DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMEA ~~DMA~~ Docket No. 2421

DO NOT DETACH THIS SLIP

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

This document has been recorded as

EXPLORATION 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

Copies to USBM, USGS, Region II

To: Code 700, Rm. 4640 Date 3-11-52

To: Operating Com. Date 3-21-52

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

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To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

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To: _____ Date _____

To: _____ Date _____

DO NOT DETACH

CONTROLLED DOCUMENT

FILE COPY
SURNAME:

200

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

Mr. Frank Waugaman, President
Lake Serene Mining Company, Inc.
Snoqualmie, Washington

Dear Mr. Waugaman:

Reference is made to your application for exploration aid, Docket No. DMEA 2421.

In accordance with your request, there are returned herewith the engineering report together with the smelting returns relating to the Lake Serene Mine.

Sincerely yours,

ROBERT E. ADAMS 4/3

Robert E. Adams
Administrative Officer
Defense Minerals Exploration
Administration

Enclosures

READAMS/meb
4-3-52
cc to: Adm.Reading File
Mails & Files Br.

Please return

with Smelter returns

Thank you

DMEA-
2421

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 10 1952

700 FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

MAR 2 4 1952 AIR MAIL

F.L. Knouse
Ellis
Johnson
Thayer
Hedges
Stephenson

Mr. Frank [illegible], President
Lake Serene Mining Co., Inc.
Snoqualmie, Washington

Re: Docket No. [illegible]-2621, (Copper)
Lake Serene Mining Co., Inc.
Lake Serene Mine
Snohomish, Washington

Dear Mr. [illegible]:

Reference is made to your application for Government aid on the captioned exploration project in the amount of $[illegible],000.

Projects approved by the Defense Mineral Exploration Administration must, in its judgment, show reasonable promise of yielding material of acceptable grade, and in quantities that will significantly improve the mineral supply position for the National Defense Program.

A careful study of your application and an examination of the property concerned (Fall of 1950), reveals that the probability of disclosing mineable reserves by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, I regret to advise, that your application for exploration aid is denied.

If additional information becomes available which makes this project feasible, we will welcome the resubmission of your proposal for consideration.

Sincerely yours,

C. O. Mittendorf (fw) E.L. 3/24/52

Acting Administrator
Defense Mineral Exploration
Administration

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

FLKnouse/jem 3/20/52
cc to: Adm. Reading File
Docket
Messrs. C.H.Johnson, Rm. 3621
Ned Nelson, Rm. 4216 GS
Ellis
Knouse
Field Team, Reg. II (2)
Operating Committee

EXPLORATION

Subject: DMEA-2421
Re: Exploration Loan
Crown Jewell
March 11, 1952

Mr. Frank Waugaman, President
Lake Serene Mining Co. Inc.
Snoqualmie, Washington

My dear Mr. Waugaman:

This will acknowledge receipt of your application dated February 20, 1952 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2421 and referred to the Rare and Miscellaneous Metals Division.

Kindly refer to DMEA-2421 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

7862

3/17/52 gla
DMEA-2421

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 10 1952

March 4, 1952

Memorandum

To: Chairman, Operating Committee, DMEA.

From: DMEA Field Team, Region II.

Subject: Application for DMEA assistance on the Lake Serene mine, Snohomish County, Washington.

Enclosed are four copies of an application for DMEA assistance submitted by the Lake Serene Mining Co., Snohomish County, Washington. The application is incompletely prepared and needs additional information, particularly a more detailed explanation of what exploration work is to be done and where.

Messrs. P. H. Toepfer and E. A. Magill, U. S. Bureau of Mines, visited the Lake Serene property during the fall of 1950. Copies of a report by Mr. Toepfer, describing this visit, are submitted herewith. Mr. Toepfer reports a considerable amount of adit exploration on two levels that expose thin stringers of copper-bearing ore which seldom exceed 2 inches in thickness. In a small stope, off the upper level, the total width of these stringers is not believed to aggregate 6 inches.

On the basis of known information on the Lake Serene mine, the Field Team recommends denial of the subject application.

By Field Team, Region II

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

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

Enclosures

c.c.: USBM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1201 North Division Street
Spokane 2, Washington
March 3, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 10 1952

MEMORANDUM

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

From: P. H. Toepfer, Mining Engineer, Region II

Subject: DMEA exploration loan request, Lake Serene Mine, Snohomish County, Wash.
DMEA Docket No. 2421
Commodity: Copper

A note dated February 27, 1952, was received from Thor Kilsgaard of the U.S.G.S., asking information on the advisability of scheduling an examination of the Lake Serene mine, and whether a DMEA loan might be granted there. I would not recommend favorable action on a DMEA loan.

This property, formerly known as the Wilbur Index mine, was examined by E. A. Magill and myself in the fall of 1950. A report was written suggesting the possibility of parallel veins, but a later examination showed that the appearance of parallel veins is probably due to a fault displacement.

The property lies about 4 miles south of Index, Snohomish County, Washington, at an elevation of about 900 feet above sea level, and is reached by a gravelled road of moderate grade.

Two adits were driven during the earlier operations, the lower one being about 400 feet long, and the upper adit, 125 feet above, being about 170 feet long. Both adits follow steeply-dipping chloritic alteration in the granodiorite country rock. Within this zone, thin stringers of high grade copper ore are found; however, they seldom exceed 2 inches in thickness, and are absent through much of the explored length of the zone. The copper minerals consist of primary bornite, covellite, and chalcopyrite. A small amount of stoping had been done in the upper adit during the earlier operations, but it is doubtful whether the stringers mined totaled 6 inches in width of ore in the stope.

Reviewed by
DMEA OPERATING COMMITTEE
3-17-52
(NB) (date)

The present owners drove an inclined stope-raise, following the best showing on the lower level. This incline encountered a fault which cut off what little ore there was to follow. Being completely inexperienced, the operators did not recognize the fault and continued the raise vertically to intercept the upper adit at the old stope; due to the fault displacement, however, the raise did not break into the upper level. This gave them the impression that more than one ore zone was present, but further work was not done.

The operators are completely inexperienced, but are honest and well-meaning. They are well equipped for their small operation.

The exploration proposal primarily appears to be for the purpose of locating parallel ore zones by diamond drilling. The belief that two ore zones are present is probably due to a lack of understanding of the fault which displaced the ore. Evidence of such parallel zones, as stated above, is not present. The surface rocks are well exposed.

The ore zone crosses a steep ridge. The present workings are on the steep eastern face once subjected to heavy glacial "plucking". The western slope is not as steep and the outcrops are concealed. The operators propose bulldozing in this area. This work might prove successful, but as there are no exposures to be examined, the possibilities of successful work here are not too good.

Peter H. Toepfer.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

No. 157 Howard Street
Spokane 4, Washington

March 5, 1952

Memorandum

To: Chairman, Operating Committee, DMEA.

From: DMEA Field Team, Region II.

Subject: Application for DMEA assistance on the Lake Serene mine, Snohomish County, Washington.

Enclosed are four copies of an application for DMEA assistance submitted by the Lake Serene Mining Co., Snohomish County, Washington. The application is incompletely prepared and needs additional information, particularly a more detailed explanation of what exploration work is to be done and where.

Messrs. R. H. Toepfer and S. A. Magill, U. S. Bureau of Mines, visited the Lake Serene property during the fall of 1950. Copies of a report by Mr. Toepfer, describing this visit, are submitted herewith. Mr. Toepfer reports a considerable amount of adit exploration on two levels that expose thin stringers of copper-bearing ore which seldom exceed 2 inches in thickness. In a small stope, off the upper level, the total width of these stringers is not believed to aggregate 6 inches.

On the basis of known information on the Lake Serene mine, the Field Team recommends denial of the subject application.

By Field Team, Region II

A. S. Weissenborn, Executive Officer
(U. S. Geological Survey)

S. A. Volin, Member
(U. S. Bureau of Mines)

Enclosures

c.c.: Spo

1201 North Division Street
Spokane 2, Washington
March 3, 1952

MEMORANDUM

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

From: P. H. Toepfer, Mining Engineer, Region II

Subject: DMEA exploration loan request, Lake Serene Mine, Snohomish County, Wash.
DMEA Docket No. 2421
Commodity: Copper

A note dated February 27, 1952, was received from Thor Kilagaard of the U.S.G.S., asking information on the advisability of scheduling an examination of the Lake Serene mine, and whether a DMEA loan might be granted there. I would not recommend favorable action on a DMEA loan.

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3-17-52
(date)

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Peter M. Toepfer.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2421
Metal or Mineral
Date Received 3-10-52
Amount $ 14800-
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 10 1952

LAKE SERENE MINING CO. INC.
SNOQUALMIE
WASHINGTON

Name and address of applicant

Date Feb. 20, 1952

If you have already filed MF-100, give date filed herewith, type of assistance requested ~~diamond drilling~~,

DMA Docket Number (if available)

INSTRUCTIONS

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

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

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

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

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract. No liens or encumbrances

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

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

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

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

3. (*a*) Describe fully the proposed work and give the total cost of the project. 1500 ft. diamond drilling

   (*b*) State the time required to start the project and to complete it. Can start when snow goes off (3 or 4 mo.)

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

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

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item. None

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

10. (*a*) How much are you prepared to invest in the proposed project? Present stockholders will furnish money required.

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

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

CERTIFICATION

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

LAKE SERENE MINING CO. INC.
(Name of company)

By Frank Waugaman
(Signature of authorized official)

Feb. 20, 1952
(Date)

President
(Title)

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

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

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2421
Metal or Mineral
Date Received 3-10-52
Amount $
Participation (Government %)

Defense Minerals Administration
MAR 10 1952

LAKE SERENE MINING CO. INC.
SNOQUALMIE
WASHINGTON

Name and address of applicant

Date Feb 20, 1952

If you have already filed MF-100, give date filed herewith, type of assistance requested ~~diamond drilling~~,

DMA Docket Number (if available)

INSTRUCTIONS

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

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

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

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

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract. No liens or encumbrances

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

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

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

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

3. (*a*) Describe fully the proposed work and give the total cost of the project. 1500 ft. diamond drilling

   (*b*) State the time required to start the project and to complete it. Can start when snow goes off (3 or 4 mo.)

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

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

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item. None

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

10. (*a*) How much are you prepared to invest in the proposed project? Present stockholders will furnish money required.

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

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

CERTIFICATION

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

LAKE SERENE MINING CO., INC.
(Name of company)

By Frank Waugaman
(Signature of authorized official)

Feb. 20, 1952
(Date)

President
(Title)

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

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

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2421

Date received 3-10-52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 10 1952

LAKE SERENE MINING CO., INC.
SNOQUALMIE
WASHINGTON

Name and address of applicant

Date Feb. 20 1952

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) Necessity Certificate pursuant to the provisions of Sec. 124-A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

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

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products? Copper and Silver
   (*b*) What are the byproducts, if any? Some Gold
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. 60 ft.
   (*b*) Linear feet of drifts and crosscuts. 480-120
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly). 150 ft. raise and 90

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity. No water
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. 2 mi. south of Index, Wash.
   (*b*) Mining district. Index
   (*c*) Township, Section, Range. Twp. 27: Sec. 30 and 31: Range 10
   (*d*) County, State. Snohomish, Washington
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 ~~Several years 1900 to~~ 1906 and 1948 and 1949

   If not in production or operation, estimated date when production will begin After diamond drilling
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: 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)
Frank Waugaman	President	none					
Hector Brown	Vice-Pres.	none					
Hazel Waugaman	Sec. & Tres.	none					
Frank Hackney							
Mary B. Hunter							
W. R. Johnson							
C. B. Hall							
Howard Stow	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$100,000	$	$100.00		none
Preferred stock	$ none	$	$		

*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.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

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

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.

This mine was operated in the early 1910's and was known as the Silbur Queen Mine.

Several car loads of high grade copper ore was shipped by Great Northern Railroad to Trenton. This ore was hauled to railroad by horses.

When road became available the LAKE FRUPRW MINING CO. finished the road to mine and built a 4 room cabin, put in good water system, built 75 ton bunker, laid tracks and bought cars, new 185 C.F. compressor with jackhammers, drills, air hose and water and air pipes. Also tools, ventilating system and etc.

Two miners were one on a small vein and some ore shipped to Tacoma Smelter.

The outcropping shows at various places over the mountain. Apparently we are not on the main vein. We would like to Diamond Drill in the lower tunnel, about every 50 ft. on the shear zone, which is 60ft. wide and 450 ft. long.

We would also like to do some outside drilling, which would require some bulldozing work.

Total requires about $14,200 dollars, as listed below.

$12,000 for Diamond Drilling
$1000 for bulldozing
$1200 for surveying, sampling and engineering

The Bureau of Mines has a survey map of the lower tunnel by C. F. Tomfer and L. A. Ewell.

Will enclose thesis on Lake Serene Mine, by W. C. Morer, a University graduate of Mining Engineering.

} yes with this copy. cg 3/6

Copy

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

Know All Men By These Presents:

Whereas, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Snohomish, State of Wash., described in a certain Exploration Project Contract dated _____, 195__, between LAKE SERENE MINING CO., INC. _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated Mar. 31 1949, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 11 day of Feb., 1952

T. J. EDWARDS

VICLA EDWARDS
Husband and Wife

(*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)					
Indicated (probable)					

(*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. Road to mine Mine 2 mi. from main hiway US #2, Wenatchee to Everett

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year. Bridal Falls creek-----worlds of water

15. Power:

State amount of power used, rate per hour, and source thereof. 185 H P Compressor

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period. 3 workmen, miners and muckers

17. Equipment and Facilities:

185 Compressor, stoper, jackhammers, rails, cars, venilating system and small tools.

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. Not operating at present.

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.

LAKE SERENE MINING CO., INC.
(Name of company)

By Frank Waugaman
(Signature of authorized official)

Feb. 20 1952
(Date)

President
(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

MINING LEASE

Copy

911857

THIE AGREEMENT, made and entered into this 31st day of March, 1949, by and between T. J. EDWARDS and VIO LA EDWARDS, his wife, of Seattle, Washington, Lessors, and LAKE SERENE MINING CO., INC., a Washington corporation, Lessee, WITNESSETH:

WHEREAS, the Lessors heretofore leased the property hereinafter described to Hector Brown and Frank Waugaman by lease dated the 19th day of March, 1945, which lease was assigned to the Lessee herein; and

WHEREAS, certain delinquencies have developed in the payment of the rent under the said lease;

NOW, THEREFORE, IT IS HEREBY AGREED that the said original lease above described is cancelled and any rent owing on account thereof is hereby forgiven, and that this lease is taken in substitution therefor.

The Lessors, for and in consideration of the payment of One Dollar ($1.00), receipt whereof is hereby acknowledged, and of the rents and payments to be made, and of the covenants and agreements hereinafter specified to be performed, hereby lease to the said Lessee all of the following describing mining claims, to- wit:

> Five patented mining claims in the Index Mining District, Survey 883, and situated in Sections Thirty (30) and Thirty-one (31) of Township Twenty-seven (27), North of Range Ten (10) East of W. M., Namely, Crown Jewell, Pride of Index, Mystery, Copper Queen, and 16 to 1, all situated in the County of Snohomish, State of Washington;

together with the appurtenances, to have and to hold unto the said Lessee for the term of twenty (20) years from the 1st day of April, 1949, unless sooner forfeited, cancelled or determined as herein provided.

The Lessee, so long as said lease is in effect, shall be permitted to work the mine or mines on said property so long as the same are worked in accordance with good and economical mining practices so as to take out the greatest amount of ore possible without waste and with due regard to the development and preservation of said premises as a workable mine, with the understanding that the Lessee shall keep the road upon the said premises leading to the mine in as good condition as the same is in at the present time.

Commencing May 1, 1949, the Lessee shall pay to the Lessors the sum of Fifty Dollars ($50.00) per month as rental of said property on the 1st day of each and every month in advance for the full term of this lease, plus royalty payments as hereinafter provided for. The first $50.00 of royalty payments made in any month may be applied toward the rental owing on the 1st day of the succeeding month, but no such royalty payments shall be applied on account of any rent except the first month's rent immediately following the payment. The effect of the above is that from royalty payments made in any month, only $50.00 may be applied upon monthly rent and that for the month immediately following the payment.

The Lessee, in addition to the fixed rental, shall pay a royalty rental based on the assay value of each

shipment according to the following scale:

Up to $30.00 ore.	Royalty	10%
From $30.00 to $35.00 ore. . .	"	12- 1/2%
From $35.00 to $40.00 ore. . .	"	15%
From $40.00 to $45.00 ore . . .	"	17-1/2%
Above $45.00 ore.	"	20%

The assay value shall be determined upon each shipment before any deductions on account of non- recoverability or of any other nature or description. Having determined the assay value, the royalty percentage shall be determined according to the foregoing table. The royalty owing on each shipment shall be arrived at by taking such determined percentage of the net returns on the shipment, net returns being not only net returns after deducting all smelter charges, but also after deducting the cost of the transportation of the ore from the mine to the smelter. The net royalty so figured shall be withheld by the smelter company from the sum due the Lessee on the shipment and shall be paid to the Lessors by the smelter company, accompanied by a copy of the statement to the Lessee on the shipment.

The Lessee may at any time discontinue operations on said premises and surrender same to Lessors, in which event Lessee shall deliver to Lessors its quit claim deed to said premises and a ninety (90) days notice of its intention to determine and surrender this lease, and after the payment of the monthly rentals due during such nintyday period, shall not thereafter be liable for any more payments.

The Lessee shall pay all taxes, personal and real, which may be hereafter assessed against the said premises or the improvements thereon, and any taxes which may have

been assessed while the prior lease was outstanding and which are still unpaid. The Lessee shall pay all workman's compensation, industrial insurance, unemployment insurance, social security, or any other tax or taxes or levies, including severance tax, properly assessed or that may become due under any laws of the United States of America, or the State of Washington, or its subdivisions.

It is understood and agreed that the only relationship between the parties hereto is that of Lessors and Lessee, that the Lessee is not in any way the agent of the Lessors and may not bind the Lessors for the payment of any obligations.

The Lessors shall not be responsible for labor, supplies or materials used or furnished upon said premises during the tenure of this lease and notice to such effect shall be posted and kept posted upon the property by the Lessee.

The Lessee shall pay all labor and material accounts promptly and shall at all times keep the property and the leasehold clear of all possible liens and encumbrances.

Lessee shall carry on all surface and underground works in a safe and workmanlike manner at all times and shall comply with all state and federal laws and regulations relative to the proper conducting of mining operations, and with all other laws duly prescribed by competent authority.

The Lessee shall keep a set of books duly acceptable under usual accounting practice up to date and available

for inspection by the Lessors, or their agent or agents, at all reasonable times.

The Lessee shall not assign this lease without the written consent of the Lessors.

The Lessee shall allow the Lessors, their agents or assigns, the right to enter upon said premises and inspect same at any and all reasonable times.

Time is of the essence of this agreement, and in case the Lessee should default in making performance of any of the requirements hereof, promptly when due, then and in that event the Lessee's rights shall terminate hereunder, and Lessors shall give the Lessee thirty (30) days notice of the forfeiture of this agreement, such notice to be given by registered letter addressed to the Lessee, during which thirty day period the Lessee shall have the right to cure all defaults, unless the default claimed be mining practices, or plan of operation, in which event the Lessee shall have thirty days to commence its compliance and must thereafter proceed with due diligence until the claimed defaults shall be complied with, otherwise the Lessors shall have the right to keep and retain all payments made by the Lessee as rent and as and for liquidated damages for the breach hereof, and shall have the right to retake possession of said mining claims, to the exclusion of the Lessee, with or without legal action.

Any and all improvements made on the premises by the Lessee shall remain the property of the Lessee, with the right to remove same, with the exception that the

Lessee shall not remove rails, ties, timbers, air- pipes, ventilators, or any permanent buildings.

In the event, on any occasion or occasions, the Lessors may excuse on the part of the Lessee any default of the Lessee hereunder, the same shall not be construed as a waiver on the part of the Lessors of any default by the Lessee, and Lessors may thereafter invoke all penalties and forfeiture provisions of this agreement strictly in accordance with the terms hereof.

In the event the road to the mine is blocked by snow which cannot be cleared by the expenditure of a reasonable sum, of the existence of which condition it is agreed T. J. Edwards shall be the sole judge, then rentals shall be waived while the condition exists. Such rentals shall be waived only after written request by the Lessee to the Lessors given at the beginning of the time when the Lessee claims the condition exists. Such waiver shall continue only until the time when the condition could be remedied by a reasonable expenditure, of which again T. J. Edwards shall be the sole judge.

The Lessors do not guarantee the use of any roads outside the limits of the mining claims leased.

The Lessee accepts the lease with knowledge of the sale of certain timber upon the mining claims to Seattle-Snohomish Mill Company, with the right of the said mill company for the Use of certain roads for the removal of the said timber.

IN WITNESS WHEREOF, the said Lessors have hereunto set their hands and the said Lessee has caused this instrument to be executed by its proper officers and its corporate seal to be hereunto affixed the day and year first above written.

T. J. Edwards

Viola Edwards

LESSORS

LAKE SERENE MINING CO., INC.

By Frank Waugaman
President

By Hazel Waugaman
Secretary

LESSEE

STATE OF WASHINGTON:
:ss.
COUNTY OF KING :

On this 31st day of March, 1949, personally appeared before me T. J. EDWARDS and VIOLA EDWARDS, his wife, to me known to be the individuals described in and who executed the within and foregoing Mining Lease, and acknowledged to me that they signed the same as their free and voluntary act and deed, for the used and purposes therein mentioned.

WITNESS my hand and official seal the day and year first above written.

George W. Barber
Notary public in and for the State of Washington, residing at Seattle

STATE OF WASHINGTON:
:ss.
COUNTY OF KING :

On this 31st day of March, 1949, personally appeared FRANK WAUGAMAN and HAZEL WAUGAMAN, to me known to be the President and Secretary, respectively, of LAKE SERENE MINING CO., INC., the corporation that executed the foregoing Mining Lease, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year first above written.

J. I. Miller
Notary Public in and for the State of Washington, residing at Snoqualmie.

Form MF-100
(May 1951)

U. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2421

Date received 3-10-52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 10 1952

LAKE SERENE MINING CO., INC.
SNOQUALMIE
WASHINGTON

Name and address of applicant

Date Feb 20 1952

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products? Copper and Silver
   (*b*) What are the byproducts, if any? Some Gold
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. 60 ft.
   (*b*) Linear feet of drifts and crosscuts. 480-120
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly). 150 ft. raise and 90

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity. No water
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. 2 mi. south of Index, Wash.
   (*b*) Mining district. Index
   (*c*) Township, Section, Range. Twp. 27: Sec. 30 and 31; Range 10
   (*d*) County, State. Snohomish, Washington
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not in operation
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☒ Lessee.
   - ☐ Contractor.
5. Number of years in production Several years 1900 to 1906 and 1948 and 1949

   If not in production or operation, estimated date when production will begin After diamond drilling
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: 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)
Frank Waugaman	President	none					
Hector Brown	Vice-Pres.	none					
Hazel Waugaman	Sec. & Tres.	none					
Frank Hackney							
Mary B. Hunter							
W. R. Johnson							
C. B. Hall							
Howard Stow	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$100,000.	$	$100.00		none
Preferred stock	$ none	$	$		

*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.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

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

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.

This mine was operated in the early 1900's and was known as the Wilbur Index Mine.

Several car loads of high grade copper ore was shipped by Great Northern Railroad to Smelter. This ore was carried to railroad by horses.

When road became available the LAKE SERENE MINING CO. finished the road to mine and built a 2 room cabin, put in good water system, built 75 ton bunker, laid tracks and bought cars, new 185 H.P. compressor with jackhammer, stoper, air hose and water and air pipes. Also tools, ventilating system and etc.

Some mining was done on a small scale and some ore shipped to Tacoma Smelter.

The outcropping shows at various places over the mountain. Apparently we are not on the main vein. We would like to Diamond Drill in the lower tunnel , about every 50 ft. on the shear zone, which is 80ft. wide and 480 ft. long.

We would also like to do some outside drilling, which would require some bulldozing work.

Would require about $14,800 dollars, as listed below.

$12,000	for Diamond Drilling
$2000	for bulldozing
$800	for surveying, sampleing and engineering

The Bureau of Mines has a survey map of the lower tunnel by P. H. Toepfer and E. A. Megill.

Will enclose Thesis on Lake Serene Mine, by W. C. Norem, a Univercity graduate of Mining Engineering.

(*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)					
Indicated (probable)					

(*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. Road to mine Mine 2 mi. from main hiway US #2, Wenatchee to Everett

14. Water Supply:

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

Bridal Falls creek-------worlds of water

15. Power:

State amount of power used, rate per hour, and source thereof. 185 H P Compressor

16. Labor:

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

3 workmen, miners and muckers

17. Equipment and Facilities:

185 Compressor, stoper, jackhammers, rails, cars, venilating system and small tools.

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.

Not operating at present

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.

LAKE SERENE MINING CO. INC.
(Name of company)

By Frank Waugaman
(Signature of authorized official)

Feb. 20 1952
(Date)

President
(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

MF-202

Copy

LANDLORD'S SUBORDINATION AGREEMENT

Know All Men By These Presents:

Whereas, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Snohomish, State of Wash., described in a certain Exploration Project Contract dated _____, 195__, between LAKE SERENE MINING COMPANY _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated Mar. 31 1949, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 11 day of Feb., 1952

T. J. EDWARDS
VIOLA EDWARDS
Husband and Wife

MINING LEASE

Copy

THIS AGREEMENT, made and entered into this 31st day of March, 1949, by and between T. J. EDWARDS and VIOLA EDWARDS, his wife, of Seattle, Washington, Lessors, and LAKE SERENE MINING CO. , INC., a Washington corporation, Lessee, WITNESSETH:

WHEREAS, the Lessors heretofore leased the property hereinafter described to Hector Brown and Frank Waugaman by lease dated the 19th day of March, 1945, which lease was assigned to the Lessee herein; and

WHEREAS, certain delonquencies have developed in the payment of the rent under the said lease;

NOW, THEREFORE, IT IS HEREBY AGREED that the said original lease above described is cancelled and any rent owing on account thereof is hereby forgiven, and that this lease is taken in substitution therefor.

The Lessors, for and in consideration of the payment of One Dollar ($1.00), receipt whereof is hereby acknowledged, and of the rents and payments to be made, and of the covenants and agreements hereinafter specified to be performed, hereby lease to the said Lessee all of the following describing mining claims, to-wit:

> Five patented mining claims in the Index Mining District, Survey 885, and situated in Sections Thirty (30) and Thirty-one (31) of Township Twenty-seven (27), North of Range Ten (10) East of W.M., Namely, Crown Jewell, Pride of Index, Mystery, Copper Queen, and 16 to 1, all situated in the County of Snohomish, State of Washington;

together with the appurtenances, to have and to hold unto the said Lessee for the term of twenty (20) years from the 1st day of April, 1949, unless sooner forfeited, cancelled or determined as herein provided.

The Lessee, so long as said lease is in effect, shall be permitted to work the mine or mines on said property so long as the same are worked in accordance with good and economical mining practices so as to take out the greatest amount of ore possible without waste and with due regard to the development and preservation of said premises as a workable mine, with the understanding that the Lessee shall keep the road upon the said premises leading to the mine in as good condition as the same is in at the present time.

Commencing May 1, 1949, the Lessee shall pay to the Lessors the sum of Fifty Dollars ($50.00) per month as rental of said property on the 1st day of each and every month in advance for the full term of this lease, plus royalty payments as hereinafter provided for. The first $50.00 of royalty payments made in any month may be applied toward the rental owing on the 1st day of the succeeding month, but no such royalty payments shall be applied on account of any rent except the first month's rent immediately following the payment. The effect of the above is that from royalty payments made in any month, only $50.00 may be applied upon monthly rent and that for the month immediately following the payment.

The Lessee, in addition to the fixed rental, shall pay a royalty rental based on the assay value of each

shipment according to the following scale:

Up to $30.00 ore.	Royalty	10%
From $30.00 to $35.00 ore	"	12-1/2%
From $35.00 to $40.00 ore . . .	"	15%
From $40.00 to $45.00 ore . . .	"	17-1/2%
Above $45.00 ore	"	20%

The assay value shall be determined upon each shipment before any deductions on account of non-recoverability or of any other nature or description. Having determined the assay value, the royalty percentage shall be determined according to the foregoing table. The royalty owing on each shipment shall be arrived at by taking such determined percentage of the net returns on the shipment, net returns being not only net returns after deducting all smelter charges, but also after deducting the cost of the transportation of the ore from the mine to the smelter. The net royalty so figured shall be withheld by the smelter company from the sum due the Lessee on the shipment and shall be paid to the Lessors by the smelter company, accompanied by a copy of the statement to the Lessee on the shipment.

The Lessee may at any time discontinue operations on said premises and surrender same to Lessors, in which event Lessee shall deliver to Lessors its quit claim deed to said premises and a ninety (90) days notice of its intention to determine and surrender this lease, and after the payment of the monthly rentals due during such ninty day period, shall not thereafter be liable for any more payments.

The Lessee shall pay all taxes, personal and real, which may be hereafter assessed against the said premises or the improvements thereon, and any taxes which may have

been assessed while the prior lease was outstanding and which are still unpaid. The Lessee shall pay all workmen's compensation, industrial insurance, unemployment insurance, social security, or any other tax or taxes or levies, including severance tax, properly assessed or that may become due under any laws of the United States of America, or the State of Washington, or its subdivisions.

It is understood and agreed that the only relationship between the parties hereto is that of Lessors and Lessee, that the Lessee is not in any way the agent of the Lessors and may not bind the Lessors for the payment of any obligations.

The Lessors shall not be responsible for labor, supplies or materials used or furnished upon said premises during the tenure of this lease and notice to such effect shall be posted and kept posted upon the property by the Lessee.

The Lessee shall pay all labor and material accounts promptly and shall at all times keep the property and the leasehold clear of all possible liens and encumbrances.

Lessee shall carry on all surface and underground works in a safe and workmanlike manner at all times and shall comply with all state and federal laws and regulations relative to the proper conducting of mining operations, and with all other laws duly prescribed by competent authority.

The Lessee shall keep a set of books duly acceptable under usual accounting practice up to date and available

for inspection by the Lessors, or their agent or agents, at all reasonable times.

The Lessee shall not assign this lease without the written consent of the Lessors.

The Lessee shall allow the Lessors, their agents or assigns, the right to enter upon said premises and inspect same at any and all reasonable times.

Time is of the essence of this agreement, and in case the Lessee should default in making performance of any of the requirements hereof, promptly when due, then and in that event the Lessee's rights shall terminate hereunder, and Lessors shall give the Lessee thirty (30) days notice of the forfeiture of this agreement, such notice to be given by registered letter addressed to the Lessee, during which thirty day period the Lessee shall have the right to cure all defaults, unless the default claimed be mining practices, or plan of operation, in which event the Lessee shall have thirty days to commence its compliance and must thereafter proceed with due diligence until the claimed defaults shall be complied with, otherwise the Lessors shall have the right to keep and retain all payments made by the Lessee as rent and as and for liquidated damages for the breach hereof, and shall have the right to retake possession of said mining claims, to the exclusion of the Lessee, with or without legal action.

Any and all improvements made on the premises by the Lessee shall remain the property of the Lessee, with the right to remove same, with the exception that the

Lessee shall not remove rails, ties, timbers, air-pipes, ventilators, or any permanent buildings.

In the event, on any occasion or occasions, the Lessors may excuse on the part of the Lessee any default of the Lessee hereunder, the same shall not be construed as a waiver on the part of the Lessors of any default by the Lessee, and Lessors may thereafter invoke all penalties and forfeiture provisions of this agreement strictly in accordance with the terms hereof.

In the event the road to the mine is blocked by snow which cannot be cleared by the expenditure of a reasonable sum, of the existence of which condition it is agreed T. J. Edwards shall be the sole judge, then rentals shall be waived while the condition exists. Such rentals shall be waived only after written request by the Lessee to the Lessors given at the beginning of the time when the Lessee claims the condition exists. Such waiver shall continue only until the time when the condition could be remedied by a reasonable expenditure, of which again T. J. Edwards shall be the sole judge.

The Lessors do not guarantee the use of any roads outside the limits of the mining claims leased.

The Lessee accepts the lease with knowledge of the sale of certain timber upon the mining claims to Seattle-Snohomish Mill Company, with the right of the said mill company for the use of certain roads for the removal of the said timber.

IN WITNESS WHEREOF, the said Lessors have hereunto set their hands and the said Lessee has caused this instrument to be executed by its proper officers and its corporate seal to be hereunto affixed the day and year first above written.

T. J. Edwards

Viola Edwards

LESSORS

LAKE SERENE MINING CO., INC.

By Frank Waugaman
President

By Hazel Waugaman
Secretary

LESSEE

STATE OF WASHINGTON:
:ss.
COUNTY OF KING :

On this 31st day of March, 1949, personally appeared before me T. J. EDWARDS and VIOLA EDWARDS, his wife, to me known to be the individuals described in and who executed the within and foregoing Mining Lease, and acknowledged to me that they signed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

WITNESS my hand and official seal the day and year first above written.

George E. Barber
Notary public in and for the State of Washington, residing at Seattle

STATE OF WASHINGTON:
:ss.
COUNTY OF KING :

On this 31st day of March, 1949, personally appeared FRANK WAUGAMAN and HAZEL WAUGAMAN, to me known to be the President and Secretary, respectively, of LAKE SUPERIOR MINING CO., INC., the corporation that executed the foregoing Mining Lease, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year first above written.

J. I. Miller
Notary Public in and for the State of Washington, residing at Snoqualmie.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

B 27 1952

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2421
Metal or Mineral
Date Received 3-10-52
Amount $
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 10 1952
RECEIVED

LAKE SERENE MINING CO. INC.
SNOQUALMIE
WASHINGTON

Name and address of applicant

Date Feb. 20, 1952

If you have already filed MF-100, give date filed herewith, type of assistance requested ~~diamond drilling~~,

DMA Docket Number (if available)

INSTRUCTIONS

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

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

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

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

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

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

   No liens or encumbrances

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

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

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

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

3. (*a*) Describe fully the proposed work and give the total cost of the project. 1500 ft. diamond drilling

   (*b*) State the time required to start the project and to complete it. Can start when snow goes off (3 or 4 mo.)

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

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

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item. None

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

10. (*a*) How much are you prepared to invest in the proposed project? Present stockholders will furnish money required

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

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

CERTIFICATION

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

LAKE SFRENE MINING CO., INC.
(Name of company)

By Frank Naugaman
(Signature of authorized official)

Feb. 20, 1952
(Date)

President
(Title)

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

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

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2421

Date received 3-10-52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 10 1952

LAKE SERENE MINING CO., INC.
SNOQUALMIE
WASHINGTON

Name and address of applicant

Date Feb. 20 1952

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) Necessity Certificate pursuant to the provisions of Sec. 124-A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

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

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products? Copper and Silver
   (*b*) What are the byproducts, if any? Some Gold
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. 60 ft.
   (*b*) Linear feet of drifts and crosscuts. 480-120
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly). 150 ft. raise and 90
   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity. No water
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. 2 mi. south of Index, Wash.
   (*b*) Mining district. Index
   (*c*) Township, Section, Range. Twp. 27; Sec. 30 and 31; Range 10
   (*d*) County, State. Snohomish, Washington
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not in operation
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☒ Lessee.
   - ☐ Contractor.
5. Number of years in production Several years 1900 to 1906 and 1948 and 1949
   If not in production or operation, estimated date when production will begin After diamond drilling
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: 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)
Frank Waugaman	President	none					
Hector Brown	Vice-Pres.	none					
Hazel Waugaman	Sec. & Tres.	none					
Frank Hackney							
Mary B. Hunter							
M. R. Johnson							
C. B. Hall							
Howard Stow	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$100,000	$	$100.00		none
Preferred stock	$ none	$	$		

*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.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

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

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.

This mine was operated in the early 1900's and was known as the Wilbur Index Mine.

Several car loads of high grade copper ore was shipped by Great Northern Railroad to Smelter. This ore was carried to railroad by horses.

When road became available the LAKE SERENE MINING CO. finished the road to mine and built a 2 room cabin, put in good water system, built 75 ton bunker, laid tracks and bought cars, new 185 H.P. compressor with jackhammer, stoper, air hose and water and air pipes. Also tools, ventilating system and etc.

Some mining was done on a small scale and some ore shipped to Tacoma Smelter.

The outcropping shows at various places over the mountain. Apparently we are not on the main vein. We would like to Diamond Drill in the lower tunnel , about every 50 ft. on the shear zone, which is 80ft. wide and 480 ft. long.

We would also like to do some outside drilling, which would require some bulldozing work.

Would require about $14,800 dollars, as listed below.

$12,000	for Diamond Drilling
$2000	for bulldozing
$800	for surveying, sampleing and engineering

The Bureau of Mines has a survey map of the lower tunnel by P. H. Toeffer and E. A. Magill.

Will enclose Thesis on Lake Serene Mine, by W. C. Norem, a Univercity graduate of Mining Engineering.

(*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)					
Indicated (probable)					

(*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. Road to mine Mine 2 mi. from main hiway US #2, Wenatchee to Everett

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year. Bridal Falls Creek-------oceans of water

15. Power:

State amount of power used, rate per hour, and source thereof. 185 H P Compressor

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period. 3 workmen, miners and muckers

17. Equipment and Facilities: 185 Compressor, stoper, jackhammers, rails, cars, venilating system and small tools.

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.

LAKE SERENE MINING CO., INC.
(Name of company)

By Frank Wangaman
(Signature of authorized official)

Feb. 20 1952
(Date)

President
(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

Copy

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

Know All Men By These Presents:

Whereas, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Snohomish, State of Wash., described in a certain Exploration Project Contract dated _____, 195__, between LAKE SERENE MINING COMPANY _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated Mar. 31 1949 does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 11 day of Feb., 195 2

T. J. EDWARDS
VIOLA EDWARDS
Husband and Wife

MINING LEASE

Copy

THIS AGREEMENT, made and entered into this 31st day of March, 1949, by and between T. J. EDWARDS and VIOLA EDWARDS, his wife, of Seattle, Washington, Lessors, and LAKE SERENE MINING CO., INC., a Washington corporation, Lessee, WITNESSETH:

WHEREAS, the Lessors heretofore leased the property hereinafter described to Hector Brown and Frank Waugaman by lease dated the 19th day of March, 1945, which lease was assigned to the Lessee herein; and

WHEREAS, certain delonquencies have developed in the payment of the rent under the said lease;

NOW, THEREFORE, IT IS HEREBY AGREED that the said original lease above described is cancelled and any rent owing on account thereof is hereby forgiven, and that this lease is taken in substitution therefor.

The Lessors, for and in consideration of the payment of One Dollar ($1.00), receipt whereof is hereby acknowledged, and of the rents and payments to be made, and of the covenants and agreements hereinafter specified to be performed, hereby lease to the said Lessee all of the following describing mining claims, to-wit:

> Five patented mining claims in the Index Mining District, Survey 883, and situated in Sections Thirty (30) and Thirty-one (31) of Township Twenty-seven (27), North of Range Ten (10) East of W.M., Namely, Crown Jewell, Pride of Index, Mystery, Copper Queen, and 16 to 1, all situated in the County of Snohomish, State of Washington;

together with the appurtenances, to have and to hold unto the said Lessee for the term of twenty (20) years from the 1st day of April, 1949, unless sooner forfeited, cancelled or determined as herein provided.

The Lessee, so long as said lease is in effect, shall be permitted to work the mine or mines on said property so long as the same are worked in accordance with good and economical mining practices so as to take out the greatest amount of ore possible without waste and with due regard to the development and preservation of said premises as a workable mine, with the understanding that the Lessee shall keep the road upon the said premises leading to the mine in as good condition as the same is in at the present time.

Commencing May 1, 1949, the Lessee shall pay to the Lessors the sum of Fifty Dollars ($50.00) per month as rental of said property on the 1st day of each and every month in advance for the full term of this lease, plus royalty payments as hereinafter provided for. The first $50.00 of royalty payments made in any month may be applied toward the rental owing on the 1st day of the succeeding month, but no such royalty payments shall be applied on account of any rent except the first month's rent immediately following the payment. The effect of the above is that from royalty payments made in any month, only $50.00 may be applied upon monthly rent and that for the month immediately following the payment.

The Lessee, in addition to the fixed rental, shall pay a royalty rental based on the assay value of each

shipment according to the following scale:

Up to $30.00 ore.	Royalty	10%
From $30.00 to $35.00 ore . . .	"	12-1/2%
From $35.00 to $40.00 ore . . .	"	15%
From $40.00 to $45.00 ore . . .	"	17-1/2%
Above $45.00 ore	"	20%

The assay value shall be determined upon each shipment before any deductions on account of non-recoverability or of any other nature or description. Having determined the assay value, the royalty percentage shall be determined according to the foregoing table. The royalty owing on each shipment shall be arrived at by taking such determined percentage of the net returns on the shipment, net returns being not only net returns after deducting all smelter charges, but also after deducting the cost of the transportation of the ore from the mine to the smelter. The net royalty so figured shall be withheld by the smelter company from the sum due the Lessee on the shipment and shall be paid to the Lessors by the smelter company, accompanied by a copy of the statement to the Lessee on the shipment.

The Lessee may at any time discontinue operations on said premises and surrender same to Lessors, in which event Lessee shall deliver to Lessors its quit claim deed to said premises and a ninety (90) days notice of its intention to determine and surrender this lease, and after the payment of the monthly rentals due during such ninty day period, shall not thereafter be liable for any more payments.

The Lessee shall pay all taxes, personal and real, which may be hereafter assessed against the said premises or the improvements thereon, and any taxes which may have

been assessed while the prior lease was outstanding and which are still unpaid. The Lessee shall pay all workman's compensation, industrial insurance, unemployment insurance, social security, or any other tax or taxes or levies, including severance tax, properly assessed or that may become due under any laws of the United States of America, or the State of Washington, or its subdivisions.

It is understood and agreed that the only relationship between the parties hereto is that of Lessors and Lessee, that the Lessee is not in any way the agent of the Lessors and may not bind the Lessors for the payment of any obligations.

The Lessors shall not be responsible for labor, supplies or materials used or furnished upon said premises during the tenure of this lease and notice to such effect shall be posted and kept posted upon the property by the Lessee.

The Lessee shall pay all labor and material accounts promptly and shall at all times keep the property and the leasehold clear of all possible liens and encumbrances.

Lessee shall carry on all surface and underground works in a safe and workmanlike manner at all times and shall comply with all state and federal laws and regulations relative to the proper conducting of mining operations, and with all other laws duly prescribed by competent authority.

The Lessee shall keep a set of books duly acceptable under usual accounting practice up to date and available

for inspection by the Lessors, or their agent or agents, at all reasonable times.

The Lessee shall not assign this lease without the written consent of the Lessors.

The Lessee shall allow the Lessors, their agents or assigns, the right to enter upon said premises and inspect same at any and all reasonable times.

Time is of the essence of this agreement, and in case the Lessee should default in making performance of any of the requirements hereof, promptly when due, then and in that event the Lessee's rights shall terminate hereunder, and Lessors shall give the Lessee thirty (30) days notice of the forfeiture of this agreement, such notice to be given by registered letter addressed to the Lessee, during which thirty day period the Lessee shall have the right to cure all defaults, unless the default claimed be mining practices, or plan of operation, in which event the Lessee shall have thirty days to commence its compliance and must thereafter proceed with due diligence until the claimed defaults shall be complied with, otherwise the Lessors shall have the right to keep and retain all payments made by the Lessee as rent and as and for liquidated damages for the breach hereof, and shall have the right to retake possession of said mining claims, to the exclusion of the Lessee, with or without legal action.

Any and all improvements made on the premises by the Lessee shall remain the property of the Lessee, with the right to remove same, with the exception that the

Lessee shall not remove rails, ties, timbers, air-pipes, ventilators, or any permanent buildings.

In the event, on any occasion or occasions, the Lessors may excuse on the part of the Lessee any default of the Lessee hereunder, the same shall not be construed as a waiver on the part of the Lessors of any default by the Lessee, and Lessors may thereafter invoke all penalties and forfeiture provisions of this agreement strictly in accordance with the terms hereof.

In the event the road to the mine is blocked by snow which cannot be cleared by the expenditure of a reasonable sum, of the existence of which condition it is agreed T. J. Edwards shall be the sole judge, then rentals shall be waived while the condition exists. Such rentals shall be waived only after written request by the Lessee to the Lessors given at the beginning of the time when the Lessee claims the condition exists. Such waiver shall continue only until the time when the condition could be remedied by a reasonable expenditure, of which again T. J. Edwards shall be the sole judge.

The Lessors do not guarantee the use of any roads outside the limits of the mining claims leased.

The Lessee accepts the lease with knowledge of the sale of certain timber upon the mining claims to Seattle-Snohomish Mill Company, with the right of the said mill company for the use of certain roads for the removal of the said timber.

IN WITNESS WHEREOF, the said Lessors have hereunto set their hands and the said Lessee has caused this instrument to be executed by its proper officers and its corporate seal to be hereunto affixed the day and year first above written.

T. J. Edwards

Viola Edwards

LESSORS

LAKE SERENE MINING CO., INC.

By Frank Waugaman
President

By Hazel Waugaman
Secretary

LESSEE

STATE OF WASHINGTON:
:ss.
COUNTY OF KING :

On this 31st day of March, 1949, personally appeared before me T. J. EDWARDS and VIOLA EDWARDS, his wife, to me known to be the individuals described in and who executed the within and foregoing Mining Lease, and acknowledged to me that they signed the same as their free and voluntary act and deed, for the used and purposes therein mentioned.

WITNESS my hand and official seal the day and year first above written.

George W. Barber
Notary public in and for the State of Washington, residing at Seattle

STATE OF WASHINGTON:
:ss.
COUNTY OF KING :

On this 31st day of March, 1949, personally appeared FRANK WAUGAMAN and HAZEL WAUGAMAN, to me known to be the President and Secretary, respectively, of LAKE SNOQUE MINING CO., INC., the corporation that executed the foregoing Mining Lease, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year first above written.

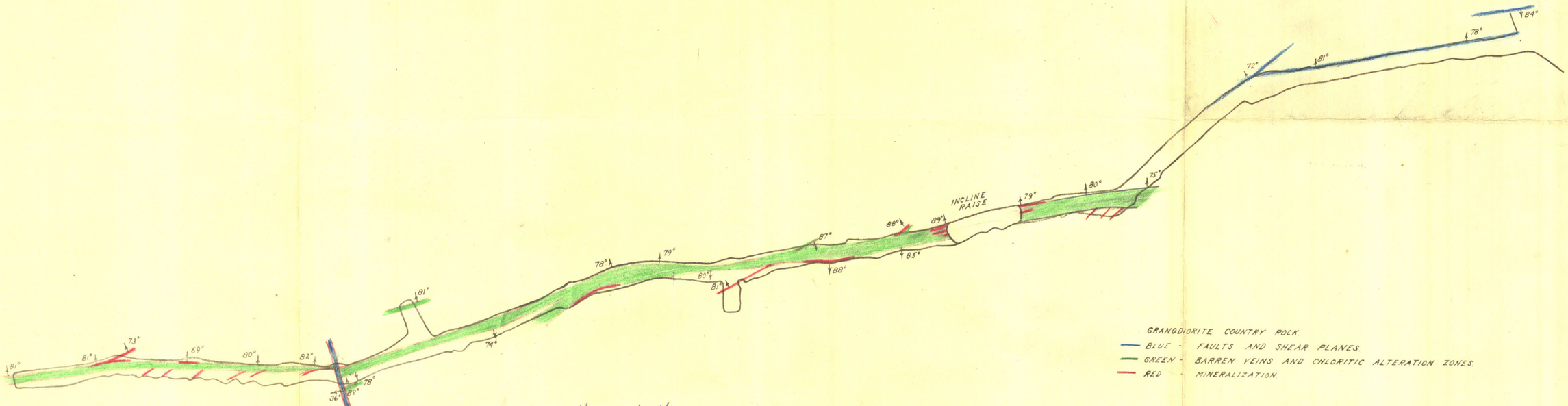
J. I. Miller
Notary Public in and for the State of Washington, residing at Snoqualmie.

Lake Serene Mining Co.

F. M. Hackney
Sonquatonis, Wash.

Lake Serene Mining Co.

F. M. Hackney
Snoqualmie, Wash.



GRANODIORITE COUNTRY ROCK.
BLUE - FAULTS AND SHEAR PLANES.
GREEN - BARREN VEINS AND CHLORITIC ALTERATION ZONES.
RED - MINERALIZATION.

Chloritic zone beyond this fault is not the same as the one followed to this point in the drift.

This fault is observed in the raise and marks the end of the ore found there.

This same fault projects to the face of the cliff just below the second adit, and its displacement can probably be measured there.

NORTH

U.S. DEPARTMENT OF THE INTERIOR.
BUREAU OF MINES.
~~PROJECT 11-103~~
INDEX, WASHINGTON.
LAKE SERENE MINE.
LOWER MAIN LEVEL.

SCALE: 1" = 20 Ft.

PROJECT ENGINEER P.H. TOEPFER 11/15/50
SURVEY E.A. MAGILL FILE

dmea 24221