DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 1882

DO NOT DETACH THIS SLIP

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

This document has been recorded as

APPLICATION FOR EXPLORATION PROJECT

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

Routing Slip

To:	Tungsten Br.	Date	Sept. 4, 1951
To:	REPORTS AND RECORDS	Date	SEP 4 1951
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

FILE COPY
SURNAME:

Holderer
Lemon
Thayer

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

a. E. C

SEP 4 1951

Memorandum

To: Reports and Records Unit

Through: Director, Supply Division

From: Tungsten Branch

Subject: DMA-1882 Tungsten
S. W. Goldok, 401 Symons Building
Spokane 4, Washington
Property: Lucile Mine, Stevens County,
Washington

The field team has inspected the Lucile mine and reports no evidence of significant tungsten mineralization. However, they report a moderately strong showing of lead and zinc.

We are denying the applicant's request for an exploration loan on a tungsten participation basis, but we are informing him that if he wishes to apply for a loan for lead and zinc, he should submit a new application.

George B. Holderer BJ 9/4

George B. Holderer
Chief, Tungsten Branch

Attachment

Approved:

Director, Supply Division

TJBallard:ec
August 28, 1951

CC: Adm. Reading File
Reports & Records Unit
Field Team Region II
Mr. Holderer
Mr. Lemmon
Files

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

SEP 4 1951

Memorandum

To: Reports and Records Unit

Through: Director, Supply Division

From: Tungsten Branch

Subject: [illegible]-1[illegible] Tungsten
[illegible] Holder, [illegible] Stevens Building
[illegible], Washington
Property: Lucile Mine, Stevens County,
Washington

The field team has inspected the Lucile mine and reports no evidence of significant tungsten mineralization. However, they report moderately strong showings of lead and zinc.

We are denying the applicant's request for an exploration loan on a tungsten participation basis, but we are informing him that if he wishes to apply for a loan for lead and zinc, he should submit a new application.

George B. Holderer

George B. Holderer
Chief, Tungsten Branch

Attachment

Approved:

Tom Lyon
Director, Supply Division

T.Ballard:ec
August 27, 1951

CC: Adm. Reading File
Reports & Records Unit
Field Team Region II
Mr. Holderer
Mr. Lyon
Files

FILE COPY
240 SURNAME:

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

Holderer
Lemmon
Tyson

SEP 4 1951

Mr. Stephen V. Zoldok
401 Symons Building
Spokane 4, Washington

In reply please refer to
DMA-1882 Tungsten

Dear Mr. Zoldok:

We wrote you on August 15, 1951 for additional information; however, since then our field team has inspected the Lucile mine. They report the property has a fair showing of lead and zinc, but no evidence was found to indicate the deposit contains significant amounts of tungsten.

Therefore, it is necessary for us to deny your application for an exploration loan for tungsten.

If you wish to apply for a loan for lead-zinc, you should file another application.

Very truly yours,

Tom Lyon

Tom Lyon
Director, Supply Division

TJBallard:ec
August 28, 1951

CC: Adm. Reading File
Reports & Records Unit
Regional Field Team Region II
Mr. Holderer
Mr. Lemmon
Files

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

SEP 4 1951

Mr. Stephen N. Zoldok
601 Symons Building
Spokane 4, Washington

In reply please refer to
DMA-1852 Tungsten

Dear Mr. Zoldok:

We wrote you on August 15, 1951 for additional information; however, since then our field team has inspected the Lucile mine. They report the property has a fair showing of lead and zinc, but no evidence was found to indicate the deposit contains significant amounts of tungsten.

Therefore, it is necessary for us to deny your application for an exploration loan for tungsten.

If you wish to apply for a loan for lead-zinc, you should file another application.

Very truly yours,

Tom Lyon

Tom Lyon
Director, Supply Division

TJBallard:ec
August 28, 1951

CC: Adm. Reading File
Reports & Records Unit
Regional Field Team Region II
Mr. Holderer
Mr. Lemmon
Files

340

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

SEP 4 1951

W. E. C -

Memorandum

To: Reports and Records Unit

Through: Director, Supply Division

From: Tungsten Branch

Subject: DMA-1882 Tungsten
S. W. Zoldok, 401 Symons Building
Spokane 4, Washington
Property: Lucile Mine, Stevens County, Washington

The field team has inspected the Lucile mine and reports no evidence of significant tungsten mineralization. However, they report a moderately strong showing of lead and zinc.

We are denying the applicant's request for an exploration loan on a tungsten participation basis, but we are informing him that if he wishes to apply for a loan for lead and zinc, he should submit a new application.

George B. Holderer
Chief, Tungsten Branch

Attachment

Approved:

Tom Lyon
Director, Supply Division

8/21/51

List of File to Reports & Records
DMA - 1882 Tungsten

2 - ME 103 with typed sheets
2 - ME 100 " " "
1 - Map of Lucille Mine
1 - Copy letter Strobel to Zoldok [illegible]
1 - " Weissenborn to Strobel 7/17/51
1 - " " " Lyon 8/13/51
1 - Copy " Weissenborn " Zoldok 8/15/51

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

AUG 15 1951

G. E.

Mr. Stephen W. Zoldok
401 Symons Building
Spokane 4, Washington

In reply please refer to
DMA 1882 Tungsten

Dear Mr. Zoldok:

Before considering your application for an exploration project costing $24,000 at the Lucile property in Stevens County, Washington, we need some additional information.

The ore is a complex mixture of lead, zinc, and tungsten from which the separation of tungsten may be a difficult metallurgical problem, particularly when only small tonnages are involved. What indication do you have that the tungsten can be successfully recovered? Apparently no tungsten has been produced from the property in the past.

In addition to the map which you submitted of the present workings, we should be provided with a map and section showing location of the proposed new adit.

Your description of the project does not mention diamond drilling, but in the cost estimates provision is made for 1,000 feet of core drilling. What is the location, depth, inclination and objective of this drilling? The information should be shown on maps and sections. Do you believe that as small an amount of drilling as 1,000 feet can be contracted for as little as $4.50 per foot?

Bulldozing is not mentioned in the project description, but is included in costs.

No provision has been requested for assaying and bookkeeping, items which you may wish to include as allowable costs of the project.

It would be helpful to have your estimate of how much ore might be discovered by the exploration proposed.

DMLemmon:bl

Very truly yours,

George B. Holderer

George B. Holderer
Chief, Tungsten Branch

CC: Adm. Reading File
Reports & Records Unit
Mr. Holderer
Mr. Lemmon
Field Team - Region II
Files

FILE COPY
SURNAME:

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

July 27, 1951

Q.E.C.

Mr. S. W. Zoldok
401 Symons Building
Spokane 4, Washington

Subject: DMA-1882
Re: Exploration Loan - Lucile

My dear Mr. Zoldok:

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

The application was assigned Docket Number DMA-1882 and referred to Mr. George Holderer, Chief, Tungsten Branch on July 27, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1882.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

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

July 27, 1951

Mr. S. W. Zoldok
401 Symons Building
Spokane 4, Washington

Subject: DMA-1882
Re: Exploration Loan - Lucile

My dear Mr. Zoldok:

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

The application was assigned Docket Number DMA-1882 and referred to Mr. George Holderer, Chief, Tungsten Branch on July 27, 1951.

In any future correspondance relating to your application, kindly refer to DMA-1882.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

L. F. Strobel:jc
cc: Strobel
File
Holderer
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 1882

Date received 7-24-51

Participation

S. W. Zoldok
401 Symons Building
Spokane 4, Washington

Name and address of applicant

Date

FILL IN THIS BLOCK

Date of application June 29, 1951

Estimated cost $24,000.00

Mineral or metal Tungsten

Percentage of Government participation 75 per cent

Location of mine Sec 19, 30, T 40 N R 42 E, WM, Stevens County, Washington

Date of filing MF-100

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.

(Name of company)	By Stephen U. Zoldak (Signature of authorized official)
July 9, 1957 (Date)	Mining Engineer (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

MF 103

1. Partnership

2. Joseph M. Zoldok, East 1425 40th Avenue, Spokane 34, Washington
Bette Jane Zoldok East 1425 40th Avenue, Spokane 34, Washington
Stephen W. Zoldok 401 Symons Building, Spokane 4, Washington

5. Owner

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

7. Inapplicable.

8. Inapplicable.

9. $6,250.00

10. (a) Property involved in the exploration will be the Lucile Tip Top, Winner, Cornet, Silver Tip, Effie, Speculator and Speculator No. 2 lode mining claims.
(b) Same as area 10 (a).

11. Present name of property is Lucile, formerly known as Owen's Mine and Boundary Silver-Lead.

13. Mine and camp water comes from a spring and is in sufficient quantity for year around operation.

No electric power is available. A portable gas or diesel-driven compressor would supply all exploration needs.

15. There are no custom mills within economic hauling distance of the mine.

19. None.

20. For scheelite which occurs as veinlets and blebs in quartz veins on the contact of a limestone with phyllite and quartzite.

21. It is proposed to drive a X-cut about 450 feet long and do about 300 feet of drifting to get under two good ore bodies exposed on the surface. The two orebodies are within 250 feet of each other. This X-cut will give approximately 160 feet of backs on the two ore shoots.

22. Present development has proven the existence of commercial tungsten-zinc-lead orebodies. From the two orebodies already exposed it is known that commercial mineralization can develop at flexures or breaks in the limestone bed. There are five known flexures or breaks in the limestone bed having considerable magnitude, only two of which have been exposed by bulldozing. A sketch of the main Lucile workings is appended.

23. (a)

2 miners @	$14.00 each	$28.00 - 75 days	$ 2,100.00
2 helpers	13.00	26.00 - 75 days	1,950.00
2 muckers	12.00	24.00 - 75 days	1,800.00

23. (Continued)

(b)	Engineer, supervisor, sampler @ $500 per man - 3 men	$ 1,500.00
(c)	Rehabilitating living quarters, office	500.00
(d)	Constructing 1/2 mile of road	500.00
	additional ore bunker	1,000.00
(e)	1 Machine drill, column, steel, bits, pipe, rail, etc.	2,000.00
(f)	Bulldozer, 10 days @ $80 per day	800.00
(g)	1 315 cfm compressor @ $350 per month	1,050.00
(h)	Explosives, caps, fuse, etc.	2,250.00
	Fuel, lubricating oil, etc.	1,000.00
	Miscellaneous tools, parts, etc.	500.00
	Diamond drilling: 1,000 feet @ 4.50 per foot	4,500.00
(i)	Unforeseen expenses	2,550.00
	Total	$24,000.00

24. It is anticipated that project can be under way within one month after project is approved. It is believed that $8,000.00 will be spent per month for a period of three months, which is the time schedule for completion of the project.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. _____

Date received _____

J. W. Zoldok
401 Symons Building
Spokane 4, Washington

Name and address of applicant

Date July 9, 1951

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☒ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Interest ~~Common~~ (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Joseph H. Zoldok, E 1425 40th Ave, Spokane 34, Wash.	Partner	None	44%			None	
Bette Jane Zoldok, E 1425 40th Ave, Spokane 34, Wash.	Partner	None	28%			None	
Stephen W. Zoldok, E 1425 40th Ave, Spokane 34, Wash.	Partner	None	28%			None	
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues: None

For Corporate Applicants

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

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	Zn-Pb Ore	300 short tons	300 short tons	None	None
2. Quantity of product processed (specify unit of measure and type of process)		300 short tons	Flotation		
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Property is still in development stage.

12. Ore or Mineral Reserves:

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

S. W. Zoldok
401 Symons Building
Spokane 4, Washington

1. Materials produced:
   (a) Tungsten (scheelite), zinc, lead, silver, cadmium.
   (b) Antimony, sulfur.

2. Name of mine is Lucile; also known as Owen's Mine and Boundary Silver-Lead. Type of mine is underground.
   (a) None.
   (b) About 427 feet.
   (c) Answered in (b) above.
   (d) About 175 feet of raises and about 123 feet of winzes with considerable surface trenching and test pitting. Mine is dry and no pumping problems are anticipated. With present ore reserves, mine can produce 25-35 tons of ore per day.

3. (a) Property is about 2 miles air line north of Leadpoint, Washington, or 5 miles by road. Nearest railroad shipping point is Boundary, Washington, 8 miles distant by road.
   (b) Northport Mining District, Stevens County, Washington.
   (c) Sec 19, 30, T 40 N, R 42 E, WM.
   (d) Stevens County, Washington.

4. (a) Property is not in operation.
   (b) Will operate as owner.

5. The property was in production for a short time in 1948 and 1949.

6. Applicant and manager is registered professional mining engineer with many years of professional and operating experience.

7. (a) Property was located in 1910 and explored by numerous trenches and test pits up to about 1927. In 1929 a 216-foot X-cut was driven to get under an ore shoot exposed on the surface. In 1929 about 80 tons of hand cobbed galena-silver ore was shipped to the Bunker Hill smelter at Kellogg, Idaho. Present owner acquired property in 1947 and carried on development work during 1948-1949. Approximately 600 tons of ore was mined during 1948-1949 and 300 tons was milled during 1948. Inadequate custom milling facilities forced suspension of operations.
   (b) Two small mining properties adjoining the Lucile to the north and west produced a small tonnage of high-grade silver ore. The property to the south produced a small tonnage of galena-silver ore about 1929.
   (c) No report by a private engineer has been made on the property. The U. S. Bureau of Mines made a report on the property in 1942 recommending an exploration program.

10. (3) Quantity and grade of product sold in 1948.
    Lead concentrates: 3.5395 short tons.

Grade:	Lead	74.7	per cent
	Silver	55.0	oz per ton
	Gold	0.015	oz per ton
	Zinc	2.3	per cent
	Antimony	1.0	per cent

10. (3) (Continued)

Zinc concentrates: 12.459 short tons.

Grade:	Zinc	53.9 per cent
	Lead	5.8 per cent
	Silver	5.7 oz per ton
	Cadmium	0.68 per cent
	Gold	0.01 oz per ton

12. (a) The ore occurs in a limestone bed as pipelike masses within the limestone and as lenses on the hanging wall contact of the limestone with a phyllite and the footwall contact of the limestone and quartzite. No report on the geology or ore reserves is available.

(b)1 No assay plans or sections showing ore reserves is available.

(b)2 Ore reserves:

Limestone-phyllite contact orebody:

$$\frac{80' \times 2.5' \times 85'}{12 \text{ cu ft per ton}} = 1400 \text{ short tons}$$

Grade:	Lead	8.0 per cent
	Zinc	5.0 per cent
	Silver	12.0 oz per ton
	Copper	1.5 per cent
	Tungsten(WO_3)	0.5 per cent (estimated)

Limestone orebody:

$$\frac{15' \times 35' \times 85'}{12 \text{ cu ft per ton}} = 3700 \text{ short tons}$$

Grade:	Zinc	11.4 per cent
	Lead	2.8 per cent
	Silver	3.0 oz per ton
	Tungsten(WO_3)	0.25 per cent (estimated)

14. Sufficient spring water available for camp and mining operations the year around. Water available for mill 2-1/2 miles by road.

17. Equipment on property includes 315 cu ft compressor, stopes, hoses, pipe, rails, tools, etc. Buildings consist of shop, compressor house, two cabins, and ore bin having 300-ton capacity. All equipment is in serviceable condition.

18. Only a lack of adequate custom milling facilities prevents the property from being operated.

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

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	3,700		$67.89	$51.16	$10.00
Indicated (probable)	1,400		$94.41	$69.23	$20.00

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads. Answered in 3 (a)

14. Water Supply:

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

15. Power:

State amount of power used, rate per hour, and source thereof. No power available.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period. None now employed.

17. Equipment and Facilities:

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

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

CERTIFICATION

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

(Name of company)

July 9, 1957
(Date)

By Stephen W. Zoldok
(Signature of authorized official)

Stephen W. Zoldok
Mining Engineer
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

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

July 27, 1951

Mr. S. W. Zoldok
401 Symons Building
Spokane 4, Washington

Subject: DMA-1882
Re: Exploration Loan - Lucile

My dear Mr. Zoldok:

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

The application was assigned Docket Number DMA-1882 and referred to Mr. George Holderer, Chief, Tungsten Branch on July 27, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1882.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

L. F. Strobel:jc
cc: Strobel
File
✓Holderer
Lyon

dma 1882

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane 4, Washington

July 17, 1951

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

Dear Mr. Strobel:

I am enclosing herewith three copies of Forms MF-100 and MF-103 submitted by Mr. S. W. Zoldok, 401 Symons Building, Spokane 4, Washington. One copy of the application has been retained at this office in order to expedite forthcoming field work.

Sincerely yours,

A. E. Weissenborn

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

Enclosures

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 24 1951
LANDON F. STROBEL
Executive Secretary

DMA-1882

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane 4, Washington

August 13, 1951

Mr. Tom Lyon, Chairman
Coordinating Committee
Defense Minerals Administration
Department of Interior
Washington 25, D. C.

Through: L. F. Strobel

Dear Mr. Lyon:

An application submitted by S. W. Zoldok, Spokane, Washington, for an exploration loan for tungsten on the Lucile mine, Stevens County, Washington, was transmitted to Washington through this office. One copy of the application was retained here for use by the Field Team. As yet we have received no DMA docket number for it.

On August 1, 1951, an examining team from this office inspected the Lucile mine. No evidence was found to indicate that this mine would produce significant amounts of tungsten, and therefore the examining team believes that the application for this mine should not be favorably considered.

There is a moderately strong showing of lead and zinc in the Lucile mine, and indications are that this may be a pipe-like deposit similar to other deposits in the district which are or have been commercial producers of these two metals. Therefore, the examining team believes that should the applicant submit another application for an exploration loan for lead and zinc, another examination of the Lucile mine might present evidence for favorable action to be taken on such an application.

Yours very truly,

Willard P. Puffett

Willard P. Puffett
For: A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 17 1951

cc: U.S. Bur. Mines
Albany, Ore.
Spokane, Wn.
L. F. Strobel

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE AUG 1 5 1951

REFERRED TO:
1. 340 3624
2.
3.
4.

FOR:

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

REMARKS: To be kept with Dma docket file

Check (X) before the items needing attention.

ROBERT E. ADAMS
Initials of sender.

GPO 16—63815-1

340

FILE COPY
SURNAME:

Holderer
Lemmon

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

AUG 15 1956

Mr. Stephen W. Zoldok
401 Symons Building
Spokane 4, Washington

In reply please refer to
DMA 1882 Tungsten

Dear Mr. Zoldok:

Before considering your application for an exploration project costing $24,000 at the Lucile property in Stevens County, Washington, we need some additional information.

The ore is a complex mixture of lead, zinc, and tungsten from which the separation of tungsten may be a difficult metallurgical problem, particularly when only small tonnages are involved. What indication do you have that the tungsten can be successfully recovered? Apparently no tungsten has been produced from the property in the past.

In addition to the map which you submitted of the present workings, we should be provided with a map and section showing location of the proposed new adit.

Your description of the project does not mention diamond drilling, but in the cost estimates provision is made for 1,000 feet of core drilling. What is the location, depth, inclination and objective of this drilling? The information should be shown on maps and sections. Do you believe that as small an amount of drilling as 1,000 feet can be contracted for as little as $4.50 per foot?

Bulldozing is not mentioned in the project description, but is included in costs.

No provision has been requested for assaying and bookkeeping, items which you may wish to include as allowable costs of the project.

It would be helpful to have your estimate of how much ore might be discovered by the exploration proposed.

DMLemmon:bl

Very truly yours,

George B. Holderer

8/15

George B. Holderer
Chief, Tungsten Branch

CC: Adm. Reading File
Reports & Records Unit
Mr. Holderer
Mr. Lemmon
Field Team - Region II
Files

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 1882

Date received 9-24-51

Participation

S. W. Zoldok
401 Symons Building
Spokane 4, Washington

Name and address of applicant

Date

FILL IN THIS BLOCK

Date of application June 29, 1951

Estimated cost $24,000.00

Mineral or metal Tungsten

Percentage of Government participation 75 per cent

Location of mine Sec 19, 30, T 40 N R 42 E, WM, Stevens County, Washington

Date of filing MF-100

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.

(Name of company)	By Stephen L. Zoldok (Signature of authorized official)
July 9/1951 (Date)	Mining Engineer (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—04067-1 U. S. GOVERNMENT PRINTING OFFICE

MF 103

1. Partnership

2. Joseph M. Zoldok, East 1425 40th Avenue, Spokane 34, Washington
Bette Jane Zoldok East 1425 40th Avenue, Spokane 34, Washington
Stephen W. Zoldok 401 Symons Building, Spokane 4, Washington

5. Owner

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

7. Inapplicable.

8. Inapplicable.

9. $6,250.00

10. (a) Property involved in the exploration will be the Lucile Tip Top, Winner, Cornet, Silver Tip, Effie, Speculator and Speculator No. 2 lode mining claims.
(b) Same as area 10 (a).

11. Present name of property is Lucile, formerly known as Owen's Mine and Boundary Silver-Lead.

13. Mine and camp water comes from a spring and is in sufficient quantity for year around operation.

No electric power is available. A portable gas or diesel-driven compressor would supply all exploration needs.

15. There are no custom mills within economic hauling distance of the mine.

19. None.

20. For scheelite which occurs as veinlets and blebs in quartz veins on the contact of a limestone with phyllite and quartzite.

21. It is proposed to drive a X-cut about 450 feet long and do about 300 feet of drifting to get under two good ore bodies exposed on the surface. The two orebodies are within 250 feet of each other. This X-cut will give approximately 160 feet of backs on the two ore shoots.

22. Present development has proven the existence of commercial tungsten-zinc-lead orebodies. From the two orebodies already exposed it is known that commercial mineralization can develop at flexures or breaks in the limestone bed. There are five known flexures or breaks in the limestone bed having considerable magnitude, only two of which have been exposed by bulldozing. A sketch of the main Lucile workings is appended.

23. (a)

2 miners	@ $14.00 each	$28.00 - 75 days	$ 2,100.00
2 helpers	13.00	26.00 - 75 days	1,950.00
2 muckers	12.00	24.00 - 75 days	1,800.00

23. (Continued)

(b)	Engineer, supervisor, sampler @ $500 per man - 3 men	$ 1,500.00
(c)	Rehabilitating living quarters, office	500.00
(d)	Constructing 1/2 mile of road	500.00
	additional ore bunker	1,000.00
(e)	1 Machine drill, column, steel, bits, pipe, rail, etc.	2,000.00
(f)	Bulldozer, 10 days @ $80 per day	800.00
(g)	1 315 cfm compressor @ $350 per month	1,050.00
(h)	Explosives, caps, fuse, etc.	2,250.00
	Fuel, lubricating oil, etc.	1,000.00
	Miscellaneous tools, parts, etc.	500.00
	Diamond drilling: 1,000 feet @ 4.50 per foot	4,500.00
(i)	Unforeseen expenses	2,550.00
	Total	$24,000.00

24. It is anticipated that project can be under way within one month after project is approved. It is believed that $8,000.00 will be spent per month for a period of three months, which is the time schedule for completion of the project.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. _____

Date received _____

S. W. Zoldok
401 Symons Building
Spokane 4, Washington

Name and address of applicant

Date July 9, 1951

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☒ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

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

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Interest ~~Common~~ (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Joseph M. Zoldok, E 1425 40th Ave, Spokane 34, Wash.	Partner	None	44%			None	
Bette Jane Zoldok, E 1425 40th Ave, Spokane 34, Wash.	Partner	None	28%			None	
Stephen W. Zoldok, E 1425 40th Ave, Spokane 34, Wash.	Partner	None	28%			None	
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues: None

For Corporate Applicants

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

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	Zn-Pb Ore	300 short tons	300 short tons	None	None
2. Quantity of product processed (specify unit of measure and type of process)		300 short tons	Flotation		
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Property is still in development stage.

12. Ore or Mineral Reserves:

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

S. W. Zoldok
401 Symons Building
Spokane 4, Washington

1. Materials produced:
   (a) Tungsten (scheelite), zinc, lead, silver, cadmium.
   (b) Antimony, sulfur.

2. Name of mine is Lucile; also known as Owen's Mine and Boundary Silver-Lead. Type of mine is underground.
   (a) None.
   (b) About 427 feet.
   (c) Answered in (b) above.
   (d) About 175 feet of raises and about 123 feet of winzes with considerable surface trenching and test pitting. Mine is dry and no pumping problems are anticipated. With present ore reserves, mine can produce 25-35 tons of ore per day.

3. (a) Property is about 2 miles air line north of Leadpoint, Washington, or 5 miles by road. Nearest railroad shipping point is Boundary, Washington, 8 miles distant by road.
   (b) Northport Mining District, Stevens County, Washington.
   (c) Sec 19, 30, T 40 N, R 42 E, WM.
   (d) Stevens County, Washington.

4. (a) Property is not in operation.
   (b) Will operate as owner.

5. The property was in production for a short time in 1948 and 1949.

6. Applicant and manager is registered professional mining engineer with many years of professional and operating experience.

7. (a) Property was located in 1910 and explored by numerous trenches and test pits up to about 1927. In 1929 a 216-foot X-cut was driven to get under an ore shoot exposed on the surface. In 1929 about 80 tons of hand cobbed galena-silver ore was shipped to the Bunker Hill smelter at Kellogg, Idaho. Present owner acquired property in 1947 and carried on development work during 1948-1949. Approximately 600 tons of ore was mined during 1948-1949 and 300 tons was milled during 1948. Inadequate custom milling facilities forced suspension of operations.
   (b) Two small mining properties adjoining the Lucile to the north and west produced a small tonnage of high-grade silver ore. The property to the south produced a small tonnage of galena-silver ore about 1929.
   (c) No report by a private engineer has been made on the property. The U. S. Bureau of Mines made a report on the property in 1942 recommending an exploration program.

10. (3) Quantity and grade of product sold in 1948.
    Lead concentrates: 3.5395 short tons.

Grade:	Lead	74.7	per cent
	Silver	55.0	oz per ton
	Gold	0.015	oz per ton
	Zinc	2.3	per cent
	Antimony	1.0	per cent

10. (3) (Continued)

Zinc concentrates: 12.459 short tons.

Grade:	Zinc	53.9 per cent
	Lead	5.8 per cent
	Silver	5.7 oz per ton
	Cadmium	0.68 per cent
	Gold	0.01 oz per ton

12. (a) The ore occurs in a limestone bed as pipelike masses within the limestone and as lenses on the hanging wall contact of the limestone with a phyllite and the footwall contact of the limestone and quartzite. No report on the geology or ore reserves is available.

(b)1 No assay plans or sections showing ore reserves is available.

(b)2 Ore reserves:

Limestone-phyllite contact orebody:

$$\frac{80' \times 2.5' \times 85'}{12 \text{ cu ft per ton}} = 1400 \text{ short tons}$$

Grade:	Lead	8.0 per cent
	Zinc	5.0 per cent
	Silver	12.0 oz per ton
	Copper	1.5 per cent
	Tungsten(WO_3)	0.5 per cent (estimated)

Limestone orebody:

$$\frac{15' \times 35' \times 85'}{12 \text{ cu ft per ton}} = 3700 \text{ short tons}$$

Grade:	Zinc	11.4 per cent
	Lead	2.8 per cent
	Silver	3.0 oz per ton
	Tungsten(WO_3)	0.25 per cent (estimated)

14. Sufficient spring water available for camp and mining operations the year around. Water available for mill 2-1/2 miles by road.

17. Equipment on property includes 315 cu ft compressor, stopes, hoses, pipe, rails, tools, etc. Buildings consist of shop, compressor house, two cabins, and ore bin having 300-ton capacity. All equipment is in serviceable condition.

18. Only a lack of adequate custom milling facilities prevents the property from being operated.

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

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	3,700		$67.89	$51.16	$10.00
Indicated (probable)	1,400		$94.41	$69.23	$20.00

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads. Answered in 3 (a)

14. Water Supply:

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

15. Power:

State amount of power used, rate per hour, and source thereof. No power available.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period. None now employed.

17. Equipment and Facilities:

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

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

CERTIFICATION

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

(Name of company)

July 9 1957
(Date)

By Stephen W. Zoldok
(Signature of authorized official)

Stephen W. Zoldok

Mining Engineer
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

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

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 1882

Date received 7-24-51

Participation

S. W. Zoldok
401 Symons Building
Spokane 4, Washington

Name and address of applicant

Date

FILL IN THIS BLOCK

Date of application June 29, 1951

Estimated cost $24,000.00

Mineral or metal Tungsten

Percentage of Government participation 75 per cent

Location of mine Sec 19, 30, T 40 N

R 42 E, WM, Stevens County, Washington

Date of filing MF-100

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.

(Name of company)

July 9, 1957
(Date)

By Stephen U. Zoldo
(Signature of authorized official)

Mining Engineer
(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

MF 103

1. Partnership

2. Joseph M. Zoldok, East 1425 40th Avenue, Spokane 34, Washington
Bette Jane Zoldok East 1425 40th Avenue, Spokane 34, Washington
Stephen W. Zoldok 401 Symons Building, Spokane 4, Washington

5. Owner

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

7. Inapplicable.

8. Inapplicable.

9. $6,250.00

10. (a) Property involved in the exploration will be the Lucile Tip Top, Winner, Cornet, Silver Tip, Effie, Speculator and Speculator No. 2 lode mining claims.
(b) Same as area 10 (a).

11. Present name of property is Lucile, formerly known as Owen's Mine and Boundary Silver-Lead.

13. Mine and camp water comes from a spring and is in sufficient quantity for year around operation.

No electric power is available. A portable gas or diesel-driven compressor would supply all exploration needs.

15. There are no custom mills within economic hauling distance of the mine.

19. None.

20. For scheelite which occurs as veinlets and blebs in quartz veins on the contact of a limestone with phyllite and quartzite.

21. It is proposed to drive a X-cut about 450 feet long and do about 300 feet of drifting to get under two good ore bodies exposed on the surface. The two orebodies are within 250 feet of each other. This X-cut will give approximately 160 feet of backs on the two ore shoots.

22. Present development has proven the existence of commercial tungsten-zinc-lead orebodies. From the two orebodies already exposed it is known that commercial mineralization can develop at flexures or breaks in the limestone bed. There are five known flexures or breaks in the limestone bed having considerable magnitude, only two of which have been exposed by bulldozing. A sketch of the main Lucile workings is appended.

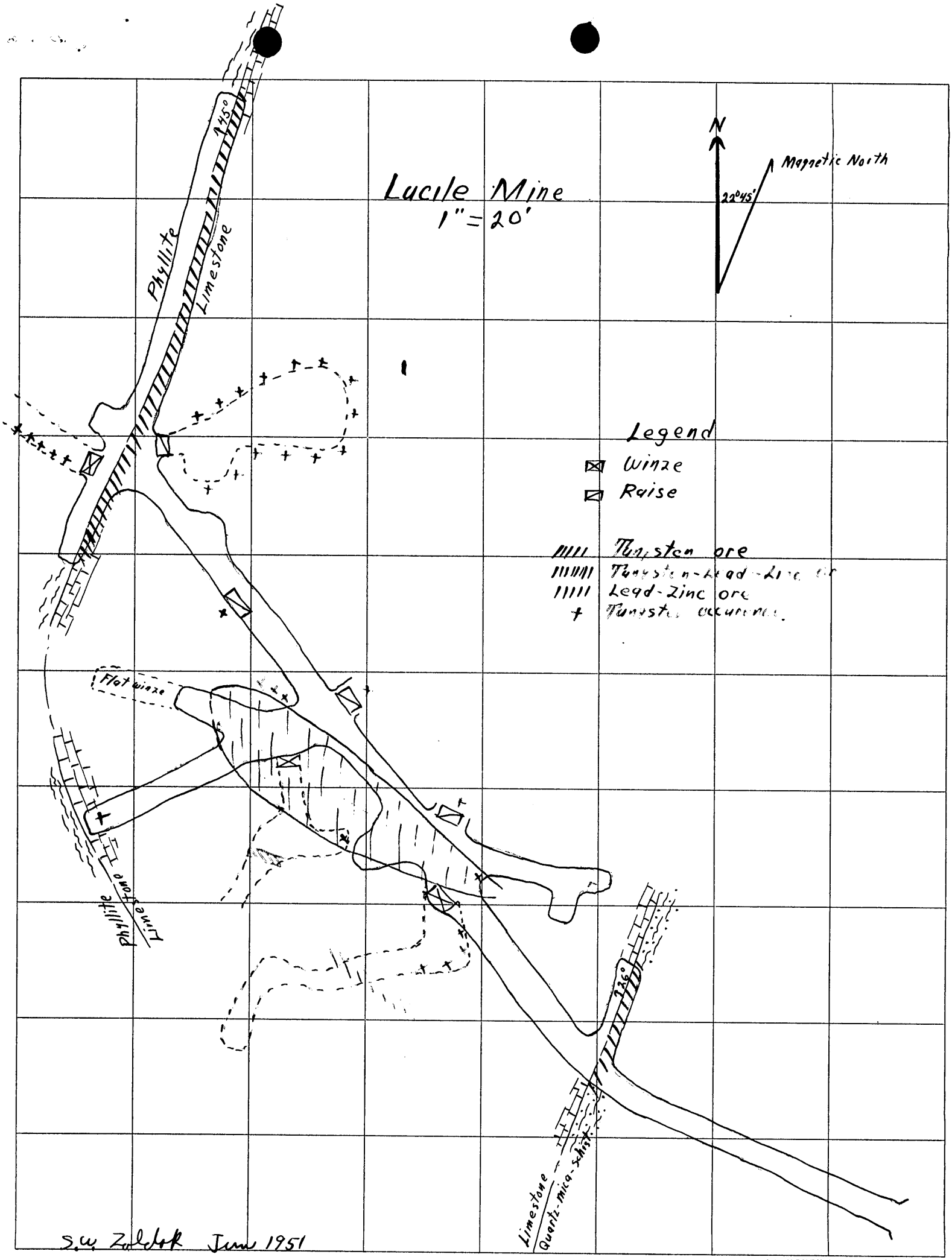
23. (a)

2 miners @	$14.00 each	$28.00 - 75 days	$ 2,100.00
2 helpers	13.00	26.00 - 75 days	1,950.00
2 muckers	12.00	24.00 - 75 days	1,800.00

23. (Continued)

(b)	Engineer, supervisor, sampler @ $500 per man - 3 men	$ 1,500.00
(c)	Rehabilitating living quarters, office	500.00
(d)	Constructing 1/2 mile of road	500.00
	additional ore bunker	1,000.00
(e)	1 Machine drill, column, steel, bits, pipe, rail, etc.	2,000.00
(f)	Bulldozer, 10 days @ $80 per day	800.00
(g)	1 315 cfm compressor @ $350 per month	1,050.00
(h)	Explosives, caps, fuse, etc.	2,250.00
	Fuel, lubricating oil, etc.	1,000.00
	Miscellaneous tools, parts, etc.	500.00
	Diamond drilling: 1,000 feet @ 4.50 per foot	4,500.00
(i)	Unforeseen expenses	2,550.00
	Total	$24,000.00

24. It is anticipated that project can be under way within one month after project is approved. It is believed that $8,000.00 will be spent per month for a period of three months, which is the time schedule for completion of the project.



"ALBANENE" No. 196M K&E CO., N.Y.
REG. U.S. PAT. OFF

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. _____

Date received _____

S. W. Zoldok
401 Symons Building
Spokane 4, Washington

Name and address of applicant

Date July 9, 1951

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☒ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Interest ~~Common~~ (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Joseph M. Zoldok, E 1425 40th Ave, Spokane 34, Wash.	Partner	None	44%			None	
Bette Jane Zoldok, E 1425 40th Ave, Spokane 34, Wash.	Partner	None	28%			None	
Stephen W. Zoldok, E 1425 40th Ave, Spokane 34, Wash.	Partner	None	28%			None	
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues: None

For Corporate Applicants

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

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	Zn-Pb Ore	300 short tons	300 short tons	None	None
2. Quantity of product processed (specify unit of measure and type of process)		300 short tons	Flotation		
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Property is still in development stage.

12. Ore or Mineral Reserves:

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

S. W. Zoldok
401 Symons Building
Spokane 4, Washington

1. Materials produced:
   (a) Tungsten (scheelite), zinc, lead, silver, cadmium.
   (b) Antimony, sulfur.

2. Name of mine is Lucile; also known as Owen's Mine and Boundary Silver-Lead. Type of mine is underground.
   (a) None.
   (b) About 427 feet.
   (c) Answered in (b) above.
   (d) About 175 feet of raises and about 123 feet of winzes with considerable surface trenching and test pitting. Mine is dry and no pumping problems are anticipated. With present ore reserves, mine can produce 25-35 tons of ore per day.

3. (a) Property is about 2 miles air line north of Leadpoint, Washington, or 5 miles by road. Nearest railroad shipping point is Boundary, Washington, 8 miles distant by road.
   (b) Northport Mining District, Stevens County, Washington.
   (c) Sec 19, 30, T 40 N, R 42 E, WM.
   (d) Stevens County, Washington.

4. (a) Property is not in operation.
   (b) Will operate as owner.

5. The property was in production for a short time in 1948 and 1949.

6. Applicant and manager is registered professional mining engineer with many years of professional and operating experience.

7. (a) Property was located in 1910 and explored by numerous trenches and test pits up to about 1927. In 1929 a 216-foot X-cut was driven to get under an ore shoot exposed on the surface. In 1929 about 80 tons of hand cobbed galena-silver ore was shipped to the Bunker Hill smelter at Kellogg, Idaho. Present owner acquired property in 1947 and carried on development work during 1948-1949. Approximately 600 tons of ore was mined during 1948-1949 and 300 tons was milled during 1948. Inadequate custom milling facilities forced suspension of operations.
   (b) Two small mining properties adjoining the Lucile to the north and west produced a small tonnage of high-grade silver ore. The property to the south produced a small tonnage of galena-silver ore about 1929.
   (c) No report by a private engineer has been made on the property. The U. S. Bureau of Mines made a report on the property in 1942 recommending an exploration program.

10. (3) Quantity and grade of product sold in 1948.
    Lead concentrates: 3.5395 short tons.

Grade:	Lead	74.7	per cent
	Silver	55.0	oz per ton
	Gold	0.015	oz per ton
	Zinc	2.3	per cent
	Antimony	1.0	per cent

10. (3) (Continued)

Zinc concentrates: 12.459 short tons.

Grade:	Zinc	53.9 per cent
	Lead	5.8 per cent
	Silver	5.7 oz per ton
	Cadmium	0.68 per cent
	Gold	0.01 oz per ton

12. (a) The ore occurs in a limestone bed as pipelike masses within the limestone and as lenses on the hanging wall contact of the limestone with a phyllite and the footwall contact of the limestone and quartzite. No report on the geology or ore reserves is available.

(b)1 No assay plans or sections showing ore reserves is available.

(b)2 Ore reserves:

Limestone-phyllite contact orebody:

$$\frac{80' \times 2.5' \times 85'}{12 \text{ cu ft per ton}} = 1400 \text{ short tons}$$

Grade:	Lead	8.0 per cent
	Zinc	5.0 per cent
	Silver	12.0 oz per ton
	Copper	1.5 per cent
	Tungsten(WO_3)	0.5 per cent (estimated)

Limestone orebody:

$$\frac{15' \times 35' \times 85'}{12 \text{ cu ft per ton}} = 3700 \text{ short tons}$$

Grade:	Zinc	11.4 per cent
	Lead	2.8 per cent
	Silver	3.0 oz per ton
	Tungsten(WO_3)	0.25 per cent (estimated)

14. Sufficient spring water available for camp and mining operations the year around. Water available for mill 2-1/2 miles by road.

17. Equipment on property includes 315 cu ft compressor, stopes, hoses, pipe, rails, tools, etc. Buildings consist of shop, compressor house, two cabins, and ore bin having 300-ton capacity. All equipment is in serviceable condition.

18. Only a lack of adequate custom milling facilities prevents the property from being operated.

(b) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	3,700		$67.89	$51.16	$10.00
Indicated (probable)	1,400		$94.41	$69.23	$20.00

(c) If placer:

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

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

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

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

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

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

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads. Answered in 3 (a)

14. Water Supply:

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

15. Power:

State amount of power used, rate per hour, and source thereof. No power available.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period. None now employed.

17. Equipment and Facilities:

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

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

CERTIFICATION

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

(Name of company)

July 9, 1951
(Date)

By Stephen W. Zoldok
(Signature of authorized official)

Stephen W. Zoldok

Mining Engineer
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

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