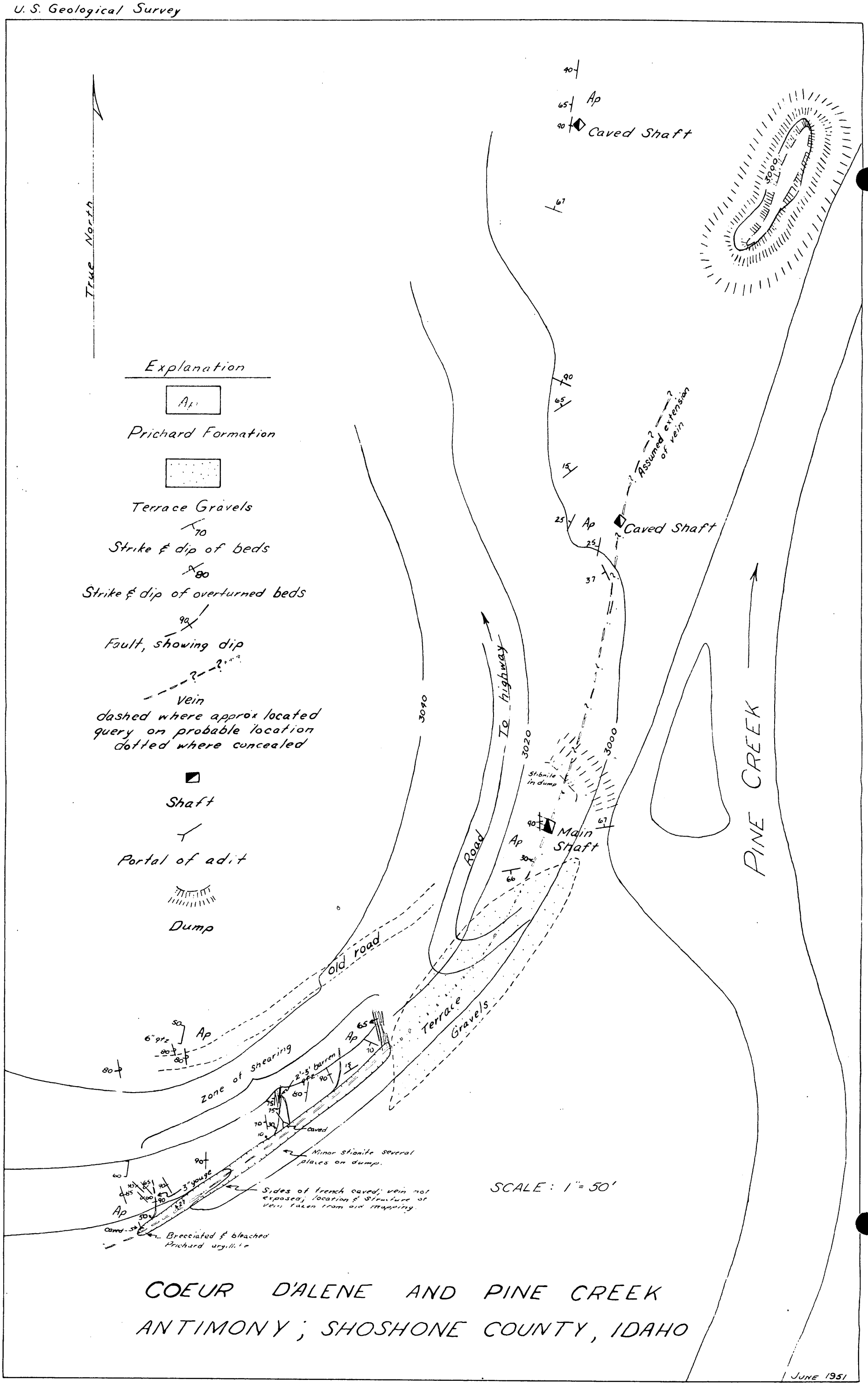
The Coeur d'Alene and Pine Creek Antimony property was last operated in 1935. The underground workings are all caved and the surface cuts and exposures are so weathered and sluffed that very little can be seen of the actual vein and the character of the mineralization. The presence of minor amounts of stibnite on the dumps, together with reliable reports of actual production of antimony from the mine leaves little doubt that stibnite occurs in the structure in significant amounts. A modest exploration program on this property is probably warranted.

The general geology of the area is nearly as obscure as the vein itself. A plane table map (attached) was prepared of the mineralized area adjacent to the Main Shaft. The vein occurs in Prichard argillite and strikes about N. 20° W. and dips about 30° to the N. E. at the surface. The inclined shaft follows the vein and is reported to steepen from 30° near the surface to about 40° or 45° near the bottom, 300 feet down the dip. "Presumably, the vein also steepens down the dip." The structure of the argillite is much contorted in the vicinity of the "vein". Along the large bulldozer cut southwest of the Main Shaft, the bedding appears to be dragged to the S. E. along the "vein", and quartz stringers and small faults follow the same pattern. It appears that the mineralized structure is a low-angle fault, possibly reverse, and the stibnite occurs along it, both in the fault zone itself and in the small vein stringers that split off from it.

The evidence on this proposal is purely circumstantial. The reports of past production are fairly reliable, but cannot be documented. Geologically, the area presents a strong structure that without question carries some antimony. It is in a district in which several small antimony prospects occur over an area of several miles long by a mile wide. It seems possible that sizable amounts of antimony may very well occur in this structure.

G. Warren Hobbs
Geologist, U. S. G. S.

Department of the Interior
U. S. Geological Survey



COEUR D'ALENE AND PINE CREEK ANTIMONY; SHOSHONE COUNTY, IDAHO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Mullan, Idaho

June 23, 1951

Memorandum:

To: A. E. Weissenborn, Executive Officer, Field Team Region II,
Defense Minerals Administration,
S. 157 Howard St.
Spokane 4, Washington

From: G. Warren Hobbs

Subject: Coeur d'Alene and Pine Creek Antimony

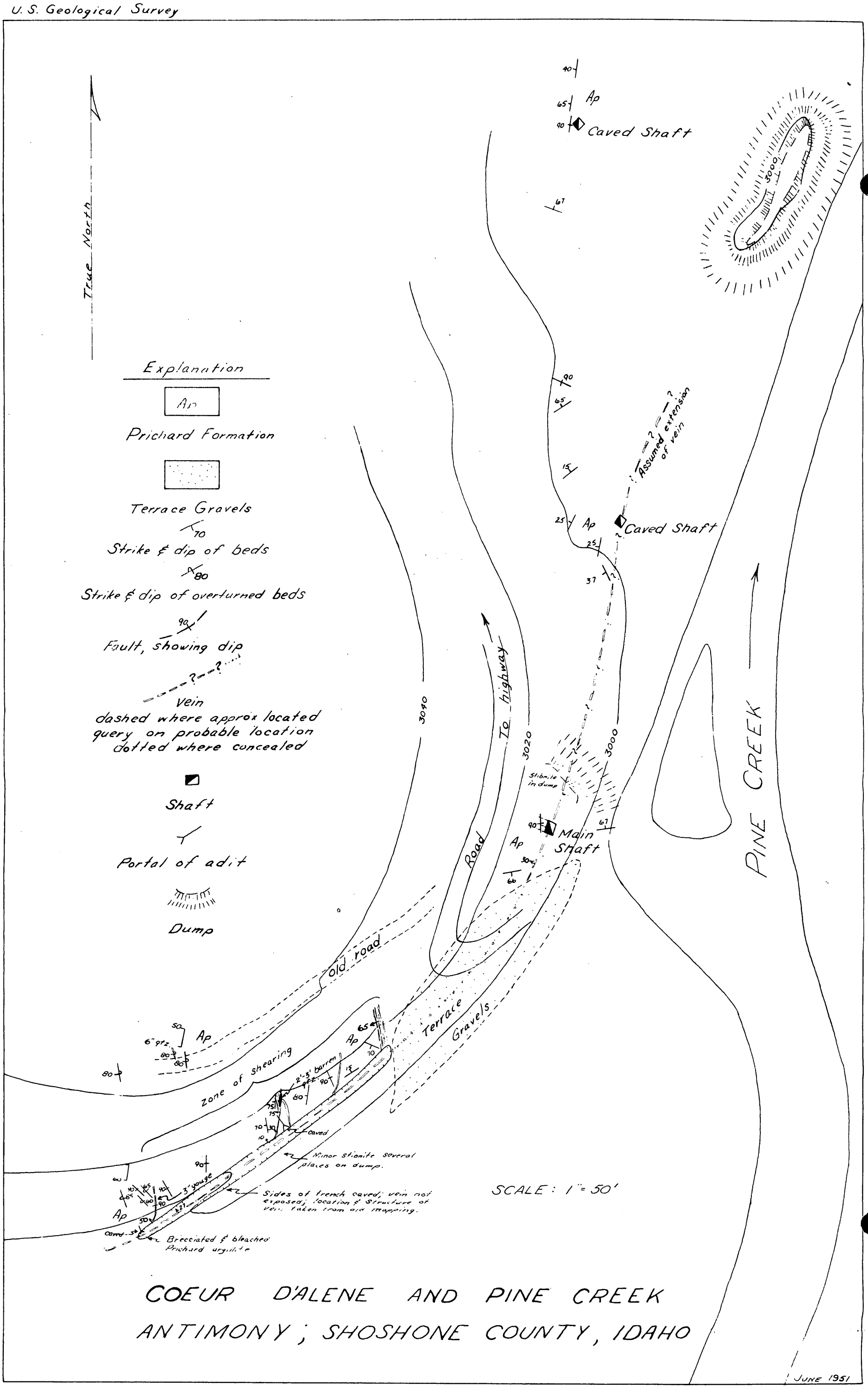
The Coeur d'Alene and Pine Creek Antimony property was last operated in 1935. The underground workings are all caved and the surface cuts and exposures are so weathered and sluffed that very little can be seen of the actual vein and the character of the mineralization. The presence of minor amounts of stibnite on the dumps, together with reliable reports of actual production of antimony from the mine leaves little doubt that stibnite occurs in the structure in significant amounts. A modest exploration program on this property is probably warranted.

The general geology of the area is nearly as obscure as the vein itself. A plane table map (attached) was prepared of the mineralized area adjacent to the Main Shaft. The vein occurs in Prichard argillite and strikes about N. 20° W. and dips about 30° to the N.E. at the surface. The inclined shaft follows the vein and is reported to steepen from 30 near the surface to about 40 or 45° near the bottom, 300 feet down the dip. Presumably, the vein also steepens down the dip. The structure of the argillite is much contorted in the vicinity of the "vein". Along the large bulldozer cut southwest of the Main Shaft, the bedding appears to be dragged to the S.E. along the "vein", and quartz stringers and small faults follow the same pattern. It appears that the mineralized structure is a low-angle fault, possibly reverse, and the stibnite occurs along it, both in the fault zone itself and in the small vein stringers that split off from it.

The evidence on this proposal is purely circumstantial. The reports on past production are fairly reliable, but cannot be documented. Geologically, the area presents a strong structure that without question carries some antimony. It is in a district in which several small antimony prospects occur over an area of several miles long by a mile wide. It seems possible that reliable amounts of antimony ore may very well occur in this structure.

G. Warren Hobbs
Geologist, U.S.G.S.

Department of the Interior
U. S. Geological Survey



COEUR D'ALENE AND PINE CREEK ANTIMONY; SHOSHONE COUNTY, IDAHO

JUNE 1951

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

[illegible]

[illegible] 22, 1951

Mr. [illegible]
[illegible], Idaho

[illegible] Creek [illegible]
[illegible] 15[illegible]

Dear Mr. [illegible]:

Your application of [illegible] 1951 for an exploration [illegible] in the amount of [illegible] has been [illegible] by the [illegible] Branch, [illegible] Division.

[illegible] attaching [illegible] contract [illegible] in the [illegible] preliminary [illegible] the [illegible] in the [illegible] all details, [illegible] result in [illegible] your [illegible]. I would suggest therefore that you [illegible] of this material [illegible] my office [illegible] [illegible] with reference to the [illegible] other material [illegible] file [illegible]

[illegible]

Yours very truly,

[illegible], [illegible]
[illegible] Metals [illegible]

[illegible]

9

June 16, 1951

Mr. C. C. Dunkle
Pinehurst, Idaho

Subject: DMA-1595X
Re: Exploration Loan
Coeur d'Alene and
Pine Creek Antimony

My dear Mr. Dunkle:

Receipt is acknowledged of your application and attachments of May 29, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1595X and was referred to Mr. Weston G. Bourret, Chief, Minor and Rare Metals Branch on June 11, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1595X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:js
cc: Strobel-2
Files
>Bourret
Lyon

MF-200
(April 1951)

Docket No. DMA 1595X
Commodity

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195___, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] _____

_____

_____

_____

_____

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of _____, County of _____ described as follows: [3] _____

_____

_____

_____

with respect to which the Operator represents and undertakes: [4]

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: _____

_____

_____

_____

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within _____ days from the date of this contract shall commence work on a project of exploration for [5] _____; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] _____ from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Attached hereto, marked "Exhibit 'B'," is a detailed list of additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute its agreed pro-rata share of the cost. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* Attached hereto, marked "Exhibit 'D'," is an itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project.

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule 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, which cost shall be allowed as a cost of the project.

10. *Allowable costs of the project.* The allowable costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in the contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, or any other indirect costs not expressly allowed by these regulations, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator _____ percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $_____, which is _____ percent of the agreed estimated total cost of this project, $_____.

12. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

14. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent additional for each full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the property which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

15. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

16. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in triplicate the day and year first above written.

Coeur d'Alene & Tino Creek Antimony
(Operator)

By C. C. Drucker

THE UNITED STATES OF AMERICA

By _____

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

Docket DMA-

Exhibit A

The exploration on the Coeur d'Alene and Pine Creek Antimony property consists of the rehabilitation of one 300 foot inclined shaft (35° to 45°) and 180 feet of drift southward from the foot of the shaft, and the driving of 200 feet of new drift to the south along the vein from the end of the rehabilitated workings. The accompanying map shows the proposed work together with the claims on which the work is to be done. Any ore discovered in the rehabilitated workings or by the new drift to the south is considered as new ore that is obligated for repayment of the Government loan as outlined in the contract.

Estimated Progress Schedule

First three months:

2 months preparation for work	
100 feet of rehabilitation of shaft at $46.00 per foot	$4,600.00

Second three months:

200 feet of rehabilitation of shaft at $46.00 per foot	9,200.00
50 feet of rehabilitation of drift at $46.00 per foot	2,300.00

Third three months:

50 feet of rehabilitation of drift at $46.00 per foot	2,300.00
100 feet of new drift at $46.00 per foot	4,600,00

Fourth three months:

100 feet of drifting at $46.00 per foot	4,600.00

Statement of over-all costs

Fixtures and improvements	1,800.00
Equipment cost	9,000.00
Rehabilitation and repairs	125.00
400 feet of rehabilitation of shaft and drifts at $46.00	18,400.00
200 feet of new drifting at $46.00 per foot	9,200.00
Contingencies (engineering, geology, miscellaneous expenses)	1,475.00
Total cost of project	40,000.00

Docket DMA-_____

Exhibits B, C, D & E

Exhibit B

Fixtures and improvements

1. Approximately one fourth mile of road reconstruction and repair including diversion of stream -----	$300.00
2. Construction of headframe for shaft with waste bin and dump irons	1,500.00
	$1,800.00

Exhibit C

Operating equipment

a. To be rented ---- None
b. To be furnished by the operator --- None
c. To be purchased:

2 Power transformers (220-440V. 2-37 1/2 KVA) at $350.00	$700.00
1 Lighting transformer (5KVA 110V)	100.00
2 Standby pumps (Ingersoll Rand motor pumps, 200 gallon, 200 foot lift) at $425.00	850.00
1 Ingersoll Rand compressor and motor unit complete 350 cu. ft. per min.	2,800.00
1 Hoist (37 1/2 h.p.)	3,700.00
1 Skip (2 yard)	175.00
Cable, 400 feet of 5/8 inch	50.00
1 car (1 1/2 yard end dump) for lower level	325.00
1 Blower for ventilation	300.00
	$9,000.00

Exhibit D

Labor and supervision

3 miners at $400.00 per month
1 shift boss at $450.00 per month

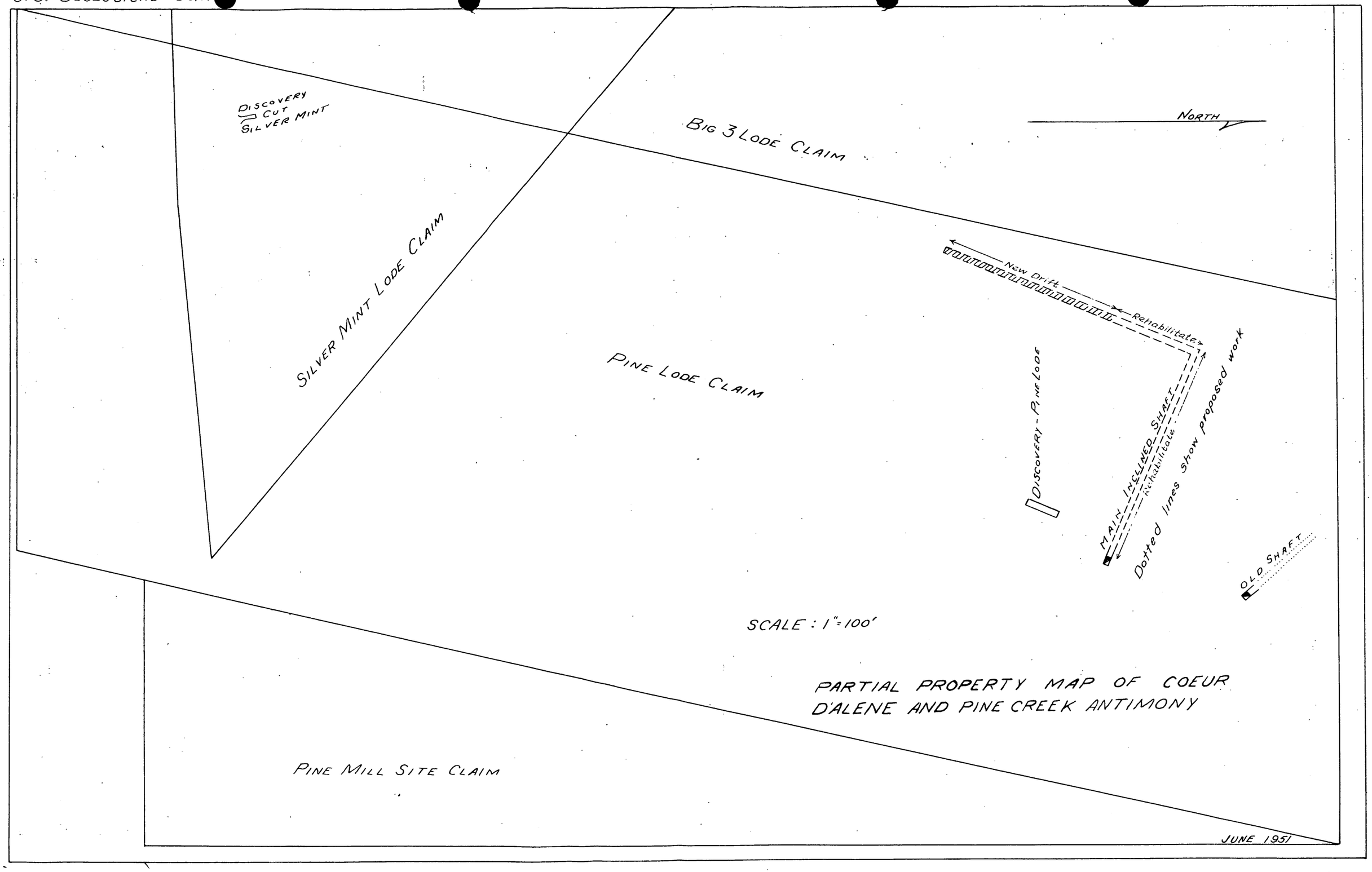
Exhibit E

Rehabilitation and repairs

Repairs to hoist room and dry	$125.00

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

DMA DOCKET -



PARTIAL PROPERTY MAP OF COEUR D'ALENE AND PINE CREEK ANTIMONY

MF-200
(April 1951)

Docket No. DMA 1595 X
Commodity [illegible]

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] _____
Coeur d'Alene and Idaho Lead Mining, Kellogg, Idaho

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Idaho, County of Shoshone described as follows: [3] Part of the Idaho Lead Mine located in the southeast part of section 6, T. 48 N., R. 2 W.

with respect to which the Operator represents and undertakes: [4]

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: None

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for [5] [illegible]; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 24 months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Attached hereto, marked "Exhibit 'B'," is a detailed list of additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute its agreed pro-rata share of the cost. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* Attached hereto, marked "Exhibit 'D'," is an itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project.

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule 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, which cost shall be allowed as a cost of the project.

10. *Allowable costs of the project.* The allowable costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in the contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, or any other indirect costs not expressly allowed by these regulations, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator 75 percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $50,000, which is 75 percent of the agreed estimated total cost of this project, $50,000.

12. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

14. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent additional for each full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the property which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

15. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

16. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in triplicate the day and year first above written.

Coeur d'Alene & Pine Creek Antimony
(Operator)

By C C Stuckle

THE UNITED STATES OF AMERICA

By _____

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

Docket DMA-

Exhibit A

The exploration on the Coeur d'Alene and Pine Creek Antimony property consists of the rehabilitation of one 300 foot inclined shaft (35° to 45°) and 180 feet of drift southward from the foot of the shaft, and the driving of 200 feet of new drift to the south along the vein from the end of the rehabilitated workings. The accompanying map shows the proposed work together with the claims on which the work is to be done. Any ore discovered in the rehabilitated workings or by the new drift to the south is considered as new ore that is obligated for repayment of the Government loan as outlined in the contract.

Estimated Progress Schedule

First three months:

2 months preparation for work	
100 feet of rehabilitation of shaft at $46.00 per foot	$4,600.00

Second three months:

200 feet of rehabilitation of shaft at $46.00 per foot	9,200.00
50 feet of rehabilitation of drift at $46.00 per foot	2,300.00

Third three months:

50 feet of rehabilitation of drift at $46.00 per foot	2,300.00
100 feet of new drift at $46.00 per foot	4,600,00

Fourth three months:

100 feet of drifting at $46.00 per foot	4,600.00

Statement of over-all costs

Fixtures and improvements	1,800.00
Equipment cost	9,000.00
Rehabilitation and repairs	125.00
400 feet of rehabilitation of shaft and drifts at $46.00	18,400.00
200 feet of new drifting at $46.00 per foot	9,200.00
Contingencies (engineering, geology, miscellaneous expenses)	1,475.00
Total cost of project	40,000.00

Docket DMA-_____

Exhibits B, C, D & E

Exhibit B

Fixtures and improvements

1. Approximately one fourth mile of road reconstruction and repair including diversion of stream ------	$300.00
2. Construction of headframe for shaft with waste bin and dump irons	1,500.00
	$1,800.00

Exhibit C

Operating equipment

a. To be rented ---- None
b. To be furnished by the operator --- None
c. To be purchased:

2 Power transformers (220-440V. 2-37 1/2 KVA) at $350.00	$700.00
1 Lighting transformer (5KVA 110V)	100.00
2 Standby pumps (Ingersoll Rand motor pumps, 200 gallon, 200 foot lift) at $425.00	850.00
1 Ingersoll Rand compressor and motor unit complete 350 cu. ft. per min.	2,800.00
1 Hoist (37 1/2 h.p.)	3,700.00
1 Skip (2 yard)	175.00
Cable, 400 feet of 5/8 inch	50.00
1 car (1 1/2 yard end dump) for lower level	325.00
1 Blower for ventilation	300.00
	$9,000.00

Exhibit D

Labor and supervision

3 miners at $400.00 per month
1 shift boss at $450.00 per month

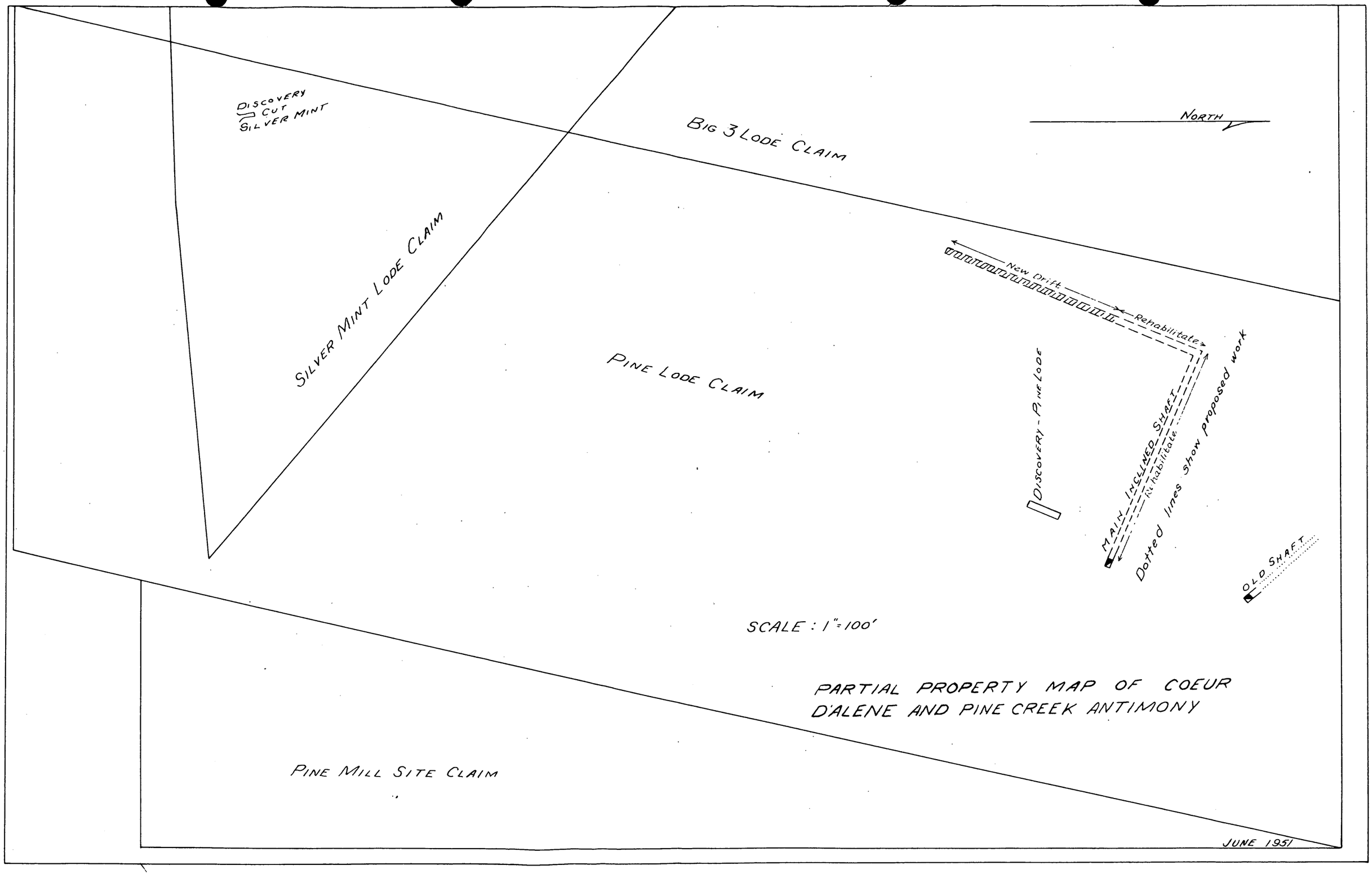
Exhibit E

Rehabilitation and repairs

Repairs to hoist room and dry	$125.00

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

DMB DOCKET -



PARTIAL PROPERTY MAP OF COEUR D'ALENE AND PINE CREEK ANTIMONY

MF-200
(April 1951)

Docket No. DMA 1595X
Commodity Antimony

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Coeur d'Alene and Pine Creek Antimony, Pinehurst, Idaho

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Idaho, County of Shoshone described as follows: [3] Part of the Pine Lode Claim located in the custom part of section 6, T. 48 N., R. 2 E.

with respect to which the Operator represents and undertakes: [4]

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: None

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for [5] ~~antimony~~ antimony; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 12 months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Attached hereto, marked "Exhibit 'B'," is a detailed list of additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute its agreed pro-rata share of the cost. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* [illegible] facilities, buildings, fixtures, equipment, or [illegible]er items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* Attached hereto, marked "Exhibit 'D'," is an itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project.

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule 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, which cost shall be allowed as a cost of the project.

10. *Allowable costs of the project.* The allowable costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in the contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, or any other indirect costs not expressly allowed by these regulations, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator 75 percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $30,000, which is 75 percent of the agreed estimated total cost of this project, $40,000.

12. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

14. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent additional for each full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the property which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

15. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

16. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in triplicate the day and year first above written.

Essex St Clair and Pine Creek Antimony
(Operator)

By C C Stuckel

THE UNITED STATES OF AMERICA

By

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

Docket DMA-

Exhibit A

The exploration on the Coeur d'Alene and Pine Creek Antimony property consists of the rehabilitation of one 300 foot inclined shaft (35° to 45°) and 100 feet of drift southward from the foot of the shaft, and the driving of 200 feet of new drift to the south along the vein from the end of the rehabilitated workings. The accompanying map shows the proposed work together with the claims on which the work is to be done. Any ore discovered in the rehabilitated workings or by the new drift to the south is considered as new ore that is obligated for repayment of the Government loan as outlined in the contract.

Estimated Progress Schedule

First three months:

2 months preparation for work	
100 feet of rehab'litation of shaft at $46.00 per foot	$4,600.00

Second three months:

200 feet of rehabilitation of shaft at $46.00 per foot	9,200.00
50 feet of rehabilitation of drift at $46.00 per foot	2,300.00

Third three months:

50 feet of rehabilitation of drift at $46.00 per foot	2,300.00
100 feet of new drift at $46.00 per foot	4,600,00

Fourth three months:

100 feet of drifting at $46.00 per foot	4,600.00

Statement of over-all costs

Fixtures and improvements	1,800.00
Equipment cost	9,000.00
Rehabilitation and repairs	125.00
400 feet of rehabilitation of shaft and drifts at $46.00	18,400.00
200 feet of new drifting at $46.00 per foot	9,200.00
Contingencies (engineering, geology, miscellaneous expenses)	1,475.00
Total cost of project	40,000.00

Exhibit B

Fixtures and improvements

1. Approximately one fourth mile of road reconstruction and repair including diversion of stream -----	$300.00
2. Construction of headframe for shaft with waste bin and dump irons	1,500.00
	$1,800.00

Exhibit C

Operating equipment

a. To be rented ---- None
b. To be furnished by the operator --- None
c. To be purchased:

2 Power transformers (220-440V. 2-37 1/2 KVA) at $350.00	$700.00
1 Lighting transformer (5KVA 110V)	100.00
2 Standby pumps (Ingersoll Rand motor pumps, 200 gallon, 200 foot lift) at $425.00	850.00
1 Ingersoll Rand compressor and motor unit complete 350 cu. ft. per min.	2,800.00
1 Hoist (37 1/2 h.p.)	3,700.00
1 Skip (2 yard)	175.00
Cable, 400 feet of 5/8 inch	50.00
1 car (1 1/2 yard end dump) for lower level	325.00
1 Blower for ventilation	300.00
	$9,000.00

Exhibit D

Labor and supervision

3 miners at $400.00 per month
1 shift boss at $450.00 per month

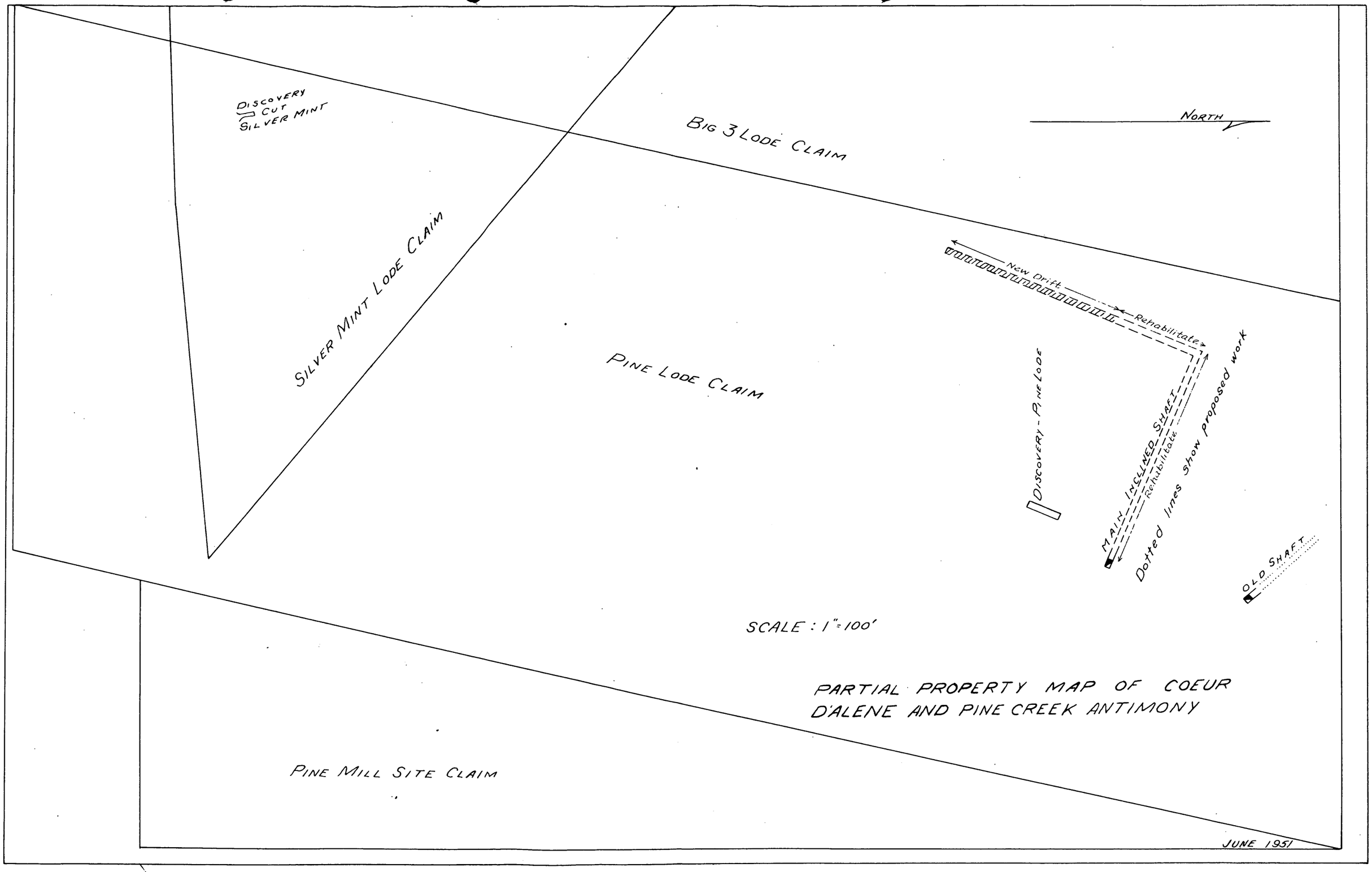
Exhibit E

Rehabilitation and repairs

Repairs to hoist room and dry	$125.00

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

DOA DOCKET -



PARTIAL PROPERTY MAP OF COEUR D'ALENE AND PINE CREEK ANTIMONY

MF-200
(April 1951)

Docket No. DMA 1595X
Commodity Antimony

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Coeur d'Alene and Pine Creek Antimony, Pinehurst, Idaho

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Idaho, County of Shoshone described as follows: [3] Part of the Pine Lode Claim located in the eastern part of section 6, T. 48 N., R. 2 E.

with respect to which the Operator represents and undertakes: [4]

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: None

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for [5] ~~antimony~~ antimony; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 12 months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Attached hereto, marked "Exhibit 'B'," is a detailed list of additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute its agreed pro-rata share of the cost. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* Attached hereto, marked "Exhibit 'D'," is an itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project.

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule 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, which cost shall be allowed as a cost of the project.

10. *Allowable costs of the project.* The allowable costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in the contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, or any other indirect costs not expressly allowed by these regulations, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator 75 percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $30,000, which is 75 percent of the agreed estimated total cost of this project, $40,000.

12. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

14. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent additional for each full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the property which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

15. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

16. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in triplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Coeur d'Alene & Pine Creek Antimony
(Operator)

By _____

By C C Hewitt

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

Docket DMA-

Exhibit A

The exploration on the Coeur d'Alene and Pine Creek Antimony property consists of the rehabilitation of one 300 foot inclined shaft (35° to 45°) and 180 feet of drift southward from the foot of the shaft, and the driving of 200 feet of new drift to the south along the vein from the end of the rehabilitated workings. The accompanying map shows the proposed work together with the claims on which the work is to be done. Any ore discovered in the rehabilitated workings or by the new drift to the south is considered as new ore that is obligated for repayment of the Government loan as outlined in the contract.

Estimated Progress Schedule

First three months:

2 months preparation for work	
100 feet of rehabilitation of shaft at $46.00 per foot	$4,600.00

Second three months:

200 feet of rehabilitation of shaft at $46.00 per foot	9,200.00
50 feet of rehabilitation of drift at $46.00 per foot	2,300.00

Third three months:

50 feet of rehabilitation of drift at $46.00 per foot	2,300.00
100 feet of new drift at $46.00 per foot	4,600,00

Fourth three months:

100 feet of drifting at $46.00 per foot	4,600.00

Statement of over-all costs

Fixtures and improvements	1,800.00
Equipment cost	9,000.00
Rehabilitation and repairs	125.00
400 feet of rehabilitation of shaft and drifts at $46.00	18,400.00
200 feet of new drifting at $46.00 per foot	9,200.00
Contingencies (engineering, geology, miscellaneous expenses)	1,475.00
Total cost of project	40,000.00

Docket DMA-

Exhibits B, C, D & E

Exhibit B

Fixtures and improvements

1. Approximately one fourth mile of road reconstruction and repair including diversion of stream -----	$300.00
2. Construction of headframe for shaft with waste bin and dump irons	1,500.00
	$1,800.00

Exhibit C

Operating equipment

a. To be rented ---- None
b. To be furnished by the operator --- None
c. To be purchased:

2 Power transformers (220-440V. 2-37 1/2 KVA) at $350.00	$700.00
1 Lighting transformer (5KVA 110V)	100.00
2 Standby pumps (Ingersoll Rand motor pumps, 200 gallon, 200 foot lift) at $425.00	850.00
1 Ingersoll Rand compressor and motor unit complete 350 cu. ft. per min.	2,800.00
1 Hoist (37 1/2 h.p.)	3,700.00
1 Skip (2 yard)	175.00
Cable, 400 feet of 5/8 inch	50.00
1 car (1 1/2 yard end dump) for lower level	325.00
1 Blower for ventilation	300.00
	$9,000.00

Exhibit D

Labor and supervision

3 miners at $400.00 per month
1 shift boss at $450.00 per month

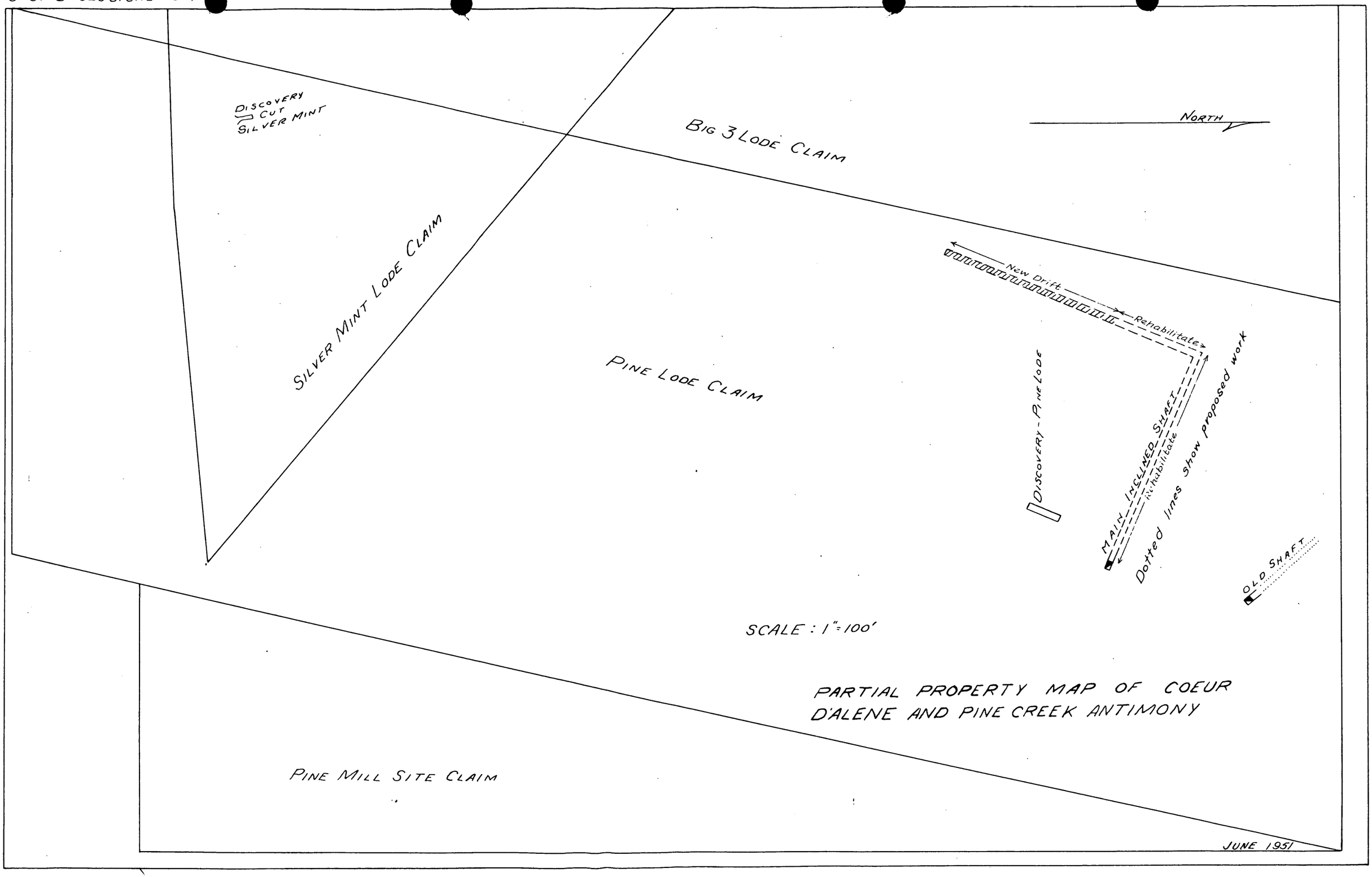
Exhibit E

Rehabilitation and repairs

Repairs to hoist room and dry	$125.00

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

DMA DOCKET -



PARTIAL PROPERTY MAP OF COEUR D'ALENE AND PINE CREEK ANTIMONY

MF-200
(April 1951)

Docket No. DMA 1595X
Commodity Antimony

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Coeur d'Alene and Pine Creek Antimony, Pinehurst, Idaho

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Idaho, County of Shoshone described as follows: [3] Part of the Pine Lode Claim located in the eastern part of section 6, T. 48 N., R. 2 E.

with respect to which the Operator represents and undertakes: [4]

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: None

~~(b)~~ That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for [5] ~~anitmony~~ antimony; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 12 months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Attached hereto, marked "Exhibit 'B'," is a detailed list of additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute its agreed pro-rata share of the cost. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* Attached hereto, marked "Exhibit 'D'," is an itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project.

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule 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, which cost shall be allowed as a cost of the project.

10. *Allowable costs of the project.* The allowable costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in the contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, or any other indirect costs not expressly allowed by these regulations, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator 75 percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $30,000, which is 75 percent of the agreed estimated total cost of this project, $40,000.

12. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

14. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent additional for each full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the property which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

15. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

16. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in triplicate the day and year first above written.

Coeur d'Alene + Pine Creek Antimony
(Operator)

By O. O. Drucker

THE UNITED STATES OF AMERICA

By _____

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

Docket DMA-

Exhibit A

The exploration on the Coeur d'Alene and Pine Creek Antimony property consists of the rehabilitation of one 300 foot inclined shaft (35° to 45°) and 100 feet of drift southward from the foot of the shaft, and the driving of 200 feet of new drift to the south along the vein from the end of the rehabilitated workings. The accompanying map shows the proposed work together with the claims on which the work is to be done. Any ore discovered in the rehabilitated workings or by the new drift to the south is considered as new ore that is obligated for repayment of the Government loan as outlined in the contract.

Estimated Progress Schedule

First three months:

2 months preparation for work	
100 feet of rehabilitation of shaft at $46.00 per foot	$4,600.00

Second three months:

200 feet of rehabilitation of shaft at $46.00 per foot	9,200.00
50 feet of rehabilitation of drift at $46.00 per foot	2,300.00

Third three months:

50 feet of rehabilitation of drift at $46.00 per foot	2,300.00
100 feet of new drift at $46.00 per foot	4,600.00

Fourth three months:

100 feet of drifting at $46.00 per foot	4,600.00

Statement of over-all costs

Fixtures and improvements	1,800.00
Equipment cost	9,000.00
Rehabilitation and repairs	125.00
400 feet of rehabilitation of shaft and drifts at $46.00	18,400.00
200 feet of new drifting at $46.00 per foot	9,200.00
Contingencies (engineering, geology, miscellaneous expenses)	1,475.00
Total cost of project	40,000.00

Docket DMA-

Exhibits B, C, D & E

Exhibit B

Fixtures and improvements

1. Approximately one fourth mile of road reconstruction and repair including diversion of stream -----	$300.00
2. Construction of headframe for shaft with waste bin and dump irons	1,500.00
	$1,800.00

Exhibit C

Operating equipment

a. To be rented ---- None
b. To be furnished by the operator --- None
c. To be purchased:

2 Power transformers (220-440V. 2-37 1/2 KVA) at $350.00	$700.00
1 Lighting transformer (SKVA 110V)	100.00
2 Standby pumps (Ingersoll Rand motor pumps, 200 gallon, 200 foot lift) at $425.00	850.00
1 Ingersoll Rand compressor and motor unit complete 350 cu. ft. per min.	2,800.00
1 Hoist (37 1/2 h.p.)	3,700.00
1 Skip (2 yard)	175.00
Cable, 400 feet of 5/8 inch	50.00
1 car (1 1/2 yard end dump) for lower level	325.00
1 Blower for ventilation	300.00
	$9,000.00

Exhibit D

Labor and supervision

3 miners at $400.00 per month
1 shift boss at $450.00 per month

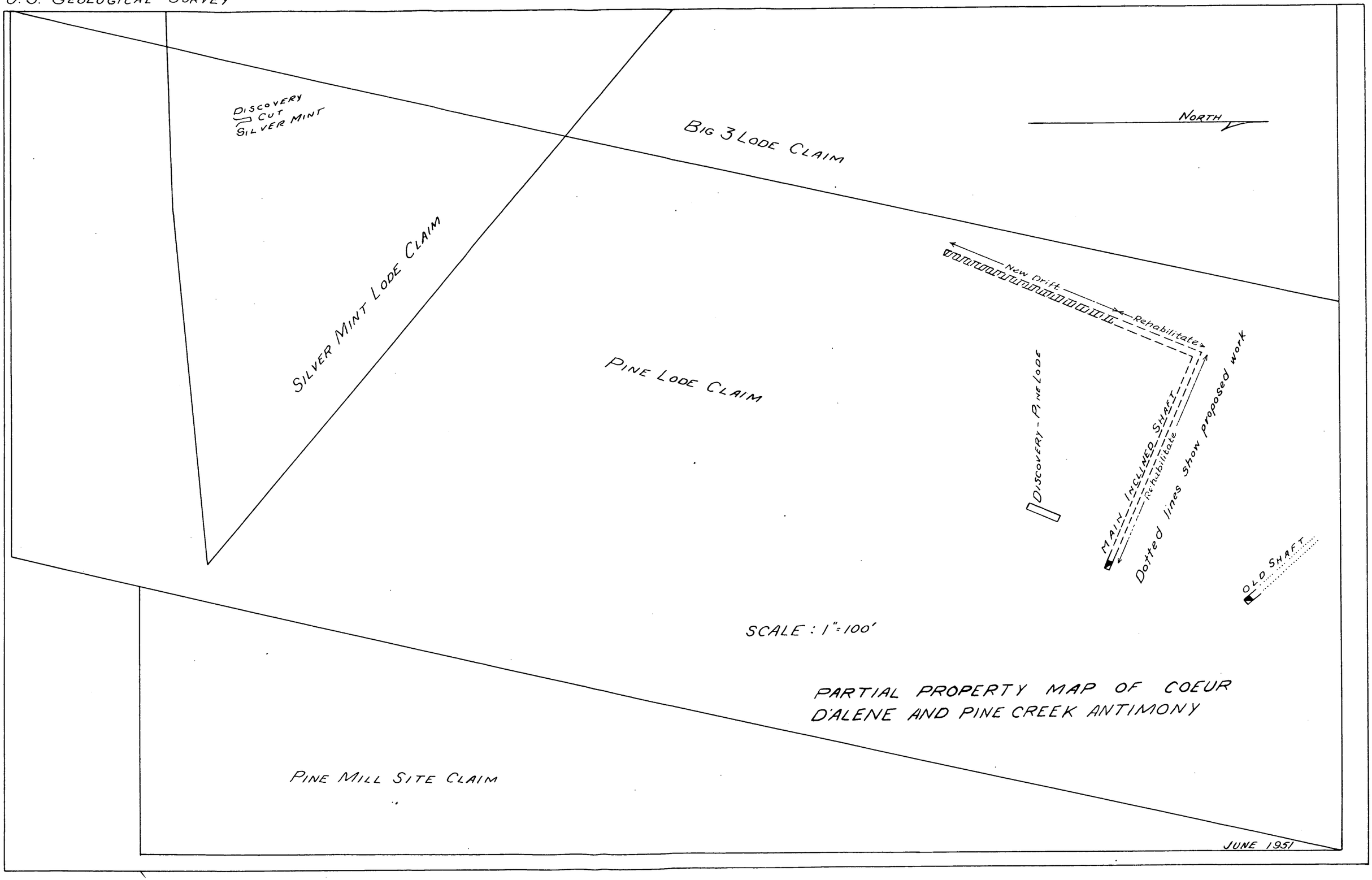
Exhibit E

Rehabilitation and repairs

Repairs to hoist room and dry	$125.00

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

DMA DOCKET -



PARTIAL PROPERTY MAP OF COEUR D'ALENE AND PINE CREEK ANTIMONY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ANTIMONY

in the

COEUR D'ALENE DISTRICT, IDAHO

by

D. E. White October 1942

Contents

Page 1 . . . . . Scope of Investigation
. . . . . General Relationships
2 . . . . . Tetrahedrite Ores
. . . . . Sunshine Mine
3 . . . . . Coeur d'Alene Mine
5 . . . . . Polaris Mine
. . . . . Silver Dollar
6 . . . . . Crescent Mine
. . . . . Bunker Hill Antimony Smelter
. . . . . Stibnite Deposits
7 . . . . . Coeur d'Alene Antimony Mine
8 . . . . . Great Dunker Antimony Mine
. . . . . Albrect Prospect
. . . . . Star Antimony Mine
9 . . . . . Stanley Mine
10 . . . . . Other Deposits
. . . . . Summary of Forecast of Production

ANTIMONY IN THE

COEUR D'ALENE DISTRICT, IDAHO

Scope of Investigation

In late September 1940, N. E. White, accompanied by W. H. Myers, made a brief reconnaissance survey of the antimony in the ores of the Coeur d'Alene district, and in particular in the tetrahedrite silver ores of that part of the district known as the Dry Belt. The survey consisted primarily of the collection of statistics on individual mine production, and the antimony content of the mill feed and of the concentrates. No figures were available at that time on the minor antimony content of the lead-zinc ores of the district, nor on the operations of the recently installed antimony smelter of the Bunker Hill & Sullivan Mining and Concentrating Company at Kellogg. Some additional information has been collected since 1940, and is incorporated within this report. In October 1942, the district was revisited, and several of the small stibnite deposits in the outlying parts of the district were seen.

General Relationships

The Coeur d' Alene district is known primarily for its production of lead and silver ore. Some of the important lead mines contain sphalerite, the zinc sulfide, as an abundant constituent of the ores. Antimony is a very minor constituent of the lead ores, where it is found as the lead sulphantimonide, or as tetrahedrite, the copper-silver sulphantimonide, or more rarely as stibnite, the antimony sulfide. A different type of ore has become increasingly important in the district since 1930--the so-called Dry Belt ores in which tetrahedrite is the predominating sulphide mineral, in a siderite gangue, with only minor amounts of the lead, zinc, and iron sulphides. The Sunshine, Coeur d'Alene, Silver Dollar, Crescent and Polaris mines are the principal tetrahedrite deposits, and are located near Osborn on the South Fork of the Coeur d'Alene River. The lead-zinc-silver deposits are both east and west of the tetrahedrite deposits, and the stibnite deposits are in the outlying parts of the whole district. Three or four deposits have been mined on Pine Creek, less than 6 miles west of Kellogg, whereas in the eastern part of the district, one deposit 1/2 mile northeast of Burke has been mined, and the Stibnite Hill deposits west of Thompson Falls, Montana, and 8 miles northeast of Burke constitute the best of the straight antimony deposits being mined at the present time.

TETRAHEDRITE ORES

SUNSHINE MINE

The antimony production from the Sunshine mine in recent years is:

	Tons Milled	% Sb in Ore	Tons Conc.	% Sb	Tons Sb in Conc.
1936	215,950	0.405	8,990	9.71	871
1937	255,800	0.477	12,087	10.22	1218
1938	320,600	0.356	11,540	9.89	1140
1939	320,990	0.336	9,189	11.76	1080
1940	278,810	0.355	8,112	12.28	990
1941	305,180	0.310	7,748	12.20	945
1942 *	168,050	0.271	4,380	9.02	395

*To Sept. 1

Up to September 1, 1942, approximately 2,950,000 tons of ore have been produced from the mine. The total antimony content is not known, but is estimated to be approximately 10,700 tons of metallic antimony. The total amount recovered from the ore or from the concentrates is not known. The concentrates in recent years have been sold to the Bunker Hill smelter, which probably recovered most of the antimony in the form of antimonial lead. Figures on recovery are not available before 1940, when the antimony smelting unit, recovering the antimony electrolytically in the final stage, was put into operation.

The percentage of antimony in the mineral tetrahedrite is apparently fairly constant. However, the ratio of silver and copper to antimony, and particularly, the ratio of silver to copper, varies considerably. In the North, or "A" vein, the tetrahedrite contains about 80 ounces of silver to 1 pound of copper, whereas in the south vein the mineral contains only about 50 ounces of silver to 1 pound of copper. The most active mining is gradually shifting from the North vein to the South, or "B", vein. The "D" vein in the foot wall of the "B" vein contains 40 ounces of silver to 1 pound of copper. The average decrease in the average silver content of the mill ore is generally misinterpreted in the district to mean a decrease in the silver to copper ratio with increasing depth in the mine. The silver content in the ore is indirectly of primary importance in determining the antimony production, which is only a by-product and is independent of the price of antimony.

Production figures on the copper content of the ores were not obtained, but the copper is considered to be 1-1/4 times the antimony content at the present time, and the mill heads for 1942 would therefore

contain about 0.34 percent in copper. The total copper production during the history of the mine is probably about 15,500 tons of metal.

Reserves: The proved reserves in the Sunshine mine are estimated by the company to be 650,000 tons of ore, or a little more than two years supply. These reserves are estimated to contain 20 ounces of silver per ton, about 0.28 percent in antimony, and 0.34 percent in copper. The vein system has now been partially explored to the 3700 level, which is nearly 4000 feet below the elevation of the Sunshine tunnel and is 1100 feet below sea level. Below about the 2700-foot level, the vein passes downward into the Rivette quartzite, where the fracturing is tighter, and the average vein matter is lower in grade than above the 2700 level. The veins maintain about the same average thickness and mineralogical character, but a smaller proportion of the strike length of the veins constitutes mineable ore. The lower limit for mining is considered to be a mining width of 6 feet, averaging 14 ounces of silver per ton.

Future Production: The most pressing problem of the company is not a shortage of ore, but a shortage of labor. The mill capacity is 1100 tons of ore per day, but present production is only 500 tons per day. A continuing production is also dependent upon a future high priorities rating of the mine, which is dependent upon the copper and antimony by-products, rather than upon the silver content of the ore. A forecast of future production from the Sunshine Mine, based upon the present rate of 500 tons of ore per day for the balance of 1942, and for 1943 is a total of 560 tons of metallic antimony during 1942 and 490 tons during 1943.

Sunshine Antimony Plant: On September 7, 1942, a new antimony recovery plant was put into operation by the Sunshine Mining Company. The new plant has a rated capacity of 3 tons of metallic antimony per day from a concentrate containing 20 percent in antimony. At present, the plant is also treating 5 tons of ore containing 20 percent in antimony per day from the Stibnite Hill antimony mine between Burke and Thompson Falls, Montana. In early October, the plant was said to be operating at capacity, 1 ton of metal coming from Stibnite Hill, 1-1/3 tons from the daily Sunshine Mill concentrates. After the stock-piled concentrates are treated, the production from the plant probably will not exceed a rate of 800 tons of metal per year.

The statistics were supplied largely by W. C. Holmes, Mill Superintendent, and John Edgar, Chief Engineer of the Sunshine Mining Company.

COEUR D'ALENE MINE

The most spectacular increase in antimony production within the district in recent years has been from the Coeur d'Alene Mine. As with the Sunshine veins, the Coeur d'Alene vein at the surface consisted primarily of siderite, with only small amounts of sulphides, and a low

silver content. The vein is called the Siderite vein, is 800 feet long, and is limited on the west by the Polaris fault, and on the east by the Mineral fault. In 1937 a 1000-foot vertical shaft was started, and more than a year later, the vein was intercepted. The tetrahedrite content of the ore was found to be much higher at depth than at the surface, similar to the Sunshine veins. The mineable ore goes up within 400 feet of the surface. The mine first started to come into good production in 1939. The mill heads are not accurately known, except that the concentrating ratio in 1940 averaged about 18.5 to 1, and in 1939, 21 to 1. The ore contains about 10 ounces of silver to 1 percent of copper, which is the lowest silver-copper ratio of any of the tetrahedrite ores in the district.

	Tons of Concentrate	% Sb	Tons Sb
1939	821	18.1	149
1940	2700(?)	18.5(?)	500(?)
1941	4270	19.4	831

During the first six months of 1940, 1321 tons of concentrate were recovered, averaging about 17 percent in antimony, 28.5 percent in copper, 1.5 percent in arsenic, and about 1 percent in silver.

Reserves: The blocked-out reserves in the Coeur d'Alene mine are estimated by the company to be 120,000 tons, which is about one year's supply at the present rate of mining of 300 to 400 tons of ore per day. The possibilities for additional ore seem excellent. Although the strike length of the vein is only 600 to 800 feet, the deepest development on the vein is on the 1800 level, where the ore is as good as on the 1000 level where it was first mined. In recent months, the shaft has been extended to the 2000 level, but the vein has not yet been intercepted. The grade of the reserves is considered to be 1.5 percent in copper, 0.9 percent in antimony, and 15 ounces of silver per ton.

Future Production: The mill has a rated capacity of 600 tons of ore per day, but the capacity of mine and hoisting facilities is only about 400 tons per day. The chief difficulty encountered is the inefficiency of labor, rather than a shortage of labor. An average of about 350 tons of ore per day is being milled. If this production is continued throughout 1942, 128,000 tons of ore containing 1,150 tons of antimony will be milled. The efficiency of the antimony recovery plant of the Bunker Hill and Sullivan Smelter is not known, but probably 900 to 1000 tons of the antimony contained in the concentrates is recovered as metallic antimony. The antimony production for 1943 is expected to be about the same as 1942, assuming the same supply of labor, and the continuance of a high priorities rating which is in turn dependent upon the antimony and copper content of the ore, rather than the silver content.

The mill figures were obtained largely from Hershal Kiebert, the Superintendent of the Hercules-Day mill which treated the ore until 1941. The mine statistics were obtained from Robert Bailey, Superintendent of the Coeur d'Alene mine.

POLARIS MINE

The Polaris mine is just east of the Sunshine mine, and is on the continuation of the same vein system. In contrast to the Sunshine mine, the tetrahedrite in the Polaris mine contains only 25 ounces of silver for 1 percent of copper. The production history is known only incompletely:

	Tons Milled	% Sb	Tons Sb
1937	28,600		
1938	64,500		
1939	49,000	0.29	142

The mine was visited in 1940, but was not revisited in 1942. However, the mine was operating in 1942 on what was said to be a reduced scale.

Reserves: The ore reserves are not large. According to John Edgar, Chief Engineer of the Sunshine Mining Company, almost all of the mine reserves are contained within a block known as the "Intervening Area" between the Sunshine and Polaris mines, and mined cooperatively by both companies. The activities of the Polaris mine within this area are restricted to the veins above the 1700 level of the Sunshine mine, a relatively small block 500 to 650 feet long on the strike length and 2000 feet or more on the dip of the vein from which much of the good ore has been mined. No detailed information is known, but reserves in the order of 50,000 to 100,000 tons of ore seem not improbable.

Future Production: No details are known concerning the scale of operations in 1942. A rough estimate is that 40,000 tons of ore containing 110 tons of antimony will be produced in the concentrates in 1942. The concentrates are sent to the Bunker Hill Smelter, which recovers the antimony metal electrolytically. The efficiency of the plant is not known. The production in 1943 will probably be less than in 1942, and the mine may not be able to continue in operation.

SILVER DOLLAR

The Silver Dollar mine, located between the Polaris and Coeur d'Alene mines, is not producing at the present time (1942) although some development work is being done. The only production figures known are for 1939, when, according to E. G. Gnaedinger, Manager of the mine, about 6,300 tons of concentrate were obtained from 150,000 tons of mill feed. The concentrates were shipped to the Tacoma Smelter, and from August to December 1939, averaged 0.17 ounces of gold and 317.7 ounces of silver per ton, 10.05% Cu, 1.34% Zn, 4.03% Sb, 4.37% Pb, 1.25% As, and 0.046% Bi. The mill feed averaged about 0.17% in antimony.

Reserves: The mine reserves are not known and are assumed to be small.

Future Production: The mine is not active at the present time and will probably not be active during the next several years.

CRESCENT MINE

The Crescent mine is owned and operated by the Bunker Hill & Sullivan Mining Company. No information was available to the writer concerning the grade of ore, reserves or scale of operations. According to rumor in the district, the mine is now operating on a smaller scale than in the past, and the reserves are about exhausted. According to Roger McConnel, geologist of the Bunker Hill mine, the concentrates from the Crescent mine contain about 5 percent in silver, 30 percent in copper, and 18 percent in antimony.

BUNKER HILL ANTIMONY SMELTER

This unit of the Bunker Hill and Sullivan Smelter was installed primarily to treat the concentrates from the tetrahedrite ores of the "Dry Belt". It was operated only on an experimental scale in 1940, when 125 tons of metallic antimony were produced. All or most of the concentrates from the Sunshine and Coeur d'Alene mines were treated in 1941, when 1,613 tons of metallic antimony were produced from 12,140 tons of concentrates from various sources. About in July 1942, most of the concentrates from the Sunshine Mine were diverted from the Bunker Hill antimony plant to the new plant which was being erected by the Sunshine Mine. Up to October 1, the Bunker Hill Mining and Concentrating Company had produced about 700 tons of metallic antimony in 1942 from the antimony plant, and had also produced antimonial lead containing approximately 760 tons of metallic antimony.

STIBNITE DEPOSITS

In addition to the antimony obtained as a by-product from the silver-bearing tetrahedrite ores from the Dry Belt, some antimony has been obtained from small stibnite-quartz veins which in general seem to occur largely in the outlying parts of the major Coeur d'Alene district. Three or four veins have been mined on a small scale at various times in the past on Pine Creek, which joins the South Fork of the Coeur d'Alene River about 5 miles west of Kellogg. Of these veins, the largest production has come from the Coeur d'Alene antimony mine. In the eastern part of the district, near Burke, some antimony has been produced from the Stanley mine. On the Montana side of Thompson Pass, between Idaho and Montana, the Stibnite Hill mine about 10 miles northeast of Burke has produced in the past, and the possibilities seem good for a considerable production in the future. This deposit, although in an outlying part of the major Coeur d'Alene district, is considered in a separate report.

COEUR D'ALENE ANTIMONY MINE (See map, attached)

Location and Accessibility: The deposit is on the west side of the valley floor of Pine Creek, about 3/4 of a mile west of the Pinehurst store, which is on Pine Creek, 1 mile south of the main highway between Coeur d'Alene and Kellogg. The deposit is very readily accessible, and is in the SE¼ of Sec. 6, T.48 N., R.1 E.B.M.

Ownership: The mine has had a number of different owners in the past. About 1939, the two principal claims are said to have been restaked by Mr. John Sinnamaki and Mr. Hill of Pinehurst.

History: The mine was first worked about 1893, for a period of three years, and was then probably idle most of the time until 1915-17. According to "Mineral Resources," 1918, the mine had produced 2000 tons of ore containing at least 250 tons of antimony. A concentrating plant was created in 1918, but this apparently was not a success. The total production from all of the deposits on Pine Creek was only 50 tons in 1917, but most of this probably came from the Coeur d'Alene mine. The mine was idle from 1918 to about 1939, when the mine was restaked by Sinnamaki and Hill. In 1940, production of 44 tons of ore containing 16% of antimony was reported to the U. S. Bureau of Mines, but this ore is believed to have come from the old mine dumps. In July 1942, James Doyle of Kellogg took a lease on the deposit, did some surface work, partially pumped the water from the old workings, and then relinquished his lease. There was no activity in October 1942 when the deposit was visited.

Workings: The vein is exposed on the surface almost continuously for a distance of 230 feet, and has been explored by two tunnels, one of which is caved, and by an inclined shaft sunk on the dip of the vein. The shaft is accessible only to an inclined depth of 60 feet. This shaft is reported to have been unwatered to the 100-foot level on the incline, where the ore above that level was found to have been mined out. The shaft below the 100-foot level was caved and filled with waste, making the lower level, 200 feet on the incline, inaccessible. About 275 feet north of the main shaft, where the vein is concealed beneath stream gravels, a vertical shaft, now caved, was probably sunk to intercept the vein at depth. No antimony was found at depth.

Geology: The country rock is shale and calcareous shale with a variety of attitudes. The vein crosscuts of the bedding strikes from N. 22° to 30° E., and dips 26° to 30° to the northwest. The vein consists of 3 to 4 feet of brecciated, leached shale, containing in places a quartz and stibnite or antimony oxide filling. Ore could be seen in place only in a small underhand stope from the surface, about 180 feet southwest of the main shaft, where approximately 200 pounds of sorted ore containing about 35 percent in antimony lies on the dump. It was removed from a lens of quartz and antimony occupying the zone of brecciated shale in the stope. Much of the ore seen on the dumps consists of quartz, and most of it could not be sorted to a product containing more than 30 percent in antimony.

Tonnage and Grade: The underground workings are inaccessible, so that no estimate can be made of the possible reserves which remain underground, or of the grade. The old dumps constitute the only positive reserves, but are low in grade, and it is questionable if much of the antimony could be recovered. The northern dump is apparently the best, and consists of 1,000 to 2,000 tons of material which probably assays between 2 and 5 percent in antimony.

Potentialities: The old workings could be reopened only at a considerable expense because of the abundant flow of water. The workings are also caved and filled with waste, and the impression was received that the mine may have been worked out. The possibilities do not seem good. Further investigation by the Geological Survey or the Bureau of Mines is not recommended.

GREAT DUNKER ANTIMONY MINE

The Great Dunker Mine has not been visited. It is not operating in 1942, and as far as is known, has not been operating since 1926. It is located 1-1/2 miles west of the junction of the West Fork with the main fork of Pine Creek, in Section 24, T.48 N., R.1 E.B.M., in a small gulch tributary to Ross Fork. The ownership at the present time is not known, but in 1926, C. A. Pearson, Star Route, Kellogg, owned the mine and produced 12 tons of ore containing 50% in Sb, but according to a report to the U. S. Bureau of Mines, this ore was not sold. According to Umpleby & Jones, pp. 121-124, U. S. Geological S urvey Bulletin 732, 1923, 50 tons of ore were shipped in 1916 from the vein which is in thin beds of blue and green slates. According to R. N. Bell, 17th Annual Report, Mining Industry for Idaho, p. 124, 1915, 14 tons of 35% ore, and 6 tons of 58% ore were shipped in 1915.

ALBRECHT PROSPECT

In 1925, Henry Albrect, of Kellogg, Idaho, reported the possession of antimony claims to the U. S. Bureau of Mines, but he had produced no ore. This may be the same deposit described by Umpleby & Jones in 1923 (see above) as the Hannibal group, consisting of 3 claims, located 1800 feet south of the Great Dunker Antimony mine. The antimony is found in bunches and lenses, but no workable ore body had been found. The prospect has not been visited by D. E. White.

STAR ANTIMONY MINE

The Star Antimony mine is also known as the Commercial Traveler Antimony mine, and is on the east side of the East Fork of Pine Creek near the mouth of Douglas Creek. This deposit has not been seen by D. E. White. According to Bell, the mine was being operated in 1915 with a crew of 8 men, on an antimony and quartz vein 5 feet wide. At that time, 1-1/2 tons of 60% ore were being produced per day. According to Umpleby, the deposit was discovered in 1914. The total production is not known.

Other deposits, or companies which have owned deposits on Pine Creek, but with location unknown, are: Shrine Mining & Milling Company, the Brown Antimony Mine (at Kellogg ?) and the Idaho Antimony Company. The Rare Metals Company is reported by the Bureau of Mines to have mined 3.2 tons of ore from Pine Creek in 1941, but is not active in 1942.

STANLEY MINE

Location and Accessibility: The Stanley mine is in the eastern part of the Coeur d'Alene district. It is on the west side of Gorge Gulch, 1/2 mile north of the intersection of the gulch with Canyon Creek near the east end of the town of Burke, in the northwest corner of Section 10, T.48 N., R.5 E.B.M.

Examination: The deposit was visited October 7, 1942 by D. E. White.

Ownership: The claims are owned by the Stanley Mining Company, controlled by H. L. Day, of Wallace, Idaho. In 1942, the mine was leased to F. L. Nelson, 406 Earl Street, Mullan.

History: In 1906, soon after the antimony vein was discovered, 4 cars of ore averaging 55 percent in antimony are said to have been shipped. The ore was reported also to carry $25.00 in gold per ton. No production is known between 1906 and 1941, when a production of 16 tons of antimony concentrate was reported to the Bureau of Mines.

Workings: The workings were not accessible in October, 1942. The lessee, F. L. Nelson, was not operating the property and he could not be located. The entrance to the main tunnel was boarded up and the old workings were caved.

Geology: The vein is in gray and greenish gray quartzite and siliceous shale. According to R. N. Bell, 8th Annual Report Mining Industry for Idaho, pp. 158-159, 1906, the vein strikes due north, and consists of 1 to 5 feet of quartz impregnated with massive stibnite. The ore seen on the dump consisted of coarse grained milky quartz with late stibnite in pockets or partially filled cavities in the quartz. Very little of the ore could have been sorted to a product containing as much as 25 percent in antimony.

Tonnage and Grade: On the basis of what was seen, no estimate on the tonnage and grade could be made.

Recommendations: Nothing was seen on the surface, or on the small dump, to indicate a deposit warranting further investigation by the Geological Survey or the Bureau of Mines.

OTHER DEPOSITS

The Stanley mine, and the Stibnite Hill mine, Montana, considered in another report, are the only two antimony deposits which have been visited in the eastern part of the Coeur d'Alene district. The Hougland mine, briefly described in Mineral Resources, 1917, is said to be a formerly large producer, but was idle in 1917. An oxide plant was at one time operated on the ore mined from a flat-lying vein. This deposit may possibly be the same as the Orlando claim, which is near Cooper Pass between Idaho and Montana east of Wallace. R. N. Bell, 8th Annual Report Mining Industry for Idaho, pp. 158-159, 1906, states that another vein similar to that of the Stanley mine was found "just above the upper end of Burke." In the brief time spent in the district, no more detailed information was obtained on these deposits, all of which have been inactive for a number of years.

Another deposit, said to be near Glidden Pass between Idaho and Montana, and owned by J. R. Burroughs, is called the Interstate Antimony mine. Its total production is not known, but 4 tons of ore containing 10 percent in antimony were sold to the Sunshine Mining Company.

SUMMARY OF FORECAST OF PRODUCTION

Little or no production is to be expected in the near future from the straight antimony deposits of the Coeur d'Alene district. As in the past, the principal production of antimony from the district will continue to be as a by-product of the tetrahedrite silver ores from the Dry Belt near Osborn. The expected production by mine is as follows:

	Tons Sb in Concentrates	
	1942	1943
Sunshine Mine	560	490
Coeur d'Alene Mine	1150	1150
Polaris Mine	110	100
Total	1820	1740

The production of antimony from other mines in the district will probably be negligible in quantity and cannot be estimated.

Respectfully submitted,

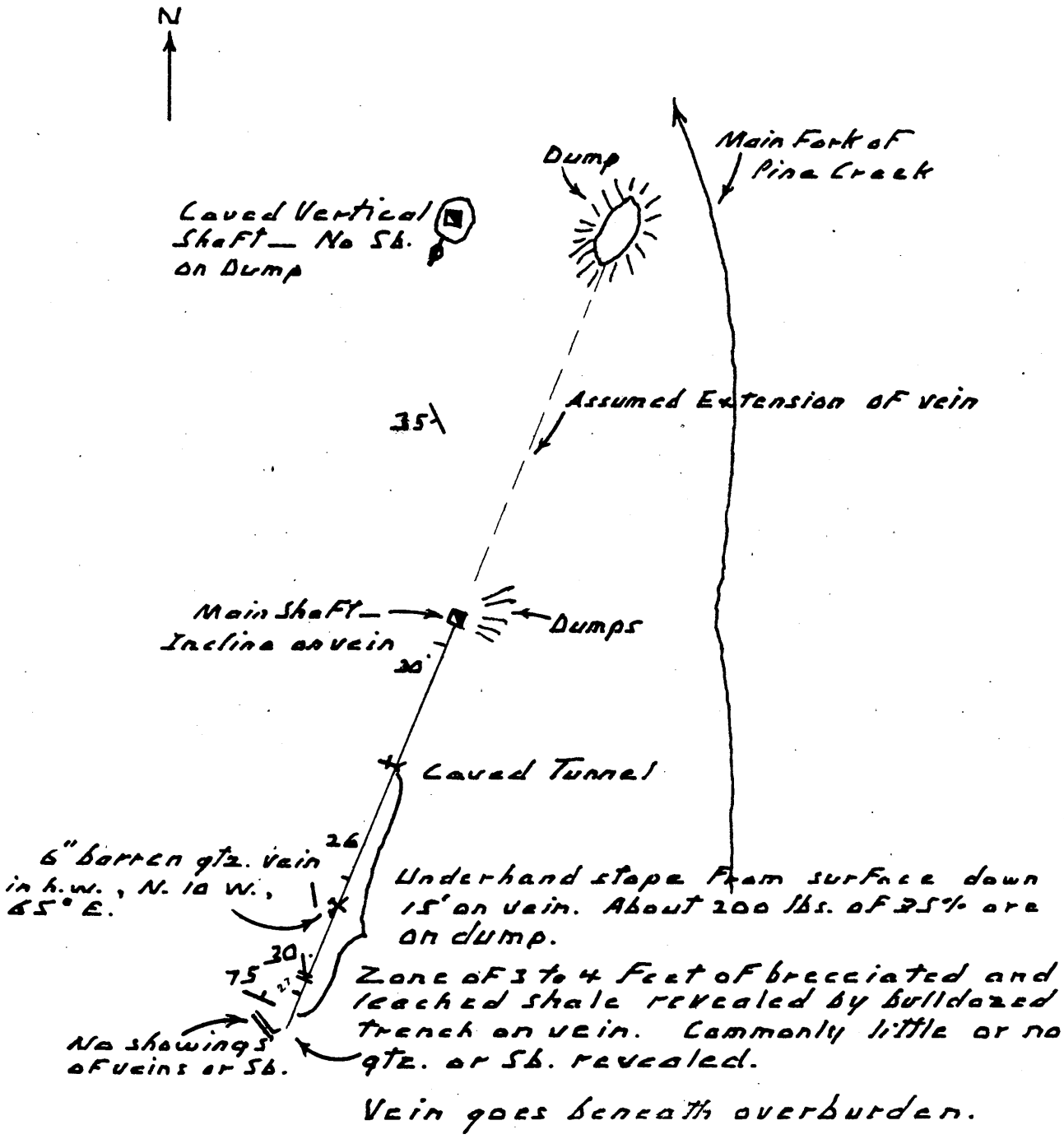
Salt Lake City, Utah
November 1, 1942

Donald E. White
Geologist for Antimony

Copies to:
Antimony Geologist-6
Regional Office, U.S.G.S.-2
District Engineer, U.S.Bureau of Mines-2

Sketch Map of Coeur D'Alene Antimony Mine, Pine Creek, Idaho

Scale 1" = 100'



De White October 1942