DMA

AUG 17 1951

REGIONAL DIRECTOR'S
OFFICE
REGION IV
AUG 20 1951
BUREAU OF MINES
DENVER, COLORADO

Re: DMA-870

Mr. Frank Ross
3516 St. Paul Street
Denver, Colorado

Dear Mr. Ross:

In reference to your letter of May 15 in which you ask us to reconsider your request for a loan of $250,000 to open up the Twentieth Century mine in the Ophir district of San Miguel County:

In a new review of your application, we have been able to consult a geological report on the Ophir district that is being prepared for publication by the Geological Survey, and in addition we have sought the advice of the geologist who is familiar with the district. From the information available to us, we must conclude that the chances of finding significant tonnages of lead, zinc and copper ore by the exploration and development work that you propose are not promising enough to justify an expenditure of public funds, whether on a full or 50 percent participating basis. I regret, therefore, that we must reaffirm the original decision to deny your application.

Your interest in the problem of increasing domestic supply of strategic minerals is appreciated.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

ETE

Fwd 4-21-57

ETMcKnight:jr
G: 8/13/51

cc: Files
J. H. East, Jr. (2)
Chief, Lead-Zinc Br.
E. T. McKnight
R. H. Mote
Reports and Records
Dir. Reading, Rm. 4212, GSA
Br. Reading, Rm. 4212, GSA

DMA

REGIONAL DIRECTOR'S
OFFICE
REGION IV
AUG 20 1951
BUREAU OF MINES
DENVER, COLORADO

AUG 17 1951

Memorandum

Re: DMA 870
Frank L. Ross
Twentieth Century claim
Ophir district, Colorado
Straight loan, $250,000
Lead, zinc, copper

To: Reports and Records Unit
Administrative Management Division

From: Lead-Zinc Branch

Subject: Denial of loan

Project for $250,000 was originally denied as a straight loan because the applicant's claim of large base metal reserves at depth was based on analogy with other mines in the San Juan district rather than on any proof of ore. Workings high on the hill were in gold-silver ore, and were mined out at an early date. The proposal was to drive a 3,000 foot tunnel to intersect the veins at depth. Applicant, in a letter of May 15, argues that the DMA is in error in questioning the occurrence of commercial bodies of base metals below the precious metal croppings. His argument is summarized in the following sentence: "Nature reliable, as a tree, leaves above, etc., means roots, carrots, onions or other vegetables below ground, so gold tops in the mines should prove sulfide ores below."

He requests that if DMA will not allocate the full 100 percent for his venture, that it consider a 75%-25% basis; and if this isn't acceptable, then a 50%-50% basis. Thus, he is in effect applying for an exploration loan, although no indication is given as to how he will match funds other than to say that he will try to raise the money through interesting some people that he knows.

The following facts are pertinent to consideration as an exploration proposal:

Applicant owns the Twentieth Century claim which extends from drainage level at Ophir to a considerable height on Silver Hill. The next adjacent claim on the mountain, along the line of the proposed deep tunnel, he does not own (original application requested funds to purchase it), but he has a part interest in the next claim, The Single Standard. The last two claims, extending to the top of the hill, he proposes to purchase, again with funds borrowed from the Government.

The line of claims supposedly extends along a vein which applicant labels as the Single Standard vein. There are surface workings on most of these claims, as shown on a diagrammatic cross section along the

line of the tunnel. They are described as gold-silver workings. The ore taken out is reported to have come at the intersection of the Silver Standard vein with cross veins, and it evidently occurred in isolated pipes. The cross-section sketch is on uncertain scale, but the proposed deep level tunnel along the Single Standard vein appears to be 500-600 feet below the lowest of the surface workings. Applicant's letter of May 15 at one place suggests the interval is 400 feet, but this is not definite.

A report on the Ophir district by J. S. Vhay will shortly be published by the Geological Survey. Mr. Vhay has reviewed this docket and questions the existence of the Single Standard vein, although he corroborates the occurrence of some of the ore pipes on veins with a cross trend. He points out that driving a long drift along the line of the proposed tunnellwould be at best a long shot gamble on the chance of picking up values at depth in some of the veins in the two recognized systems that would trend across the line of this tunnel. He concludes, however, that the proposition is a poor one, and too long a gamble to be worthy of Government participation.

It is recommended that the denial of the application for a direct loan be reaffirmed, and that the proposal for an exploration loan also be denied, and that the attached letter be sent to the applicant.

Returned herewith are a copy of original application on NSRB form 146; originals and copies of applicant's 2 letters dated May 15, 1951; carbon copy of the historical outline of the "Cross mine"; letter of July 16, 1951 from E. T. McKnight to J. S. Vhay; and Vhay's reply of August 3.

Gunnard Johnson

T. P. Billings, Chief
Lead-Zinc Branch

Approved: FWO 8-21-51

Tom Lynn
Director, Supply Division

ETMcKnight:jr
G: 8/13/51

cc: Files
J. H. East, Jr. (2)
E. T. McKnight
Chief, Lead-Zinc Br.
R. H. Mote
D r. Reading, Rm. 4212, GSA
Br. Reading, Rm. 4212, GSA

J. H. East, Jr.
Region IV

May 7, 1951

Memorandum

To: Executive Secretary, D.M.A.

From: Lead-Zinc Branch, D. M. A.

Subject: Denial of exploration loan
Frank L. Ross
Twentieth Century Mine
Ophir District
San Miguel County, Colorado

Re: Docket DMA-870

Commodity: Lead-zinc

The application submitted by Frank L. Ross has been reviewed by the Lead-Zinc Branch. The review reveals the following pertinent facts:

The original proposal was for a loan of $250,000, to be used for driving a lower tunnel 3,000 feet to develop and open for production lead, zinc, and copper ores below mined out gold-silver stopes. Acquisition of additional properties and construction of a mill.

Data on this area indicated that the known ore reserves were inadequate to support the proposed program. The project was classified as "exploration" by the reviewers. A letter was sent to the applicant inquiring if he would participate in the matching fund exploration program. His reply indicates that he is unable to provide his share of funds and submits Forms MF-103, MF-200, requesting 100% as the Government's share.

The covering letter reaffirms the applicant's belief that the proven ore reserves are sufficient to amortize the proposed loan.

The Lead-Zinc Branch recommends that the application be denied for a direct mining loan. The applicant has failed to substantiate that enough proven ore is present to support such a loan. The applicant's interpretation of "proven ore" is not one accepted by geologists and mining engineers. "Proven ore" is not based on analogy with ore in other mines as is done by the applicant. The available data in the Government files and a familiarity with the district by U. S. Geological Survey geologists indicates that the applicant's claims for ore are not based on conclusive evidence.

The reserves for this particular mine should be in the "inferred ore" category.

It is further recommended that since the applicant is unable to provide his share of funds for an exploration project that the application made for this purpose also be denied.

Otto Herres

OTTO HERRES, Chief
Lead-Zinc Branch

A. Brokaw:emp
G 5/7/51

Copies to: J. H. East, Jr., Region IV (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
L. B. Moon
R. H. Mote
L. F. Strobel
T. Lyon
Files

May 7, 1951

Mr. Frank L. Ross
3516 St. Paul Street
Denver, Colorado

Re: Docket DMA-370

Dear Mr. Ross:

Your application for a loan of $250,000 for a mining operation at the Twentieth Century mine has been reviewed by the Defense Minerals Administration. The review also covered the documents submitted by you on April 24, 1951.

The documents supporting your application do not substantiate that there are proven ore reserves adequate to amortize the loan you request. The reserves of "proven ore" as described in your application would come under the accepted definition for "inferred ore". In order for a property to qualify for a direct mining loan it is necessary that the quantity of known reserves be sufficient to assure the recovery of the investment. Under these circumstances we do not feel it would be a justifiable expenditure of public funds to allocate money for the type of project you propose.

In your letter of April 24 you have indicated that you are unable to provide fifty per cent of the funds for an exploration program, therefore we cannot consider your application further since by the rules of the program it is mandatory that the applicant match funds with the Government on an equal basis.

We wish to thank you for bringing this property to our attention.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

ALBrokaw:emp
G 5/7/51
Copies to: J. H. East, Jr. Region IV (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
L. B. Moon
R. H. Mote
L. F. Strobel
T. Lyon
Files

May 3, 1951

Frank L. Ross
3516 St. Paul Street
Denver 5, Colorado

Dear Mr. Ross:

We are today forwarding to Washington the forms NSRB 146 which you submitted to this office.

Sincerely yours,

J. H. East, Jr.
Regional Director

/el
cc-Due files

May 3, 1951

Memorandum

To: Landon Strobel, Executive Secretary, Defense Minerals Administration

From: Executive Officer, BMR Field Team, Region IV

Subject: Forms BMRB 146 - Frank L. Ross, Denver, Colorado

We are attaching three copies of BMRB 146 submitted by Frank L. Ross, 3516 St. Paul Street, Denver 5, Colorado.

J. H. East, Jr.

Attachments
/el
cc-dmm files

APR 12 1951

In reply please
refer to DMA-870

Mr. Frank L. Ross
3516 St. Paul Street
Denver, Colorado

Dear Mr. Ross:

One of the purposes of the Defense Production Act of 1950 is the encouragement of exploration, development and mining of strategic minerals and metals. Where an applicant has proven reserves of strategic materials, Federal aid in mining can be given through procurement contracts for such materials as are in short supply. On the strength of these contracts, the applicant can obtain private financing in most instances.

The program recently approved for encouragement of exploration of stratetic materials calls for participation on the part of the applicant. For zinc and lead deposits it will be necessary to match Government funds on an equal basis. Funds advanced by the Government will be considered a loan, to be repaid of the exploration is profitable, but to be canceled if unsuccessful. The details of the plan, explaining the projects that will be eligible for assistance, the terms and schedules of financing, repayment, and other pertinent information, are enclosed.

A review of your application (DMA-870) for financial aid in constructing a mill and driving two tunnels on your property in San Miguel County, Colorado, indicates part of your proposal may be considered under this exploration program. Details concerning expenditures that will be considered chargeable to exploration aid will be subject to a final determination by negotiation, but as a preliminary appraisal, we believe that the program will apply to $90,000.00 of your proposal.

Before we can proceed further with consideration of your application, which may or may not require a field examination, please indicate your willingness to provide your share of the funds needed to carry out the proposed exploration. Any modification of your original proposal that you may wish to make will be considered, but you should be specific concerning the work you wish to undertake.

Very truly yours,

Otto Herres

OTTO HERRES, Chief
Lead-Zinc Branch

EJLyons:emp G 4/2/51
Copies to: 2 copies to J.H.East
Region IV
Chief, Lead-Zinc Br.
E.T.McKnight 4204 GSA
L. B. Moon
R. H. Mote
L. F. Strobel C. O. Mittendorf Files

Form NSRB-146
(Nov. 1950)

UNITED STATES GOVERNMENT

APPLICATION FOR GOVERNMENT LOAN
UNDER SEC. 302 OF
DEFENSE PRODUCTION ACT OF 1950

FORM APPROVED
BUDGET BUREAU NO. 25-R002

AMOUNT OF LOAN REQUESTED

TERMS OF LOAN REQUESTED

DATE OF APPLICATION

TO BE FILLED IN BY DELEGATE AGENCY

(DATE RECEIVED)

COMM.

AGRIC.

INT.

D.T.A.

FILE NO.

NAME AND ADDRESS OF APPLICANT (Street, City, Zone, State)

FRANK L. ROSS,
3516 St. Paul Street,
Zone 5, Denver, Colorado.

INSTRUCTIONS

Application should be filed with the Department of Commerce, Department of Agriculture, Department of Interior, or the Defense Transport Administration, whichever has the primary interest in the facilities, products, or processes involved. However, for convenience of the applicant, he may file with any government agency with which he has contract or other pertinent relationships and such agency will arrange for the transmittal of the application to the appropriate office.

Submit four (4) signed copies of the application. Name and address of applicant should be stamped or typed for identification of each sheet of the application and all accompanying papers. When a question is inapplicable, this should be so stated on the form. Additional sheets may be attached in answering any questions or in providing other supporting information.

1. PURPOSE OF LOAN

Give a brief general statement of the purpose of the loan requested, including in the table below estimated amounts for such major purposes as land acquisition, building construction, purchase of plant, purchase of equipment, working capital, repayment of debt, etc. Statement should make clear whether funds will be used for expansion of capacity, development of technological processes, or production of essential materials.

General Statement: To erect a Plant and Mill for treatment of ores, and start production of Rare Metals from Chinle Formation, which contains Mercury, Tin, Cobalt, Strontium, Platinum, Titanium, Gold and other rare metals; improve and develope technological processes for recovery of rare metals, and to produce such rare and essential metals and materials.

Operations to be in Washington County, Utah. For details see attached reports.

NATURE OF EXPENDITURE	AMOUNT
Machinery and erection of milling plant,	$ 15,000.00
Acquiring suitable site near River for milling operations and disposal of tailings,	5,000.00
Excavating and loading machinery, with tools, equipment and facilities at the Mine,	4,000.00
Trucks, haulage equipment and road improvement,	6,000.00
Sampling, experimental work, study of processes, research work and equipment,	5,000.00
Supervision and management	5,000.00
Carrying work until production makes project self sustaining	10,000.00
Total amount applied for	$50,000.00

2. PROPOSED METHOD FOR REPAYMENT OF LOAN

State sources of funds, and proposed schedule of repayment

From production and sale of metals; 15% of production to apply to repayment of loan.

3. NATURE OF BUSINESS AND DESCRIPTION OF PROJECT

Describe fully the business activity for which the funds are intended. In so doing, identify the materials and services to be produced, describe the facilities and processes involved, and explain in detail any research activity and the nature of the results expected. Attach blueprints and specifications, if available, and furnish other technical details to the extent that they are not covered elsewhere in the application.

A mining project, for the mining, refining and sale of metals, such as Mercury, Tin, Palladium, Cobalt, Platinum, Titanium, Gold and possibly Uranium and Nickel. See attached Reports for details. A Mr. G. F. Peake has worked out and using processes that work satisfactorily on another deposit, where he recovers some of the metals, commercially successfully, and estimates a similar plant on our property would cost about $15,000.00. He is endeavoring to, and we should also try to recover some of the additional metals.

4. Relationship to National Defense. Explain carefully how the expenditure of the funds will contribute to national defense. As a part of such explanation, the following questions should be answered to the extent possible:

(a) What evidence exists as to current shortages of the materials or services to be produced?

There is a shortage of several of these metals, especially Mercury, Tin, Platinum, Cobalt and some of the others. Gold is always desireable.

(b) What evidence exists as to future shortages of the materials or services to be produced?

General public information; governmental reports, and present lack of several of these metals.

(c) Are such shortages, if any, regional or national in scope?

National, as well as regional.

(d) In what respects will the use of the funds aid directly in expediting the carrying out of government defense contracts? (A listing of defense contracts, if any, held by applicant is required in item 8 below.)

We have no contracts, but metals will go to open market for general use.

4. Relationship to National Defense - Continued

(e) In what respects will the use of the funds aid indirectly in expediting the carrying out of government defense contracts or related operations?

By providing manufacturers and government with these metals badly needed at this time for defense contracts and related operations.

(f) Are there available alternative methods or facilities to accomplish the same purpose as that for which these funds are intended? (For instance, unused capacity, possibility of multiple shift operations, idle facilities, readily convertible equipment, sub-contracting?) If answer is yes, explain why alternatives are not used.

No, new and additional supplies are needed.

5. Maximum Designed Production

List separately materials or services identified in item 3 (a)	Unit of measure (b)	Maximum designed production with existing facilities (c)	Average percentage of maximum designed production used in quarter preceding filing of application (d)	Maximum designed production including use of funds applied for (e)
No operations as yet.				
		See attached Reports.		

6. Employment

(a) Number currently employed at location(s) where funds are to be used. (Use pay period ending nearest 15th of month preceding filing of application.)

Use local labor as needed. Five men needed to start, and probably fifteen later.

(b) Maximum feasible employment with existing facilities.

(1) Single shift operation.

Sufficient local labor, if needed.

(2) Multiple shift operation (specify how many shifts).

(c) Estimated additional employees required by the use of the funds applied for.

Start with 5 and increase to 15 to 20.

7. Timing

(a) On what date(s) are the requested funds needed?

As soon as possible, so work can start.

(b) On what expected date(s) will applicant begin to use such funds and obtain output from the use of such funds? Wherever possible, give planned schedule of output.

Would like to start by June 1st, 1951, and it will take about three months to secure steady production, of some metals and three months more to start producing some of the others.

8. Output from the use of funds applied for will be for the following purposes:

a. For the following principal prime defense contracts (if any) with the United States Government:

Date of contract (a)	Contracting Government Agency (b)	Program symbol (2 digits) or other contract identification (c)	Materials or services (d)	Delivery date(s) (e)	Amount (Dollars) (f)

Metals will be placed on open market, subject to governmental regulations.

b. For the following subcontracts (if any) with U.S. Government prime defense contractors:

Date of contract (a)	Materials or services (b)	Supplied to (Give name and address of firm) (c)	Delivery date(s) (d)	(e) Government agency receiving end product or services / (f) Program symbol (2 digits) or other contract identification	Amount (Dollars) (g)
				(e) / (f)	
	None.			(e) / (f)	
				(e) / (f)	

c. For the following classes or types of customers not covered by contracts listed above (list materials or services to be provided and, wherever possible, also indicate final product use):

The metals will be available on open market, subject to whatever regulations may be in force at the time.

The EAGLE ROCK METALS Project

Consists of about 600 acres of Chinli Shale

Where Erosion has exposed in under the Lava Formation

In SW Utah, Washington County, Utah, containing rare metals

Mercury,
Palladium,
Gold,
Cobalt,
Tin,
With possibly Uranium, and others.

Strontium,
Platinum,
Titanium,
Nickel,
Iridium

Am attaching copies of Reports by

Stanley D. Ilenberger,

Helen M. Hunter,

Western State Laboratories, (Larry Nielsen)
(Walter F. Hauserer)

Jinkins Laboratories, to Mr. C. F. Leake.

There seems to be no question about the presence and value of the metals; there is an enormous tonnage available; how to separate, save and market them is the question --ROCKS--.

We need a credit of not to exceed $50,000.00 to workthis out; build a mill; start producing for market.

For further details, write,

Frank L. Ross,
3814 St. Paul Street,
Denver, Colorado.

STANDEY D. EILENBERGER
Consulting Engineer,
6309 Twenty-Seventh Avenue,
KENOSHA, WISCONSIN.

REPORT To Mr. RALPH NORGAARD, et al.

A preliminary examination has been made of the ore samples delivered to Mr. Max Lust, and consideration has been given to the development of electrical methods of recovery based on the known metal values as contained in a report of Jinkin's Laboratories to Mr. C. F. Peake, dated September 12, 1950. These metals include gold, silver, platinum, cobalt, titanium, thorium and strontium. From the report of Mr. Ralph W. Bender to Mr. Herbert Schieler, it is also known that the ore contains considerable quantities of mercury.

No information is available as to the compounds which include these metals. Only gold, mercury and platinum can occur free; the others must occur as a complex molecule or particle. A preliminary examination shows these metals in a free state. It has been stated that this ore is free of sulphur. To a first approximation, it would appear that we must attempt recovery of the other metal values from the following minerals - cobalt from the mineral smaltite, $CoAs_2$, which is 28.2% cobalt worth $1.50 per pound as a 97-99% pure metal; with the platinum group will occur palladium, iridium, and other rare metals; thallium usually occurs as crooksite $(CuTlAg)_2Se$ worth $12.50 per pound for the contained thallium; thorium will probably be present as thorite, $ThSiO_4$, and titanium as TiO_2, 59.9% titanium worth $5 per pound for the recovered metal. Strontium has a relative low commercial value, and it may not pay to recover this element. It is considered very probable that the ore contains other rare earths, additional metals of the platinum group, and also, from the known composition, nickel and tin.

Gold and silver, in addition to occurance in a free state, may also be present as tellurides, probably petsite, $AuAgTe_2$, 25.5% gold. Platinum may also occur as sperrylite, $PtAs_2$, 56/6% platinum. Mercury also may be present as calomel, Hg_2Cl_2, 85% mercury. Recovery values on this group of metals will be gold, $35.00 / troy ounce; platinum, $90.00 / troy ounce; platinum; $90.00 / troy ounce; palladium, $24.00 / troy ounce; mercury, $115.00 / 76 lb. flask.

The deposit is a very fine, water deposited sandstone, cemented by collodial clay having a particle size less than .002 mm, or 2 microns. Gold, platinum and mercury exist free as minute grains mixed with the sandstone deposit. Other mineral exist as cryslalline deposits made after the sandstone has been exposed above water. The free metal and crystalline deposits may readily be observed in a low power microscope.

The sandstone/clay/metal/metallic salt mixture is bonded electrically, not mechanically. Water momentarily weakens this bond and leaves the several materials dispersed. The clay particles and the many mineral particles each carry a relatively high electrical charge, perhaps on the order of 50 millivolts. The sandstone and larger particles of free metal are relatively inert.

No single method of recovery will meet with commercial success. Because the high clay content, flotation, smelting and cyanidization are impracticable; mechanical methods above, such as jig concentration or mechanical agitation and subsequent recovery with activated charcodes

such as Narcoal, Norite or Dorite will meet with only limited success.

It is believed that a combination of methods will produce a better than 90% recovery of the principal values, at a very low recovery cost.

It is believed that this ore can be processed without crushing, somewhat follows:

1, Introduce the broken ore into the upper section of a vertical recovery cell having a series of progressively fined screens at the lower end, starting with a coarse, substantial grating and ending with a fine screen on the order of -100 mesh. Introduce water under pressure to cause disintergration and agitation. The particles larger than -100 will remain above the screen and those smaller than -100 will pass through together with the waste water.

2, At this point the fine particles will pass between a series of parallel electrodes having a proper electrical field voltage applied and both the metal particles in suspension, even though larger than particle size, and metals in molecular form will be recovered, approximately as follows:

A. Group I

Metal Particle	Charge voltage, millivolt
Strontium	58.4
Gold	32.0
Tin	27.2

This group requires the lowest field voltage for anode recovery; the required voltage is at present unknown, but is on the order of 2.7 volts-om. All particles in suspension will migrate and adhere to the anode (not electroplate on), remaining there for subsequent recovery as set out below. All molecules in solution will simultaneously migrate to and electroplate on the cathode, as follows:

Metal Ion	Grams/Ampere Hour
Strontium	1.63
Gold	7.35
Tin	2.21

At the full voltage required, the current density will be much greater than required to plate all metal in solution.

B. Group II.

	Charge voltage, millivolt
Silver	15.956

Mercury	15.972
Palladium	16.40
Platinum	17.26

This group will require a higher anode voltage, on the order of 5.0 volt/cm, and will plate out as follows:

Metal Ion	Grams/Ampere Hour
Silver	4.92
Mercury	7.46
Palladium	0.99
Platinum	1.82

C, Group III.

	Charge Voltage, millivolts
Andium, Iridium,	6.72
Titanium	6.60
Cobalt	5.56
Nickel	4.62

This group requires a still higher anode voltage on the order of 10 volts/cm, and will plate out as follows:

Metal Ion	Grams/Ampere Hour
Andium	1.42
Titanium	0.41
Cobalt	1.09
Nickel	1.09

D, Group IV

Metal Particle	Charge voltage, millivolt
Tin	2.72

Tin, of the elements known to be present and on which charge voltage data is available, requires the highest anode voltage, possibly 15 volts/cm, and will plate out 2.21 grams/ampere hour.

E, Group V

No charge voltage data available on the following:

Thallium
Thorium

These will plate out as follows:

COPY

Thallium , .124 grams/ampere hour
Thorium, 8.16 " "

3, The step by step electrical recovery would be a continuous process, and hot anodes and cathodes would consist of composite metal deposits. After a suitable operating period, such as 7 hours, for example, recovery operations would be converted to a second cell and cell # 1 would be converted to a refining process where pure metal cathodes were used and pure metal plated off of the impure electrodes to the pure cathode. These methods of refining are well established.

4, The coarse material held above the -100 screen would be removed mechanically, or hydraulically, or a combination of both. This material, being substantially free of clay and electrical charges, would be treated on a

(a) A standard dig table;
(b) Cyaniding for gold, silver;
(c) Heating for mercury distillation;
(d) Sluicing, or
(e) A combination of two or more of these methods.

Only a relatively small percentage of the dry weight tonnage would be handled by step #4. The high tonnage and perhaps highest recovery would be in steps 2 and 3.

5, The tailing of step 4 could be reintroduced to step 2 and 3 for final recovery. Tailings derived from step 3 would be discarded by hydraulic methods.

6, The total primary electrical cost of all steps will not exceed 10¢/ton dry weight solids. The mechanical handling cost would be higher, perhaps as high as $1.00/ton of a small tonnage basis, such as 100 ton/day. The hydraulic cost might also rise to $1.00/ton, depending on the difficulties of securing suitable water, amount of pumping required, &c.

7, A proper research program would include the following steps:

A. Complete assay work to determine what compounds exist and to what extent the free metals are free or in the form of a complex salt.
Assay above does not show this. Complete knowledge on this point will be of great aid in establishing preliminary operating values.

B, Securing a composite ore sample of about 1000 lbs, about (3) 50 gal. steel drums of small size pieces would furnish a good sample.

C, Securing a water sample of about 5000 lbs. of the exact water that would be used in mill operations, about (10) 50 gal. drums would furnish a good sample.

D. Set up complete pilot equipment in a location having good disposal facilities, ample water supply, good laboratory housing and a source of 220 volt power.

E. Construct a satisfactory recovery cell capable of processing about 7 lbs. dry weight solids and 15 lbs. water/hr.

F. By emperical methods determine a satisfactory electrode material for the many complex metals involded. A possible anode choice would be graphite or antimonial lead. A possible cathode material, copper or steel.

G. Install the electrode system determined by F in the cell construction of E.

H. Run a series of pilot recoveries of about 3 hours each, processing 20 lbs. per run.

J. Run close assays on the input to the head, the output of the tail and directly on the product of recovery. A contract on assay work will be made with a reliable assayer. For this purpose, standard assays are satisfactory and identification of com ounds are unnecessary.

K. After a satisfactory electrical recovery system is determined, also determine the refining step to produce pure metal.

L. Separately work out methods of recovery on the coarse material.

M. Determine the advisability of reworking the coarse material tailings by electrical methods.

P. Keep daily record books, recording all data, sketches, circuits, assay values, &c. Preserve all original assay sheets. Condense all such daily data into a monthly report, and condense all monthly reports into a final report.

The purposes of this research program is to establish a satisfactory recovery method for all the principal values in the red chinli area of southern Utah, substantially the same material as delivered to Mr. Lust, and to develope sufficient reliable data to design a recovery mill and accurately predict performance and operating cost in advance. At present, the work cannot be undertaken on a full time basis, but can be started within 10 days on a part time basis. All necessary equipment of all kinds is available for use at no cost, except material for cell construction, electrode construction and such incidentals as piping, wiring, &c. The equipment on hand includes both the necessary rectifies for recovery and all electrical and electronic test and measuring equipment. It is proposed that this work be undertaken by myself, and that I be fully responsible for conducting the experiment, reports, financial arrangements, &c.

I will be directly assisted by the following graduate engineers now in the employ of Hailand Research Corporation:

Mr. Harry Bishop, B. S. in E. E.
Mr. Donald Cobb, B. S. in C. E.
Mr. Robert LaMeseena, B. E. in M. E.

I would also expect to consult with others in certain problems and have good connections and would expect to use the following:

Dr. Eugene Mittelman, Consultant Physist, Chicago,
Dr. Peter Debye, Head, Dept. of Chemistry, Cornell,
Dr. I. Klotz, Prof. of Chemistry, Northwestern,
Mr. Weinig, Consultant, Ex-officio Head of the Experimental School, Colorado School of Mines.

Other would from time to time assist both directly and as consultants on specific problems and nominal wages for direct assistance.

The cost of this program will consist of:

1, Material and labor for cell construction.

2, Material and labor for electrode construction.

3, Direct wages paid during experimental tests.

4, Direct fees paid for consultants.

5, Assay expenses.

6, Direct overhead expense including light, heat and power.

7, Supplies of all nature, such as chemicals.

8, Fees paid to myself for my own services.

9, Various misc. small cash expenses, such as stenographic cost.

It is proposed that this work be carried out on approximately the following schedule:

Three to four nights per week; minimum hours per night three, maximum 5; minimum number of men, 3; maximum number of men, 5. Minimum man hours, 9, maximum number of man hours, 20.
One or two full days, probably Saturday and Sunday, 8 hours to 16 hours. Three to five men, 24 to 80 hours.

Weekly effort, 31 to 100 man hours.

Monthly effort, average, 330 man hours.

Preliminary time for setting up equipment, conctruction work, rebuilding present rectifier equipment and all work preliminary to actual test, not over 30 days.

Maximum time on test work after start, 120 days.

Maximum total elapsed time, 150 days.

All charges of all kinds to be presented monthly on the first day of each month and paid within 10 days.

Estimated total cost of all kinds, not to exceed $5,000.00, as follows:

First month, including all construction and material, $1,800.00 maximum;

Each succeeding month, not to exceed $600.00;

$800.00 cash to be paid in advance and receipt given to expedite setting up equipment and buying material for construction. Balance of first months expenses to be paid within 10 days after billing of first day of following month.

Each succeeding months expense to be paid at the end of the month on the same basis.

STANLEY D. EILENBERGER,

Denver, Colorado,
December 20, 1950.

- - - - - - - - -

Statement by Mr. Frank L. Ross, owner.

Mr. Ralph Norgaard visited and inspected the property with me; took the samples to Mr. Max Lust, who delivered to Mr. Stanley D. Eilenberger; secured the foregoing Report; felt unable to undertake the expense alone; became interested in another proposition in Central Colorado; released his option to me, and kindly gave me this Report, and I am sure Mr. Norgaard will recommend this proposition if anyone cares to write him, as his address, 324 S. 9th Street, Canon City, Colorado.

Many of Mr. Eilenberger's suggestions and recommendations have already been applied by Mr. C. F. Peake, at a similar deposit near St. George, Utah, where Mr. Peake produces some of the metals, with expectation of recovering more. Some of them are more than paying expenses now, so he expects to increase the size of his plant soon. Some of Mr. Peake's work is along same lines as those suggested by Mr. Eilenberger. Mr. Peake recovery of metals gold, mercury and platinum at his plant in Utah, is followed by recover of other metals in his laboratory in Los Angeles.

(Extracts from Report)

RALPH W. BENDER
Mining Engineer
30 Alvarado Court
Berkeley, California.

April 17, 1947

Mr. Herbert Schisler,
Los Angeles, Calif.

Dear Mr. Schisler:

This will confirm my verbal statement to you that I had been on and casually looked over a portion of the Chinli Formation Location in Sec. 20, Tp. 41, S. R. 11 W., in Washington County, Utah. It is my understanding that you have acreage in this Section. . . .

At the time of this observation of your property I was engaged in examination and sampling of the easterly continuance of this same formation on the NW¼, Sec. 21 . . . . . I could see there was no difference in the character of the material . . . . . .

Your property, as I saw it, was similar to the one I examined and sampled . . . . . at the time my samples were tested by Pacific States Laboratories, at Culver City, I was informed that you brought in to this concern samples . . . . . for determination of the contained gold and mercury content on a per ton basis. This particular sample from your property in Sec. 20 on the same strata as the red sample I personally took from Sec. 21, was fired and under my direct observation from start to finish. The weighed button giving a value of $155.52 per ton. The weighed button from my red strata sample gave a value of $131.20 per ton. These results being in gold.

While I did not observe the mercury extraction from your red sample, it was reported to me as giving a recovery of 240 lbs., or 12% mercury content. The mercury recovery from my red sample was reported 19.58 lbs. per ton (By the Cox Method) . . . . . .

A composite sample made up by me from all the visible strata on Sec. 21 returned a value of $40.40 gold per ton, and a mercury recovery of 20.98 lbs. per ton. . . . . .

It is my opinion that gold recovery can best be obtained through electrical precipitation in cyanide solution which is now being done, but only after prior treatment with a catalyzer which will destroy detrimental elements . . . . . .

It is indeed difficult to foresee the final results accruing from developements of the Chinli Formation, but I will venture to say they will be most astounding, notwithstanding all the present criticism and skepticism that is passed around. If the results of the first operating unit on a commercial scale become known, you will, I am certain, see another "gold rush" greater than any we have known to date; those who have pioneered should reap their just reward.

Very truly yours,
RALPH W. BENDER, Mining Engineer.

COPY

(COPY)
A REPORT By the
WESTERN STATES LABORATORIES.
- -

Culver City, California.

Consolidated Placers, Inc.,
Attention: Mr. Harry Gould,
Vice-President and General Manager,

Dear Sir:

We have treated the sample furnished us from your deposit of Chinli Clay, located in Washington County, Utah, with our process of extracting the two minerals requested by you, namely: GOLD and MERCURY. We have obtained the following results:

Your composite sample - we have extracted and proven a GOLD Content of $41.40 per ton - - - The Red Clay Strata $151.23 per ton. Both of these values are gold content.

The MERCURY Content of the composite sample is $49.50 per ton, and the Red Clay strata is $48.00 per ton.

In case the above meets with your approval, we are in a position to enter into a contract with you to furnish a plant to extract in a commercial way both Gold and Mercury, and any other mineral elements that you may desire; however the construction cost and preliminary operation cost of the plant now under construction is for extraction of Gold and Mercury.

We wish to get started on this operation at the earliest time possible, and will expect to hear from you as to the contract which we will make with you, utilizing our process in the above mentioned plant.

Yours very truly,

WESTERN STATES LABORATORIES,
By Larry Adlesen,
By Walter F. Hauser.

- - -

Note by Mr. Ross:

I found this with my Brother's papers; the death of Mr. McLain and of my Brother, left this enterprise without leadership, so I am now making an effort to go ahead with it.

The plant referred to as "now under construction" I believe refers to the Peake Plant, which proved successful for gold and mercury and they are now rebuilding and enlarging it.

(Copy)

Business Address
18 West Slauson Avenue

Telephone
Axminster 2-4795

Plant
Yucca Valley

J I N K I N ' S L A B O R A T O R I E S

Manufacturers Of
Cosmetics - Stealite Brand of Polishes
Household Cleaners

COPY

Los Angeles, 44, California
Yucca Valley, Calif.
September 12, 1950.

Mr. G. F. Peake,
701½ W 47th St.,
Los Angeles, Calif.

Dear Mr. Peake:

Determination of partial quantitative analysis of button submitted me on the 4th of this month are as follows:

Silver, ...	$ 7.50 per ton
Gold	94.10 per ton
Platinum	120.03 per ton (based at $74.00)

Analysis is incomplete at this time on other elements, of which qualitative analysis show and lead me to believe that the following is present in commercial quantities:

Cobalt
Titanium
Thalium
Thorum
Strontium

This is an extensive, complex sample you submitted. To break it down and give you a complete quantitative analysis will take an additional 10 to 15 days.

Respectfully yours,

(Sg) W. D. JINKINS,
W. D. Jinkins,
JINKINS LABORATORIES.

A Little HISTORY.

This deposit and outcropping was discovered several years ago; a Mr. L. C. Kolain became interested in it as the Smithsonian Group; did considerable testing and experimental work; interested and sold some acreage to a Mr. J. Don Ross. Kolain was killed in auto accident.

J. Don Ross died; leaving as heirs a Sister, and a Brother; the Sister, Mrs. Elizabeth Ross Hogg, deeded her interest to the Brother, Frank L. Ross, who examined the property and found it to be O. K. in his judgment, so he is trying to go ahead and complete the work started by Kolain and Ross, who were trying to determine a process for saving and refining the large amount of Rare Metals in the Clay.

Meanwhile, a Mr. G. F. Rocke, working on another outcropping, has been testing, experimenting and working out a process, which produces satisfactory result of some of the metals. I want to adopt the Rocke processes, and improve if possible, so as to recover more of these metals. The government and public needs them, especially at this time. We ask governmental aid.

- - - - - - - - - - - - -

A Little HISTORY.

As I understand the situation--altho not a geologist-- the story runs:

Once upon a time the Red Beds were being formed by the waters; practically level; some volcano eruptions threw into the air ashes, rock, dirt and other materials from deep in the earth--some of it being rare metals; it fell and became a part of the top sands being formed at the time; then lava came thru to cover, and make some mountains in S. W. Utah.

Then the elements, waters and time cut thru the top lava, to make the Virgin Valley; this exposed at places the contents or top sands just below the lava, and this is where the rare metals were, and are. Lots of it has gone to sea, or been carried down and redeposited at other places, but some of it remains just where it first fell to earth, in the top sands of the Red Beds.

A part of these outcropping is what we have, and I want to recover, refine and place on the market for governmental and public use the vast amount of metals contained in these upper sands.

I hope the Government will aid, at this time, when there is such an urgent need for many of them.

Respectfully,

Frank L. Ross,
3616 St. Paul Street,
Denver, Colorado.

May 1st; 1941.

11. **Recent Efforts to Obtain Credit** - Continued

(b) State efforts to obtain credit, within 60 days preceding date of application, from banks, the Reconstruction Finance Corporation, or other sources, results, and reasons if refused. (NOTE.- Section 302 of the Defense Production Act of 1950 states that a loan may be extended "only to the extent that it is not otherwise available on reasonable terms." Accordingly, Applicant should show that it has applied to each bank named in (a) above, or explain the reason for not doing so. The fact that a loan of the particular maturity and terms applied for is refused by a bank or banks is not sufficient to comply with the statute, if credit on reasonable terms is available. State whether a bank will participate in the loan, and if so, state name of bank and amount of participation. Full particulars must be given.) List the names and addresses of banks and other lending institutions to which applications for credit have been made, and in each case state date of application, amount of credit available, if any, maximum term for which credit is available, what consideration, if any, was given to possible guarantee of loan under Federal Reserve Regulation V, and reason for refusal or reason loan was not obtained. Indicate whether or not application was definitely refused for further credit on any basis.

Have presented this to several private parties during past six months, without being able to interest anyone financially able to provide funds sufficient. Mr. Ralph Norgaard visited the property with me; secured reports and tested the material, but felt unable to assume the financial burden of providing the mill, &c. Later, Mr. Virt Kaufman (former Superintendent for me in Mining in Ouray, and in San Miguel Counties, Colorado) visited the properties with me; was favorably impressed; joined in securing more acreage, but is not able tocarry or provide the necessary finances so joins me in feeling governmental aid necessary. Kaufman, an experienced and capable Mining Operator, will have local personal control of operations, if I can arrange with him to do so.

Banks cannot handle this form of investments; and others seem to feel so much of this experimental work should be of benefit to the war effort, that government proper party to aid, as we ask aid.

12. What other forms of government financial assistance, if any, have been received or requested by the applicant in connection with the purposes of the loan herein applied for? If applicant plans to request such assistance in the future, give details.

None, for this project. (I have an application pending for some aid in a lead-zinc-copper project in Colorado).

13. **HISTORY, MANAGEMENT, LEASED AGREEMENTS, INSURANCE, ETC.**

These subjects should be fully covered in statements attached hereto. Outline past management experience or other basis for showing competence of the Applicant to perform in accordance with expressed purpose of the application. If plant was purchased, state price, form and terms of payment, date of purchase, from whom and under what circumstances purchase was made. If it is proposed to construct or acquire new facilities (including equipment), state estimated cost and basis of such estimate, form and terms of payment, and from whom purchases of facilities will be made. State whether Applicant, or the business or plant, has been in receivership, bankruptcy, Chapter X, XI or XII, in hands of creditors, committee, or whether Applicant has effected a compromise with creditors, and if so, discuss fully. Indicate whether business is conducted in leased premises and whether any facilities are leased from others and describe terms of any lease agreements. List type and amount of insurance carried on plant property. Describe briefly any pending or threatened litigation affecting Applicant.

See Reports attached.

14. NAMES AND ADDRESSES OF OFFICERS, DIRECTORS, OR PARTNERS, AND IN ADDITION THERETO, THE FIVE LARGEST STOCKHOLDERS IF A CORPORATION.

Title Holders. 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 Applicant (d)	Number of shares held in applicant: Common (e)	Number of shares held in applicant: 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 L. Ross,	3216 St. Paul Street,		Denver, Colorado,				
Florence A. Ross,	"	"	"	"			
Frances R. Davis,	"	"	"	"			
R. C. Davis,	"	"	"	"			
Betty R. Fauri,	2216 S. Holly St.		"	"			
George Fauri,	"	"	"	"			
Gergio Kaufman,			Ouray,				
Wirt Kaufman,			"	"			
	Total		x x x x x			x x x	x x x

The have turned over or leased to applic ant for operation and financing.

15. CAPITAL STOCK ISSUES

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par value (c)	Number of shares outstanding (d)	Dividend rate last paid (e)
Common stock	$	$	$		
Preferred stock	$	$ None	$		

16. PURCHASE AND SALES RELATIONS WITH OTHERS

Does Applicant buy from, sell to, or use the services of, any concern or partnership in which an officer, director, large stockholder, or partner of the Applicant has a substantial interest? If not, so state. If so, give names of such officers, directors, stockholders, and partners, and names of such concerns or partnerships.

Co-owners turn over and lease the property to Frank L. Ross, for operation, financing and production purposes; 16% of production (2% to each c o-owner) royalty, after all moneys and loan repaid from production. Government to be re-paid before the owners receive anything.

Does any officer, director, large stockholder, or partner of Applicant receive any commission, bonus, or other payment in cash or services from any concern or partnership with which Applicant has business dealings? If not, so state. If so, give names of such officers, directors, stockholders, or partners and amounts of such commissions, bonuses, or payments.

No co-owner receives any salary or compensation, except Frank L. Ross is to receive actual expenses when away from Denver; Wirt Kaufman a reasonable compensation if he takes charge of operations at the mine, with expenses when away from Ouray.

17. COMPENSATION SCHEDULE

INSTRUCTIONS: The schedule shall show the amount of compensation being paid to all employees of Applicant receiving compensation at a rate in excess of $10,000 per annum, including employees paid on a part-time basis where the rate of compensation exceeds $10,000 per annum computed on a full-time basis. If Applicant is a corporation, the schedule should show the compensation, regardless of amount, being paid to all officers, directors, and such stockholders as have an interest in Applicant's business of 10 percent or more. If Applicant is a partnership, the schedule should show the compensation being paid to, or being withdrawn by, all partners for their personal use. If Applicant is an individual, the schedule should show the amount being withdrawn by Applicant for his personal use. In each case the listed person's connection with the business should be indicated (i.e., whether an officer, director, stockholder, partner, owner, etc.). The calendar basis for the compensation should likewise be shown. Attorneys or firms of attorneys on a regular retainer or salary basis should be included. The schedule should include a separate notation indicating the source and amount of any compensation being paid by a company or firm directly or indirectly controlling, affiliated with, or controlled by, Applicant. If the space provided herein is insufficient, the schedule should be continued on the reverse side or appropriate continuation sheets should be attached.

Usual and customary wage and salary, in Washington County, Utah, for employees.

9. **Feasibility**

(a) Estimate anticipated requirements for manpower, equipment, raw materials, energy, fuel, transportation facilities, water supply, housing, community facilities, and other factors of production, for (1) preparation of the facilities and (2) actual operation thereof. (The estimates may be limited to those factors of substantial significance to the preparation and operation of the facilities for which the funds are intended.)

Manpower 5 to 25 men, plenty available in that section.

Machinery, tools and material will be obtained on open market.

(b) Discuss and evaluate the availability of each of the above factors in the area(s) where the funds will be used.

Man power will be available -- farming section -- close to main thru highways. Steel tanks and pipe main requirements, from open market -- about midway between Salt Lake City and Los Angoles, near main highway. All needed should be readily available.

10. The following applications for necessity certificates for tax amortization (Under Section 124A of the Internal Revenue Code) for facilities at the location(s) covered by this application have been filed since January 1, 1950:

Date of application (a)	Government file number (b)	(Estimated) Total of facilities in dollars on each application (c)	(d) If final action has been taken, give date of	
			Issuance	Denial
	None.			

11. **Recent Efforts to Obtain Credit**

(a) Banks—List names and addresses of all Banks of Deposit of Applicant within the last 5 years: *(Mark with an asterisk (*) bank or banks in which deposits are now kept)*

Colorado State Bank, Denver, Colorado,
Colorado National Bank, Denver, Colorado.
Have been unable interest private capital, as investors seem to feel these metals will be under governmental supervision and control, so recommend I ask governmental aid, as I am going.

17. **COMPENSATION SCHEDULE** - Continued

The term "compensation", as used herein and such schedule, shall include all salaries, fees, bonuses, commissions, retainers, regular drawing accounts, and other payments, direct or indirect, in money or otherwise, for personal services.

Name (a)	Position (b)	Compensation paid during previous fiscal year (c)	Present compensation (d)
None, except as outlined in preceding paragraph.			

18. **COLLATERAL**

(a) The applicant offers the following described collateral as security for repayment of the loan applied for.

Description (a)	Date acquired (b)	Cost (c)	Book Value (Net) (d)	Appraised* value (e)
Property now held: None, as this 600 acres is ample security.				
Fross Claim, in the SW of	Sec. 21, T.	R 11 W, in	Washington	Co., Utah,
Fross No. 2 " " SE "	" 21, "	" 11 "	"	" "
Fross No. 3 " " NE "	" 21, "	" 11, "	"	" "
Fross No. 4, " " NW "	" 21, "	" 11 "	"	" "
(less about 30 acres held by others)				
To be acquired: Some acreage along Virgin River, for mill site and buildings dump.				

* This column need be filled in only if a recent appraisal has been made. If so, identify appraiser below.

Name (a)	Title (b)	Date (c)
See Reports attached.		

(b) Describe existing liens, if any, on property listed above.

None

Form NSRB-146 (Nov. 1950) | Name and address Frank L. Ross, Denver, Colorado. |

EXHIBIT A - CURRENT FINANCIAL STATEMENT

As of _____

(Date not more than 30 days prior to date of application)

ASSETS

CURRENT ASSETS

1. Cash..... Practically None..... $ _____
2. Notes receivable..... Am Mine poor, as I have.. $ _____
   Less reserve for doubtful notes. St. Paul in Red Mountain Mining District,
3. Accounts receivable: San Juan County, Colo.; now idle;
   Current..... Brewster Group at Ophir, Colorado,
   Past due not over 4 months.. on which am trying to get aid for
   Past due over 4 months..... operations; a production interest in
   Less reserve for doubtful accounts Salty Boy Mine near Silverton, Colo.,
4. Inventories: now under lease and operations may start
   Raw materials..... soon; some oil acreage in Wyoming, which
   Work in process..... give me a little royalty to live on.
   Finished goods..... Also my interest in these claims in Utah.
   Less reserve for inventory losses..... _____
5. Other current assets (describe) _____

TOTAL CURRENT ASSETS..... $ _____

FIXED AND OTHER ASSETS

6. Plant used in business:
   Land..... $ _____
   Buildings..... _____
7. Machinery..... _____
8. Equipment, furniture, and fixtures..... _____ $ _____
   Less reserve for depreciation..... _____
9. Investments—stocks and bonds.....
10. Investments in affiliated companies.....
11. Receivables due from affiliated companies.....
12. Real estate not used in business.....
13. Due from officers, directors, employees, stockholders.....
14. Deferred charges.....
15. Other assets.....

TOTAL ASSETS..... $ _____

LIABILITIES

CURRENT LIABILITIES

16. Notes payable (see schedule 1, page 10):
    Banks..... $ _____
    Trade creditors..... Owe a little to the finance Company
    Officers, stockholders, relatives to cover last trip to look at this
    Insurance companies... property and pay some taxes of St. Paul Mine
17. Accounts payable..... About $350.00 due, loan in my daughter's name
18. Other current liabilities: but I make the monthly payments.
    Delinquent taxes { Real estate..... $ _____
    Federal..... _____
    Wages and salaries..... _____
    Due officers..... _____
    Accrued interest, rent, taxes, wages, etc..... _____

TOTAL CURRENT LIABILITIES..... $ _____

FIXED AND OTHER LIABILITIES

19. Machinery liens.....
20. Mortgage debts (see schedule 2, page 10).....
21. Bonds or debentures (see schedule 2, page 10).....
22. Other liabilities.....

NET WORTH

23. Common stock (if Applicant is incorporated)..... $ _____
24. Preferred stock (if Applicant is incorporated)..... _____
25. Surplus (if Applicant is incorporated)..... _____
26. Capital and Surplus Account (if Applicant is partnership or individual).....

TOTAL LIABILITIES..... Practically None.

27. Contingent liabilities (explain) _____ (except accruing taxes) $ None.

NOTE.— Submit copy of last available audit or of financial statement at close of last fiscal period (if such date differs from date of above statement).

Form NSRB-146 (Nov. 1950)	Name and address Frank L. Ross, Denver, Colorado.	Page 10 of 12 pages

SCHEDULE I - Notes Payable (in detail)

Name and address	Maturity	Amount	State amount and character of collateral	Name of guarantor(s) and/or endorser(s)
None, except about $350.00 as stated,				Frances R. Davis.

SCHEDULE 2 - Mortgage Debt (real estate and/or chattels) or Bond Issue

Names and addresses of holders	Date of maturity	Interest rate	Unpaid principal amount	Date to which interest is paid
None			$	
TOTAL	X X X X X X X	X X X X X X	$	X X X X X X X X X X X X X X X X X

If mortgage secures a bond issue, state whether bonds are principally held by management and/or stockholders or by others, and attach copy of mortgage indenture.

EXHIBIT B - CONDENSED COMPARATIVE STATEMENT OF INCOME AND EXPENSES

For years ended _____
(Insert date of end of fiscal year)
(000.00 omitted)

	(Figures for 3 preceding years) 19	19	19	Current year as of date of Exhibit A
1. Net sales	About $100.00 per month income,			
2. Cost of goods sold	from oil, social	security,	&c.	
3. Gross profit on sales (line 1 minus line 2)				
4. Other income (itemize)				
5. Total (line 3 plus line 4)				
6. Salaries (officers or partners)*				
7. Selling and all other expenses				
8. Total of lines 6 and 7				
9. Profit or loss before depreciation and Federal taxes (line 5 minus line 8)				
10. Depreciation				
11. Federal Income and Excess Profits Taxes				
12. Net profit or loss (line 9 minus lines 10 and 11)				
ANALYSIS OF SURPLUS				
13. Total surplus at beginning of period	Represented by Mining Interests.			
14. Net profit or loss for period				
15. Line 13 plus line 14 if profit; line 13 minus line 14 if loss				
Add:				
16. Surplus paid in during period				
17. Surplus resulting from revaluation of assets				
18. Other additions to surplus (itemize)				
19. Total of lines 15 to 18, inclusive				
Deduct:				
20. Dividends				
21. Other charges to surplus (itemize)				
22. Total of lines 20 and 21				
23. Surplus at end of period (line 19 less line 22), MUST AGREE WITH SURPLUS AS SHOWN IN BALANCE SHEETS				

* To include all payments of any kind (commissions, bonuses, withdrawals) to officers or partners.
NOTE—If years included in the above tables are not adequately representative of applicant's financial experience, information may be submitted for additional years.

Ou[illegible]ping

Form NSRB-146 (Nov. 1950) | Name and address Frank L. Ross, Denver, Colorado. |

EXHIBIT C - CONDENSED COMPARATIVE STATEMENT OF CONDITION

For years ended May 1st, 1951.
(Insert date of end of fiscal year)

(000.00 omitted. Use figures to nearest thousand. For instance, the figure $3,489.36 should be written as 3; the figure $3,689.36 should be written as 4)

ASSETS	(Figures for 3 preceding years) 19	19	19	Current year as of date of Exhibit A
CURRENT ASSETS:				
1. Cash	This enterprise now, has no financial reports or records.			
2. Receivables (after deducting reserves)				
3. Inventories				
4. Other current assets:				
TOTAL CURRENT ASSETS				
FIXED AND OTHER ASSETS:				
5. Plant accounts (before depreciation):				
Machinery, equipment, etc.				
Delivery equipment				
Real estate and buildings used in business				
6. Other assets (as investments, real estate not used in business, etc.):				
TOTAL ASSETS				
LIABILITIES				
CURRENT LIABILITIES:				
8. Notes payable	None.			
9. Accounts payable				
10. Accrued liabilities				
11. Other current liabilities:				
TOTAL CURRENT LIABILITIES				
FIXED AND OTHER LIABILITIES:				
12. Mortgage debts				
13. Debentures				
14. Other fixed liabilities:				
RESERVES:				
15. Reserve for depreciation				
16. Other reserves:				
NET WORTH:				
17. Common stock (issued) (if Applicant is incorporated)				
18. Preferred stock (issued) (if Applicant is incorporated)				
19. Surplus (if Applicant is incorporated)				
20. Capital and surplus account (if Applicant is partnership or individual)	Value of 600 acres mining claims.			
TOTAL LIABILITIES	Assay values large but depends upon PROCESS and operation to fix actual valuations.			

NOTE— If years included in the above table are not adequately representative of applicant's financial experience, condition statements may be submitted for additional years.

EXHIBIT D

AGREEMENT AS TO COMPENSATION FOR SERVICES RENDERED OR TO BE RENDERED TO APPLICANT IN CONNECTION WITH APPLICATION AND/OR LOAN

To induce the United States Government and its agencies to make a loan under Sec. 302 of the Defense Production Act of 1950 to Frank L. Ross (hereinafter called "Applicant") and in consideration of the making of a loan to Applicant, the undersigned, having been retained by Applicant for the purpose of rendering professional or other services in connection with its application for a loan or loans, hereby represents, warrants, and agrees that the undersigned has not been paid, has not made any agreement with the Applicant to be paid, and has not procured any person to pay or agree to pay, and will not, directly or indirectly, charge or receive any bonus, fee, or commission in any form in connection with the said application for, or the obtaining of, the loan applied for by the Applicant, or any compensation in any form for services rendered or to be rendered in connection therewith except for the services and in the amounts stated below:

Name	Description of services	Amount paid	Amount to be paid
None		$	$

To induce the making of the loan and the employment of the undersigned by Applicant, the undersigned hereby further warrants, covenants and agrees, upon the consideration herein specified, and in consideration of the employment of the undersigned by Applicant, as above recited, that if the amount of compensation stated above for any such services shall not be deemed reasonable by any agency of the United States Government, the undersigned will reduce the charge for such services to such amount as shall be deemed reasonable by such agency, and will not, directly or indirectly, charge or collect from the Applicant or any other person, any sum in excess of the amount so deemed reasonable; and that if the undersigned has heretofore collected, from the Applicant or any other person, as compensation for any such services, any amount deemed by such agency to be unreasonable, the undersigned will refund to Applicant or such other person such sums as are in excess of the amount deemed reasonable. The undersigned further warrants, covenants and agrees that if the amount of the compensation for any such services is not determinable at the date of application, or is not stated above, it will not collect or charge any sum as compensation for such services without the prior written approval of the Government agency with which this application is officially filed as to the nature of the services for which such compensation is to be paid and the amount of such compensation.

No one.

Witness: _____

Address of witness: _____

Dated _____, 19____

NOTE—Corporations must execute foregoing certificate in corporate name, by duly authorized officer, and seal must be affixed and duly attested; partnerships must execute in firm name, together with signature of a general partner. If no compensation is paid or to be paid for services rendered in connection with application or loan, this should be so stated and the Applicant should sign this Exhibit.

CERTIFICATION

The Applicant hereby certifies that the statements made in the foregoing application, and all exhibits and documents submitted in connection therewith, are true and correct statements to the best of Applicant's information and belief and are submitted as a basis for credit. The Applicant agrees to reimburse any agency of the United States Government upon demand for any expenses incurred in connection with or arising out of this application or any loan made pursuant hereto.

Dated May 1st, 1951, 19____

Witness: _____

(For individual applicants)

Frank L Ross
(Signature)

Witness: _____

(For partnership applicants)

_____
(Full name of firm)

By _____, a general partner.
(Signature)

(For corporate applicants)

(CORPORATE SEAL)

_____
(Full corporate name of Applicant)

Attest: _____

By _____
(Signature) (Title)

_____, _____
(Signature) (Title)

3516 St. Paul Street, Denver, Colorado.

The United States Criminal Code, 18 U.S.C., Sec. 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: 1950 O - 916171

March 23, 1951

Dr. James Boyd
Administrator
Defense Minerals Administration
Interior Building
Washington 25, D. C.

Dear Doctor Boyd:

We are enclosing three copies of the application for Government loan from Frank L. Ross, 3516 St. Paul Street, Denver, Colorado.

This is the twentieth package of reports forwarded to Washington from Region IV.

Sincerely yours,

J. H. East, Jr.

J. H. East, Jr.
Regional Director

Enclosures

Form NSRB-146
(Nov. 1950)

UNITED STATES GOVERNMENT

APPLICATION FOR GOVERNMENT LOAN
UNDER SEC. 302 OF
DEFENSE PRODUCTION ACT OF 1950

FORM APPROVED
BUDGET BUREAU NO. 25-R002

AMOUNT OF LOAN REQUESTED

TERMS OF LOAN REQUESTED

DATE OF APPLICATION

TO BE FILLED IN BY DELEGATE AGENCY

(DATE RECEIVED)

COMM.

AGRIC.

INT.

D.T.A.

FILE NO.

NAME AND ADDRESS OF APPLICANT *(Street, City, Zone, State)*

Frank L. Ross,
3516 St. Paul Street,
5, Denver, Colorado.

INSTRUCTIONS

Application should be filed with the Department of Commerce, Department of Agriculture, Department of Interior, or the Defense Transport Administration, whichever has the primary interest in the facilities, products, or processes involved. However, for convenience of the applicant, he may file with any government agency with which he has contract or other pertinent relationships and such agency will arrange for the transmittal of the application to the appropriate office.

Submit four (4) signed copies of the application. Name and address of applicant should be stamped or typed for identification of each sheet of the application and all accompanying papers. When a question is inapplicable, this should be so stated on the form. Additional sheets may be attached in answering any questions or in providing other supporting information.

1. PURPOSE OF LOAN

Give a brief general statement of the purpose of the loan requested, including in the table below estimated amounts for such major purposes as land acquisition, building construction, purchase of plant, purchase of equipment, working capital, repayment of debt, etc. Statement should make clear whether funds will be used for expansion of capacity, development of technological processes, or production of essential materials.

General Statement

To drive a Lower Tunnel to develope and open for production the lead, zinc and copper ores below the former high grade gold and silver ores.

All the large producers in the San Juan Section now produce the lead, zinc and copper ores about or below timberline - about 11,500 feet elevation.

Histories similar

NATURE OF EXPENDITURE	AMOUNT
Portal buildings, machinery, &c.,	$ 25,000.00
Driving 1000 feet and opening ore,	25,000.00
Acquisition additional properties,	35,000.00
Driving tunnel 2000 feet,	40,000.00
Acquisition properties beyond, if desired,	25,000.00
Construction of Mill, if desired,	100,000.00
Total, as needed, and if needed,	250,000.00
Production might reduce amount needed. Total amount applied for	250,000.00

This is an Application for a LOAN or LINE OF CREDIT of $250,000.00, to be provided as needed (altho $50,000.00 may be sufficient if first ore bodies opened are sufficient to carry from then on):

1st;	For installing electric power, compressor, blacksmith shop, drills, equipment and buildings at portal of tunnel,	25,000.00
2nd;	For driving tunnel 1,000 feet, thru Twentieth Century Claim, with upraises, cutting and stoping and preparing the first couple ore bodies for production,	[illegible]
3rd;	For acquisition of additional properties, the Little Jack, Bull Jack and additional properties located along line of tunnel, particularly, as I have been informed are available soon by the Union and others who hold the present leases;	[illegible]
4th;	For driving tunnel 1,000 feet thru Middle Ave and Triple Standard, with upraises and cutting out stopes for the ore bodies, as opened,	40,000.00
5th,	For acquisition of additional properties, the Al Sano and Son Sijou if desired,	20,000.00
6th;	For construction of a 200 ton Mill and Concentrating Plant when tonnage opened justifies,	100,000.00
	Total requested (as and if needed) (It is possible much less may be required but asking full amount that might be needed to complete the work outlined.)	$ 250,000.00

Respectfully submitted,

Applicant,

P. O. address:
3010 St. Paul St., Denver, Colorado.

2. PROPOSED METHOD FOR REPAYMENT OF LOAN

State sources of funds, and proposed schedule of repayment.

From production - Suggest 15% of production be applied toward the repayment of the advancements.

3. NATURE OF BUSINESS AND DESCRIPTION OF PROJECT

Describe fully the business activity for which the funds are intended. In so doing, identify the materials and services to be produced, describe the facilities and processes involved, and explain in detail any research activity and the nature of the results expected. Attach blueprints and specifications, if available, and furnish other technical details to the extent that they are not covered elsewhere in the application.

Mining - opening for production the lead, zinc and copper ores below the former higher grade gold-silver ores.

Interesting feature - the uranium and other rare metals found along the San Miguel River probably at some time came from veins at the head of the stream, and this property is one of the most prominent veins at the head of that River. Considerable interest is being taken along this line.

4. **Relationship to National Defense.** Explain carefully how the expenditure of the funds will contribute to national defense. As a part of such explanation, the following questions should be answered to the extent possible:

(a) What evidence exists as to current shortages of the materials or services to be produced?

General reports, as well as fact that U. S. is making this class of loans and encouraging mine owners to act.

(b) What evidence exists as to future shortages of the materials or services to be produced?

There is a shortage of lead, zinc and copper now, and will be for considerable time to come.

(c) Are such shortages, if any, regional or national in scope?

National - possibly world-wide.

(d) In what respects will the use of the funds aid directly in expediting the carrying out of government defense contracts? (A listing of defense contracts, if any, held by applicant is required in item 8 below.)

No war contracts in which I am interested, except general defense. As I have these metals, I want to get them into production.

4. Relationship to National Defense - Continued

(e) In what respects will the use of the funds aid indirectly in expediting the carrying out of government defense contracts or related operations?

Produce Lead, Zinc and Copper, with possibilities of other rare metals.

(f) Are there available alternative methods or facilities to accomplish the same purpose as that for which these funds are intended? (For instance, unused capacity, possibility of multiple shift operations, idle facilities, readily convertible equipment, sub-contracting?) If answer is yes, explain why alternatives are not used.

No.

5. Maximum Designed Production

List separately materials or services identified in item 3 (a)	Unit of measure (b)	Maximum designed production with existing facilities (c)	Average percentage of maximum designed production used in quarter preceding filing of application (d)	Maximum designed production including use of funds applied for (e)
~~Could produce about 100 ton of ore daily from the New Century when open the ore bodies there;~~				
~~Could increase to at least 200 tons per day under Little Eva, and should get 300 tons or more when open under the Single Standard.~~				

6. Employment

(a) Number currently employed at location(s) where funds are to be used. (Use pay period ending nearest 15th of month preceding filing of application.)

None

(b) Maximum feasible employment with existing facilities.

(1) Single shift operation.

None

(2) Multiple shift operation (specify how many shifts).

(c) Estimated additional employees required by the use of the funds applied for.

Would require 15 men to start with, and increase up to 50 for three shifts in tunnel work, and when ores opened increase to 100.

7. Timing

(a) On what date(s) are the requested funds needed?

Snows going rapidly in spring, so could start about June 1st.

(b) On what expected date(s) will applicant begin to use such funds and obtain output from the use of such funds? Wherever possible, give planned schedule of output.

Can start getting in supplies, ordering machinery, &c., anytime after May 1st; start installation about June 1st; should be able to reach first ore chute and have some production within six months thereafter; will take about a year to get mine fully opened up and capacity production. The first ores could go to custom mill.

8. Output from the use of funds applied for will be for the following purposes:
a. For the following principal prime defense contracts (if any) with the United States Government:

Date of contract (a)	Contracting Government Agency (b)	Program symbol (2 digits) or other contract identification (c)	Materials or services (d)	Delivery date(s) (e)	Amount *(Dollars)* (f)
The Metals would go to open market; Smelters at Leadville, Colorado; Salt Lake City, Utah, and Amarillo, Texas.					

b. For the following subcontracts (if any) with U.S. Government prime defense contractors:

Date of contract (a)	Materials or services (b)	Supplied to *(Give name and address of firm)* (c)	Delivery date(s) (d)	(e) Government agency receiving end product or services (f) Program symbol (2 digits) or other contract identification	Amount *(Dollars)* (g)
Lead, Zinc and Copper in general demand; open Market.				(e) (f)	
				(e) (f)	
				(e) (f)	

c. For the following classes or types of customers not covered by contracts listed above (list materials or services to be provided and, wherever possible, also indicate final product use):

General Market for Metals at all times.

9. **Feasibility**

(a) Estimate anticipated requirements for manpower, equipment, raw materials, energy, fuel, transportation facilities, water supply, housing, community facilities, and other factors of production, for (1) preparation of the facilities and (2) actual operation thereof. (The estimates may be limited to those factors of substantial significance to the preparation and operation of the facilities for which the funds are intended.)

Will require an Air compressor; drills and tools; a small compressor house and blacksmith shop;
About a half mile Power Line, electric power avaliable;
Cars, trackage and pipe;

There is housing nearby in Ophir, as well as boarding houses, stores, &c.

Roads already there. Telephone service available. Mail facilities at Ophir.

(b) Discuss and evaluate the availability of each of the above factors in the area(s) where the funds will be used.

The situation favorably, as little money will have to go into buildings for personnel; they can walk to work; roads good, so trucks can go right to mouth of tunnel-- no steep grades or long up-hill pulls so usual around mining work;

Practically all money will go into equiment and actual mining work.

10. The following applications for necessity certificates for tax amortization (Under Section 124A of the Internal Revenue Code) for facilities at the location(s) covered by this application have been filed since January 1, 1950.

Date of application (a)	Government file number (b)	(Estimated) Total of facilities in dollars on each application (c)	(d) If final action has been taken, give date of	
			Issuance	Denial
None.				

11. **Recent Efforts to Obtain Credit**

(a) Banks— List names and addresses of all Banks of Deposit of Applicant within the last 5 years: *(Mark with an asterisk (*) bank or banks in which deposits are now kept)*

I went East coupld times to try to interest someone in the financing but unable to secure results; recently been corresponding with a number but mining issues seem to have to interest for them.
Unless I can get some aid from a governmental loan, see no way to get these metals opened. Believe this is a place where more metal can be secured for as little money as anywhere.
Others are asking for loans for properties which in my judgment have less possibilities of production than I have.
There is no profit for me, unless the work is successful.

11. **Recent Efforts to Obtain Credit** - Continued

(b) State efforts to obtain credit, within 60 days preceding date of application, from banks, the Reconstruction Finance Corporation, or other sources, results, and reasons if refused. (NOTE.- Section 302 of the Defense Production Act of 1950 states that a loan may be extended "only to the extent that it is not otherwise available on reasonable terms." Accordingly, Applicant should show that it has applied to each bank named in (a) above, or explain the reason for not doing so. The fact that a loan of the particular maturity and terms applied for is refused by a bank or banks is not sufficient to comply with the statute, if credit on reasonable terms is available. State whether a bank will participate in the loan, and if so, state name of bank and amount of participation. Full particulars must be given.) List the names and addresses of banks and other lending institutions to which applications for credit have been made, and in each case state date of application, amount of credit available, if any, maximum term for which credit is available, what consideration, if any, was given to possible guarantee of loan under Federal Reserve Regulation V, and reason for refusal or reason loan was not obtained. Indicate whether or not application was definitely refused for further credit on any basis.

Have been unable to get anyone to undertake the financing, have not asked any Bank aid for this purpose, and know of no back or finance company that could or would provide the funds needed.

12. What other forms of government financial assistance, if any, have been received or requested by the applicant in connection with the purposes of the loan herein applied for? If applicant plans to request such assistance in the future, give details.

None

13. **HISTORY, MANAGEMENT, LEASED AGREEMENTS, INSURANCE, ETC.** (See attached statements)

These subjects should be fully covered in statements attached hereto. Outline past management experience or other basis for showing competence of the Applicant to perform in accordance with expressed purpose of the application. If plant was purchased, state price, form and terms of payment, date of purchase, from whom and under what circumstances purchase was made. If it is proposed to construct or acquire new facilities (including equipment), state estimated cost and basis of such estimate, form and terms of payment, and from whom purchases of facilities will be made. State whether Applicant, or the business or plant, has been in receivership, bankruptcy, Chapter X, XI or XII, in hands of creditors, committee, or whether Applicant has effected a compromise with creditors, and if so, discuss fully. Indicate whether business is conducted in leased premises and whether any facilities are leased from others and describe terms of any lease agreements. List type and amount of insurance carried on plant property. Describe briefly any pending or threatened litigation affecting Applicant.

14. NAMES AND ADDRESSES OF OFFICERS, DIRECTORS, OR PARTNERS, AND IN ADDITION THERETO, THE FIVE LARGEST STOCKHOLDERS IF A CORPORATION.

Owned individually.

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 Applicant (d)	Number of shares held in applicant: Common (e)	Number of shares held in applicant: 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)
	Total		x x x x x			x x x	x x x

15. CAPITAL STOCK ISSUES

Individual ownership. For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par value (c)	Number of shares outstanding (d)	Dividend rate last paid (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

16. PURCHASE AND SALES RELATIONS WITH OTHERS

Does Applicant buy from, sell to, or use the services of, any concern or partnership in which an officer, director, large stockholder, or partner of the Applicant has a substantial interest? If not, so state. If so, give names of such officers, directors, stockholders, and partners, and names of such concerns or partnerships.

Individual ownership.

Does any officer, director, large stockholder, or partner of Applicant receive any commission, bonus, or other payment in cash or services from any concern or partnership with which Applicant has business dealings? If not, so state. If so, give names of such officers, directors, stockholders, or partners and amounts of such commissions, bonuses, or payments.

17. COMPENSATION SCHEDULE

INSTRUCTIONS: The schedule shall show the amount of compensation being paid to all employees of Applicant receiving compensation at a rate in excess of $10,000 per annum, including employees paid on a part-time basis where the rate of compensation exceeds $10,000 per annum computed on a full-time basis. If Applicant is a corporation, the schedule should show the compensation, regardless of amount, being paid to all officers, directors, and such stockholders as have an interest in Applicant's business of 10 percent or more. If Applicant is a partnership, the schedule should show the compensation being paid to, or being withdrawn by, all partners for their personal use. If Applicant is an individual, the schedule should show the amount being withdrawn by Applicant for his personal use. In each case the listed person's connection with the business should be indicated (i.e., whether an officer, director, stockholder, partner, owner, etc.). The calendar basis for the compensation should likewise be shown. Attorneys or firms of attorneys on a regular retainer or salary basis should be included. The schedule should include a separate notation indicating the source and amount of any compensation being paid by a company or firm directly or indirectly controlling, affiliated with, or controlled by, Applicant. If the space provided herein is insufficient, the schedule should be continued on the reverse side or appropriate continuation sheets should be attached.

No salary--just actual expenses travelling, and meals, lodging and expenses while away from home, looking after the work at the mine.

17. **COMPENSATION SCHEDULE** - Continued

The term "compensation", as used herein and such schedule, shall include all salaries, fees, bonuses, commissions, retainers, regular drawing accounts, and other payments, direct or indirect, in money or otherwise, for personal services.

Name (a)	Position (b)	Compensation paid during previous fiscal year (c)	Present compensation (d)
No arrangements made as yet.			

18. **COLLATERAL**

(a) The applicant offers the following described collateral as security for repayment of the loan applied for.

Description (a)	Date acquired (b)	Cost (c)	Book Value (Net) (d)	Appraised* value (e)
Property now held: The Twentieth Century and the interest in the Single Standard, and whatever additional property rights acquired in adjoining properties.				
To be acquired: LittleEva and other rights or properties hereafter acquired.				

* This column need be filled in only if a recent appraisal has been made. If so, identify appraiser below.

Name (a)	Title (b)	Date (c)

(b) Describe existing liens, if any, on property listed above.

None.

Form NSRB-146 (Nov. 1950)	Name and address Frank L. Ross, Denver, Colorado.	Page 9 of 12 pages

EXHIBIT A - CURRENT FINANCIAL STATEMENT

As of _____

(Date not more than 30 days prior to date of application)

ASSETS

CURRENT ASSETS	1. Cash..... Mines, and property Rights.		$
	2. Notes receivable	$	
	Less reserve for doubtful notes		
	3. Accounts receivable:		
	Current	$	
	Past due not over 4 months		
	Past due over 4 months	$	
	Less reserve for doubtful accounts		
	4. Inventories:		
	Raw materials	$	
	Work in process		
	Finished goods	$	
	Less reserve for inventory losses		
	5. Other current assets (describe)		
	TOTAL CURRENT ASSETS		$
FIXED AND OTHER ASSETS	6. Plant used in business:		
	Land	$	
	Buildings		
	7. Machinery		
	8. Equipment, furniture, and fixtures	$	
	Less reserve for depreciation		
	9. Investments—stocks and bonds		
	10. Investments in affiliated companies		
	11. Receivables due from affiliated companies		
	12. Real estate not used in business		
	13. Due from officers, directors, employees, stockholders		
	14. Deferred charges		
	15. Other assets		
	TOTAL ASSETS		$

LIABILITIES

CURRENT LIABILITIES	16. Notes payable (see schedule 1, page 10): None		
	Banks	$	
	Trade creditors		
	Officers, stockholders, relatives		
	Insurance companies		$
	17. Accounts payable		
	18. Other current liabilities:		
	Delinquent taxes: Real estate	$	
	Delinquent taxes: Federal		
	Wages and salaries		
	Due officers		
	Accrued interest, rent, taxes, wages, etc.		
	TOTAL CURRENT LIABILITIES		$
FIXED AND OTHER LIABILITIES	19. Machinery liens		
	20. Mortgage debts (see schedule 2, page 10)..... A new enterprise.		
	21. Bonds or debentures (see schedule 2, page 10)		
	22. Other liabilities		
NET WORTH	23. Common stock (if Applicant is incorporated)	$	
	24. Preferred stock (if Applicant is incorporated)		
	25. Surplus (if Applicant is incorporated)		
	26. Capital and Surplus Account (if Applicant is partnership or individual)		
	TOTAL LIABILITIES		$
	27. Contingent liabilities (explain)		$

NOTE.— Submit copy of last available audit or of financial statement at close of last fiscal period (if such date differs from date of above statement).

SCHEDULE I - Notes Payable (in detail)

Name and address	Maturity	Amount	State amount and character of collateral	Name of guarantor(s) and/or endorser(s)
None				

SCHEDULE 2 - Mortgage Debt (real estate and/or chattels) or Bond Issue

Names and addresses of holders	Date of maturity	Interest rate	Unpaid principal amount	Date to which interest is paid
None; on Twentieth Century, or Single Standard; To acquire Little Eva and others, would require some negotiations; parties secured interests by inheritance; dislike paying taxes; have always expressed willingness to take reasonable amount, probably glad to get it from production.			$	
TOTAL			$	XXXXXXXXXXXXXXXXX

If mortgage secures a bond issue, state whether bonds are principally held by management and/or stockholders or by others, and attach copy of mortgage indenture.

EXHIBIT B - CONDENSED COMPARATIVE STATEMENT OF INCOME AND EXPENSES

For years ended _____
(Insert date of end of fiscal year)

(000.00 omitted)

None	(Figures for 3 preceding years) 19	19	19	Current year as of date of Exhibit A
1. Net sales				
2. Cost of goods sold				
3. Gross profit on sales (line 1 minus line 2)				
4. Other income (itemize)				
5. Total (line 3 plus line 4)				
6. Salaries (officers or partners)*				
7. Selling and all other expenses				
8. Total of lines 6 and 7				
9. Profit or loss before depreciation and Federal taxes (line 5 minus line 8)				
10. Depreciation				
11. Federal Income and Excess Profits Taxes				
12. Net profit or loss (line 9 minus lines 10 and 11)				
ANALYSIS OF SURPLUS				
13. Total surplus at beginning of period				
14. Net profit or loss for period				
15. Line 13 plus line 14 if profit; line 13 minus line 14 if loss				
Add:				
16. Surplus paid in during period				
17. Surplus resulting from revaluation of assets				
18. Other additions to surplus (itemize)				
19. Total of lines 15 to 18, inclusive				
Deduct:				
20. Dividends				
21. Other charges to surplus (itemize)				
22. Total of lines 20 and 21				
23. Surplus at end of period (line 19 less line 22), MUST AGREE WITH SURPLUS AS SHOWN IN BALANCE SHEETS				

* To include all payments of any kind (commissions, bonuses, withdrawals) to officers or partners.

NOTE—If years included in the above tables are not adequately representative of applicant's financial experience, information may be submitted for additional years.

Form NSRB-146 (Nov. 1950) | Name and address Frank L. Ross, Denver, Colorado. |

EXHIBIT C - CONDENSED COMPARATIVE STATEMENT OF CONDITION

For years ended December 31, 1950
(Insert date of end of fiscal year)

(000.00 omitted. Use figures to nearest thousand. For instance, the figure $3,489.36 should be written as 3; the figure $3,689.36 should be written as 4)

ASSETS	(Figures for 3 preceding years) 19	19	19	Current year as of date of Exhibit A
CURRENT ASSETS:				
1. Cash	No statement available, as my assets consist			
2. Receivables (after deducting reserves)				
3. Inventories	of mining and oil interests - at present no			
4. Other current assets:	way to estimate valuations.			
TOTAL CURRENT ASSETS	Have this Twentieth Century Mining			
FIXED AND OTHER ASSETS:	Claim and 1/16 of the Single Standard			
5. Plant accounts (before depreciation):	at Ophir; have St. Paul Mine in Red			
Machinery, equipment, etc.	Mountain District (not productive now)			
Delivery equipment	and a productive interest in Galtie Boy			
Real estate and buildings used in business	Mine in San Juan County. A little			
6. Other assets (as investments, real estate not used in business, etc.):	oil royalties, and some undrilled acreage. Also some rare metal 120 acres in Utah-- unproven as yet. (Cash income about $100.00 per month under present situations.			
TOTAL ASSETS				
LIABILITIES				
CURRENT LIABILITIES:				
8. Notes payable	Nothing, except current expenses.			
9. Accounts payable				
10. Accrued liabilities	Am Mine Poor, &c., so nee help to			
11. Other current liabilities:	get some of them started. I once upon a time operated the Silverton Smelter, so became familar with mining and ore production; thought I knew what it took to make a good mine;			
TOTAL CURRENT LIABILITIES	those I have I think are good, but			
FIXED AND OTHER LIABILITIES:	under recent mining conditions, have			
12. Mortgage debts	only been able to hold on and wait--			
13. Debentures	believe this loan will help everyone, as			
14. Other fixed liabilities:	well as aid in production of the metals so sorely needed.			
RESERVES:				
15. Reserve for depreciation				
16. Other reserves:				
NET WORTH:				
17. Common stock (issued) (if Applicant is incorporated)				
18. Preferred stock (issued) (if Applicant is incorporated)				
19. Surplus (if Applicant is incorporated)				
20. Capital and surplus account (if Applicant is partnership or individual)				
TOTAL LIABILITIES				

NOTE— If years included in the above table are not adequately representative of applicant's financial experience, condition statements may be submitted for additional years.

EXHIBIT D

AGREEMENT AS TO COMPENSATION FOR SERVICES RENDERED OR TO BE RENDERED TO APPLICANT IN CONNECTION WITH APPLICATION AND/OR LOAN

To induce the United States Government and its agencies to make a loan under Sec. 302 of the Defense Production Act of 1950 to Frank L. Ross (hereinafter called "Applicant") and in consideration of the making of a loan to Applicant, the undersigned, having been retained by Applicant for the purpose of rendering professional or other services in connection with its application for a loan or loans, hereby represents, warrants, and agrees that the undersigned has not been paid, has not made any agreement with the Applicant to be paid, and has not procured any person to pay or agree to pay, and will not, directly or indirectly, charge or receive any bonus, fee, or commission in any form in connection with the said application for, or the obtaining of, the loan applied for by the Applicant, or any compensation in any form for services rendered or to be rendered in connection therewith except for the services and in the amounts stated below:

Name	Description of services	Amount paid	Amount to be paid
No One	As I am doing the work myself, and paying for the plats, printing, and other expenses.	$	$

To induce the making of the loan and the employment of the undersigned by Applicant, the undersigned hereby further warrants, covenants and agrees, upon the consideration herein specified, and in consideration of the employment of the undersigned by Applicant, as above recited, that if the amount of compensation stated above for any such services shall not be deemed reasonable by any agency of the United States Government, the undersigned will reduce the charge for such services to such amount as shall be deemed reasonable by such agency, and will not, directly or indirectly, charge or collect from the Applicant or any other person, any sum in excess of the amount so deemed reasonable; and that if the undersigned has heretofore collected, from the Applicant or any other person, as compensation for any such services, any amount deemed by such agency to be unreasonable, the undersigned will refund to Applicant or such other person such sums as are in excess of the amount deemed reasonable. The undersigned further warrants, covenants and agrees that if the amount of the compensation for any such services is not determinable at the date of application, or is not stated above, it will not collect or charge any sum as compensation for such services without the prior written approval of the Government agency with which this application is officially filed as to the nature of the services for which such compensation is to be paid and the amount of such compensation.

Frank L. Ross

Witness: _____

Address of witness: _____

Dated _____, 19____

NOTE—Corporations must execute foregoing certificate in corporate name, by duly authorized officer, and seal must be affixed and duly attested; partnerships must execute in firm name, together with signature of a general partner. If no compensation is paid or to be paid for services rendered in connection with application or loan, this should be so stated and the Applicant should sign this Exhibit.

CERTIFICATION

The Applicant hereby certifies that the statements made in the foregoing application, and all exhibits and documents submitted in connection therewith, are true and correct statements to the best of Applicant's information and belief and are submitted as a basis for credit. The Applicant agrees to reimburse any agency of the United States Government upon demand for any expenses incurred in connection with or arising out of this application or any loan made pursuant hereto.

Dated March 21, 1951

Witness: _____

(For individual applicants)

Frank L. Ross
(Signature)

Witness: _____

(For partnership applicants)

_____
(Full name of firm)

By _____, a general partner.
(Signature)

(For corporate applicants)

(CORPORATE SEAL)

_____
(Full corporate name of Applicant)

Attest: _____

By _____
(Signature) (Title)

_____, _____
(Signature) (Title)

The United States Criminal Code, 18 U.S.C., Sec. 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: 1950 O - 916171

Norwood, Colorado, Octo. 23, 1947

Mr. Frank L. Ross,
Denver, Colorado.

Dear Sir:

I lived in Ophier many years, and still interested in some mining operations there. It is a gold producing district, the scene of much activity in early days. The ores are found near vein intersections, and in the higher altitudes are good gold values. Depper, there are sulphides carry more lead, copper and zinc with some gold and silver.

Mr. Arthur Brewster was a ~~firned~~ friend for many years, and he was good experienced miner, who knew the district well. He located, patented and started development work on the Twentieth Century Lode. He cut some ore and shipped from the property some smelter grade ores, running well in gold. Illness in later years prevented his completing the work he planned.

The property is well located, inside the mineralized section, and ores when found should be good grade, with much having value sufficient to ship direct to the smelter.

My recommendation would be that you complete the development work, and I think you can make a valueable and profitable mine there.

Yours truly,

J M L Beisle

EL FIDEL HOTEL

JOHN FIDEL
MANAGING DIRECTOR

Largest in New Mexico

~~ALBUQUERQUE, N. M.~~

Grants, New Mexico.
October 28, 1947.

Mr. Frank L. Ross,
Attorney at Law,
P.O.Box 2126, Denver Colo.

Dear Mr. Ross:

Am just in receipt of your letter of Oct. 21st., which was forwarded to me here from Ophir. I am twenty-seven miles out from Grants mining fluorspar and do not get my mail very regularly.

You ask me about Arthur Brewster and the Twentieth Century Lode which he owned. I first met Brewster when I went to Ophir in 1909 to work in the old Suffolk mill. At that time he was driving his Little Eva cross-cut to cut that portion of the Shumaker vein which he had covered with his Twentieth Century claim. The Shumaker was a producer of high-grade free milling gold ore. I left Ophir in 1910 and did not return until 1917. Between those two dates, he had cut the vein, driven an up-raise and extracted a considerable amount of gold ore. He has held the property ever since, paying taxes on it and thought well enough of it to fight a law-suit over it, which he won. He came into that country when he was a young fellow, he and his family being one of the first to cross the Ophir Pass from Silverton to Ophir. After spending some time in the Paradox country, he returned to Ophir to engage in mining and was connected with that game in one way or another until he died. He was a good reliable, conscientious fellow and a good miner. As to the present value of the Twentieth Century property, it would be hard to assess now until some work was done on it but it is on a gold producing hill which was the scene of several profitable gold producers in the early days and undoubtedly will produce more in the future.

My family are all well, thank you. My youngest son, the one you met at Ophir, received his discharge shortly after he went back to the hospital as his leg had healed up while at Ophir. He is now in Colorado, has a car with all the gadgets on the stearing wheel and gets around pretty well for a fellow with only one good limb out of four. At least he has not lost any of his spirit. Wishing you the best of good luck, I am,

Yours Very Truly,

C. L. Brown

C. L. Brown.

(Copy)

Ouray, Colo.,

June 4, 1947

Mr. Frank Ross:

Your letter of June 1.

Glad I got to meet you at Silverton, and am writing you about a old friend of mine, Art Brewster. I have known Art Brewster 40 years and to my opinion he was as good a prospector as I ever was out with.

I was with him at his mine, the 20th Century, at Ophir the year of 1916, and we took some wonderful ore out the short time I was there, as he had a bad cold, and at that time I was just visiting with him, so I got him to go to Paradox to spend the winter, and I always wanted to go back but never knew who owned it after Mr. Brewster died, and as a prospector and miner I give that property a good recommendation.

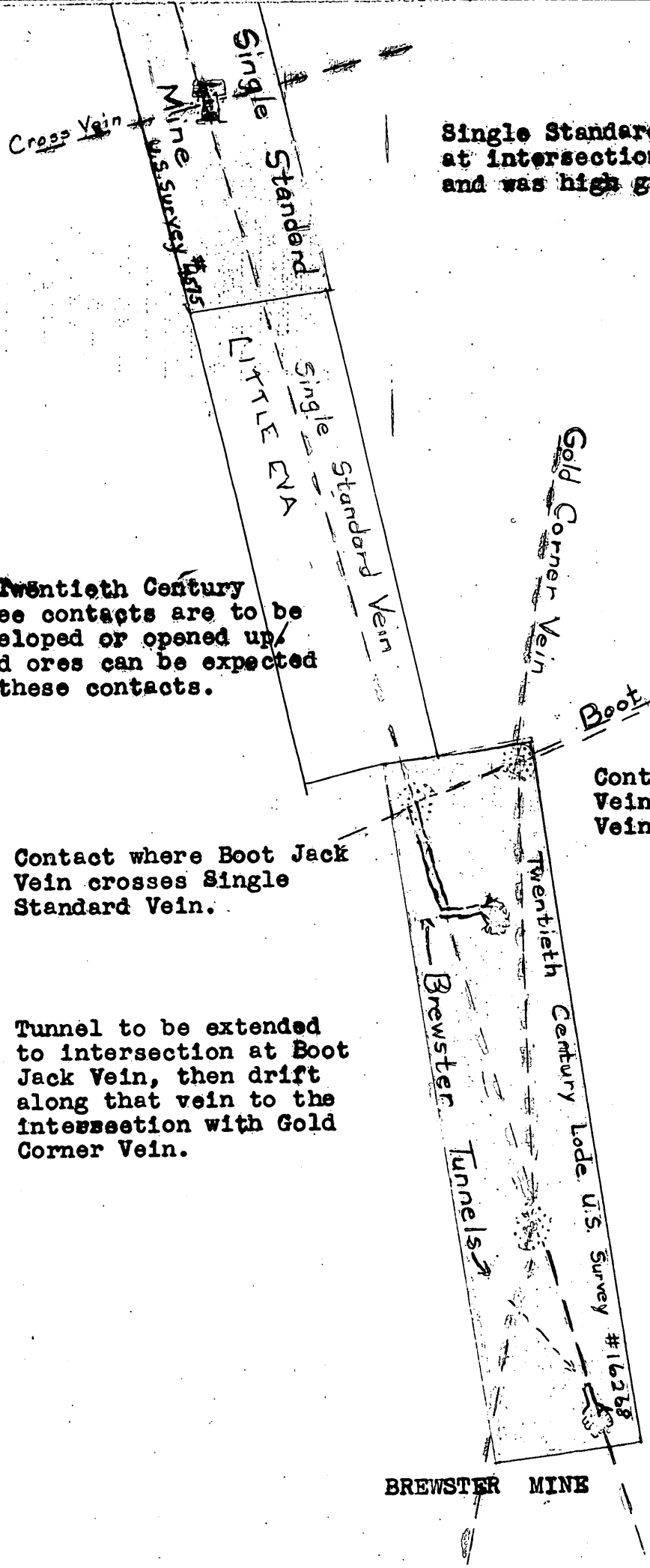
If you want to check on my knowledge, write H. W, Bosley of Moab, or Jake Lewis of Gateway, Colo.

Hoping you success, am as ever,

L. H. Couchman,
Montrose, Colo.
General Del.

- - - - - - - - - - - - - -

(Note by Mr. Ross)
Have same opinions by
Jimmy Noise, Ophir, Colo., Jim Barlile, Norwood, Colo.,
T. I. Brown, Ophir, Colo.



Single Standard Ore Body was at intersection of a cross vein and was high grade.

On Twentieth Century three contacts are to be developed or opened up. Gold ores can be expected at these contacts.

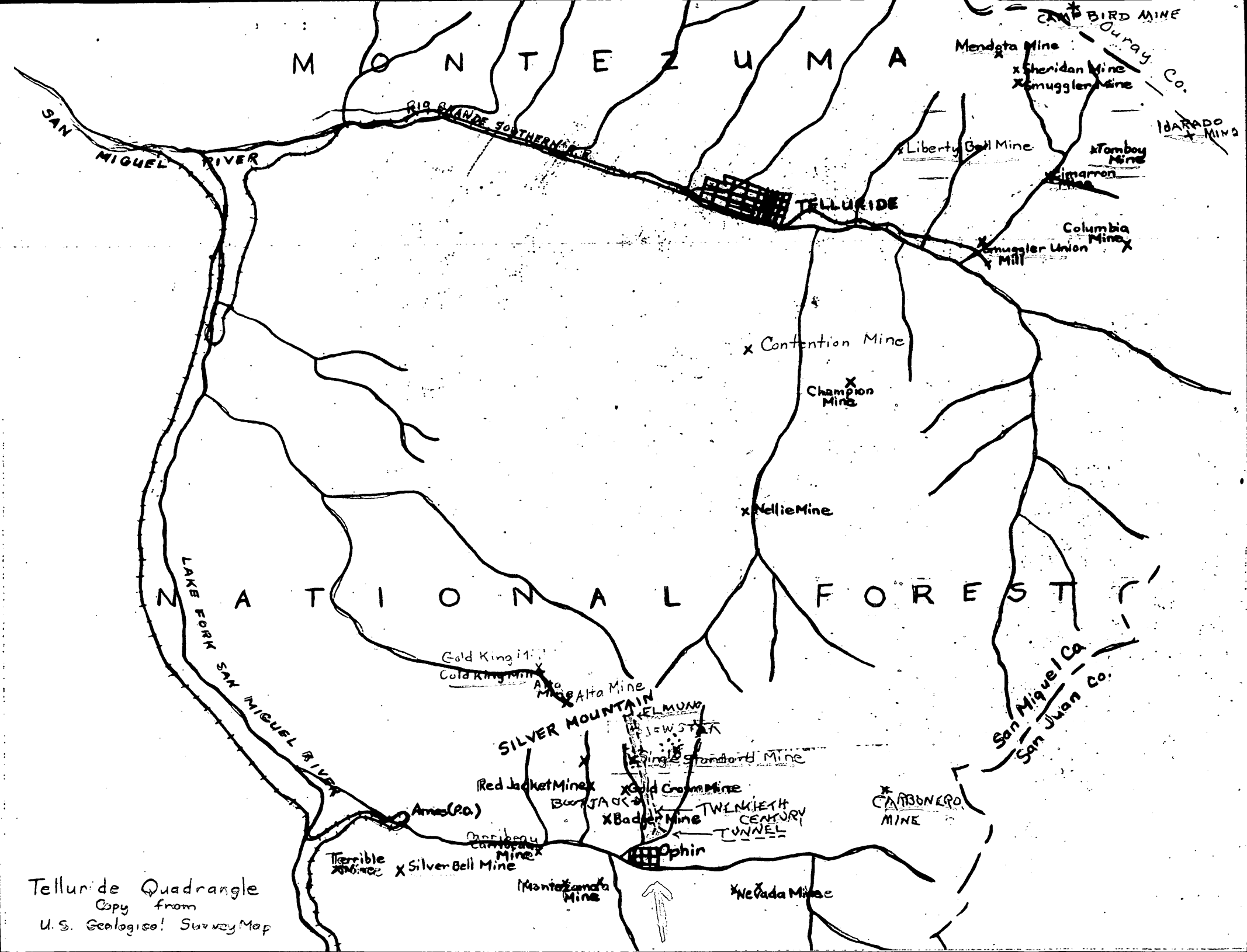
Contact where Boot Jack Vein crosses Gold Corner Vein.

Contact where Boot Jack Vein crosses Single Standard Vein.

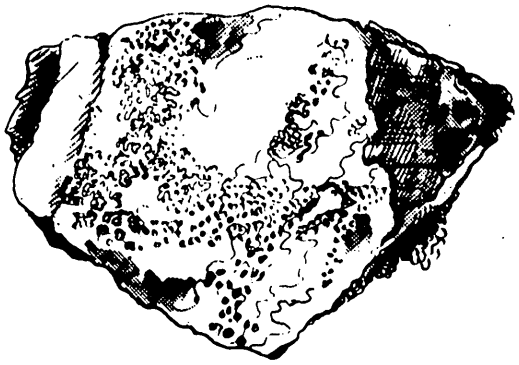
Tunnel to be extended to intersection at Boot Jack Vein, then drift along that vein to the intersection with Gold Corner Vein.

Contact where Gold Corner Vein crosses Single Standard Vein.

Brewster's Tunnels are to be extended to reach the contact.



Telluride Quadrangle
Copy from
U.S. Geological Survey Map



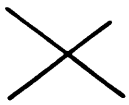
This is a drawing (slightly enlarged) of the ore taken by the elder Brewster and associates from the one chute they opened up and worked. It shows how the minerals, in this case gold, is deposited in the silicious rock as it is formed to fill the crevices.

A Little Geology.

A vein is a crack in the earth's crust like this:

A cross vein is a crack at a different angle, like this:

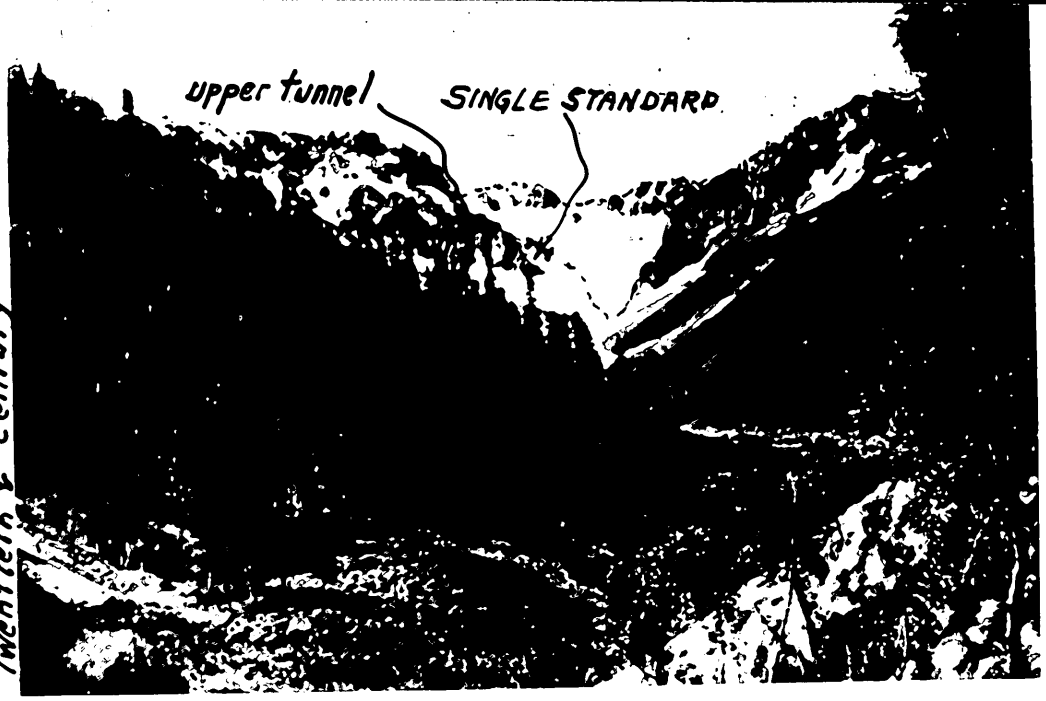
An intersection or contacts is a crossing of veins, like this:



As time passes geologically the tremors and tremblings of the formation causes the four sharp points to grind away and erode, so the waters and gasses remove the sands and gravels slowly but surely, until the intersections look like this:

But Nature does not permit a vacuum, so as these erosions open space, the silica and sediment in the waters and gasses form a new kind or rock, a quartz or quartzite to fill the space. In this new stock (vein filling) whatever minerals the waters or gasses carried are dropped and impregnated into this new rock filling, so what are known as ore lenses, chutes and mineral deposits are formed.

But I have none of this kind of ore <u>opened up</u>; the elder Brewster and his associates took out all they could find in the ore lenses they opened up; this is one of the few specimens remaining of that old ore body. But the younger Brewster followed the vein along until he found a couple of places where it was crossed by other veins; he located this and it is to get at the mill grade ores, carrying LEAD, ZINC and COPPER, as well as some gold and silver, that I am to use the money for from this Loan.



2040 BROADWAY — ESTABLISHED, 1866 — TELEPHONE TAbor 3615

WALTER E. BURLINGAME

CHEMIST—ASSAYER—ENGINEER

DENVER, COLORADO

FOLIO 502

Frank L. Ross

DATE Oct 23 1947

We Hereby Certify, that the samples assayed for you gave the following results:

DESCRIPTION	GOLD OUNCES PER TON	SILVER OUNCES PER TON	COPPER PER CENT (WET)	LEAD PER CENT (WET)	ZINC PER CENT	IRON PER CENT	SILICA PER CENT			VALUE PER TON
Ross #1	0.08	4.50		10.40						$27.65
Ross #2	0.08	22.30		27.50						77.87
Ross #3	3.30	7.10								121.89
Ross #4	0.08	1.00								3.70

GOLD AT 35 PER OUNCE — COPPER AT ____ PER UNIT

SILVER AT .90 PER OUNCE — ZINC AT ____ PER UNIT

LEAD AT 2.00 PER UNIT

Charges $ ~~8.00 Paid~~

WALTER E. BURLINGAME

FROSS MINE - OPHIR, COLORADO

(Production figures from Office of State Commissioner of Mines)

Tomboy Mine	From 6/7/1899 to 6/30/1924			$22,235,883.00
Smuggler-Union	From 1882 through 1924			60,000,000.00 (gross)
Liberty Bell	From 1898 through 1924			19,000,000.00 (16,000,000.00(net) (3,000,000.00(dividends)
CampbBird	Through 1924			26,000,000.00(net) (16,000,000.00(dividends)
	1926			33,572.00
	1927	Gold and silver bullion		8,160.00
		Concentrates	121 tons	
		Milling ore	2340 tons	
	1928	Gold and silver bullion		108,750.00
		Concentrates	478 tons	
		Milling ore	6511 tons	
Silver Bell	1922	Concentrates	232 tons	
	1923	"	426 tons	
		Crude ore	118 tons	
	1924	"	23 tons	
	1926	"	59 tons	
	1928			8,220.00
	1934			190.02
Alta	1917	Milling ore	25000 tons	
		Concentrates	1800 tons	
	1918	"	500 tons	
	1919	"	1350 tons	
		Milling ore	27000 tons	
	1920	"	14180 tons	
		Concentrates	986 tons	
	1921	Crude ore	69 tons	
		Concentrates	1090 tons	
	1922	"	2801 tons	
		Crude ore	51 tons	
	1923	Concentrates	2190 tons	
	1926	Milling ore	1500 tons	
		Crude ore	200 tons	
		Concentrates	250 tons	
	1928	"	235 tons	
	1937			42,383.00
	1938			176,609.00
	1939			264,181.00
	1943			118,275.00
	1945			127,000.00
King Lease (Camp Bird)	1929	Crude ore		140,273.00
		Concentrates		84,159.00
	1930 through 1945	"		2,535,443.91
		(Gold and silver bullion were also sold to U. S. Mint from this property but we do not have the figures.)		
Virginius	No information			

(Early day high grade gold production in Ophir District was produced before time when reports made or records kept)

(Production figures from Office of U. S. Mining Department)

SAN MIGUEL COUNTY, Colorado.

Grand Total thru 1945

	GOLD	$ 73,352,427
	SILVER	37,257,717
	COPPER	3,218,767
	LEAD	14,320,333
	ZINC	2,281,351
	Total values of metals,	130,430,595
1946	All metals	1,634,943
		$ 132,065,538

- - - - -

In MINERAL MARKET REPORT, Issued January 10, 1947, it says:

San Miguel County.-- Production of all metals in San Miguel County increased in 1946 over 1945. The total gross value of these metals rose 29 percent. The production from the Idarado Mining Co. property was credited to San Miguel County. The Company continued to develop its Black Bear property through the 12,000-foot Treasury Tunnel, with its portal in Ouray County and to make additions to its 300-ton selective-flotation mill located at the tunnel portal. Lead, zinc and copper concentrates were produced. The Telluride Mines, Inc., operated the Smuggler-Union, Montana, Blck Eagle, and Cimarron mines, treating the ore in the Company 550-ton amalgamation and gravity-and flotation-concentration mill at Pandora. The company continued to drive a 3-mile, 9-by9-foot, tunnel in the sediments at the mill level to connect with the Pandora and Smuggler-Union veins. The Alta Mines, Inc., continued to operate its Alta-St. Louis mine and 100-ton flotation mill. The Silver Bell Mines Co. completed a new 150-ton flotation plant at Ophir to treat ore from the Silver Bell mine; actual production was started late in the year.

- - - - -

Suggestion by Mr. Ross:

Let us open the lead-zinc-copper ores under the upper gold and silver chutes, the same as they did at the other mines--the Smuggler-Union, the Shenandoah-Dives, Alta and those that have been producing during the past twenty years or more.

March 20th, 1951.

FROSS MINE.

(Historical Outline)

The FROSS MINE consists of the TWENTIETH CENTURY, U. S. Sur. No. 10268; an undivided one-sixteenth interest in the Single Standard, U. S. Sur. No. 4575, and such other interests as may be obtained in the adjoining and nearby claims, near Ophir, San Miguel County, Colorado.

About 1876, a man by the name of Brewster, from Missouri, and a man by the name of Ross, went to Ophir, Colorado; met; their families became acquainted; both moved to Montrose, Colorado, for education of children. The elder Brewster always claimed he made over $80,000 from his interest in the Single Standard, and other properties. On his death the Single Standard title passed to a son, Arthur Brewster, who located the same vein lower on the Mountain, calling it the Twentieth Century. He opened some good shipping ores, shipping it crude. At time of his death, after several years illness, he had over $10,000.00 in cash--pretty good for a prospector and small operator.

On death of Arthur Brewster, title passed to a Sister, Grace Brewster, who has sold and transferred the title to Frank L. Ross, who now holds the ownership. Shipments have been from upper levels, which is the GOLD area in the San Juan District. It is at about timberline, (11,500 foot elevation usually. Below timberline the veins and ores become more sulphide, with LEAD, ZINC and COPPER. Practically all mines in the San Juan Section have same historical outline. The ores below timberline are more of a concentrating ore, needing mills and machinery to make it into a commercial quantity or quality. The Smuggler-Union (Telluride) Mine of to-day is under the old-time Sheridan, Mandota and Union. The Shenandoah-Dives of to-day is from ores under the old North Star of King Solomon and the Dives. So with practically all large producers. Brewster intended to do this, but never got to it. Now, I want to do it, as I am confident the tonnage, values and metals are there. I know the mines of the San Juan; at one time I operated a Smelter at Silverton; think I know what it takes to make a good mine, and confident I can make a large one here.

Desire to call it the FROST MINE. Could not risk my name unless I was pretty certain it would be a success. Have been unable to promote or finance it in usual way-- may be I am a poor salesman, or possibly brokers and promoters were not in humor to act. So I hope to get some federal assistance, as the metals needed are there.

So I make, and present this application, under the present laws and regulations. The present owners of the adjoining properties are heirs and descendants, long removed from that vicinity. Have communicated with most of them; they seem willing to take any reasonable offers; they are tired of paying taxes, so encourage me to try to do something for them. I am confident I can secure the little Eva, the other interests in the Single Standard and other adjoining properties upon reasonable and favorable basis, as well as secure rights-of-way or leases for the asking.

Believe there is the making of a really large Mine there. Being close to Ophir, a lot of usual expense, such as bunk houses, boarding houses and other accomodations for workmen, can be saved. All the money can go into mine work, machinery for mining, powder, power and actual mining expenses. Supervising, overhead and management expenses will be held to a minimum. Even my Compensation must come from production (except actual expenses away from Denver).

I can refer to Mr. A. C. Gilfley, or any other reputable mining man, or official, for reference or recommendation. Mr. Gilfley operates the Silver Bell Mine one way, and is examining the Carbonero on the other side, so knows the District.

Trusting my Application will receive favorable attention, and the loan be granted, I remain,

Very respectfully,

3813 St. Paul Street,
Denver, Colorado.
Tel. PR 3645.

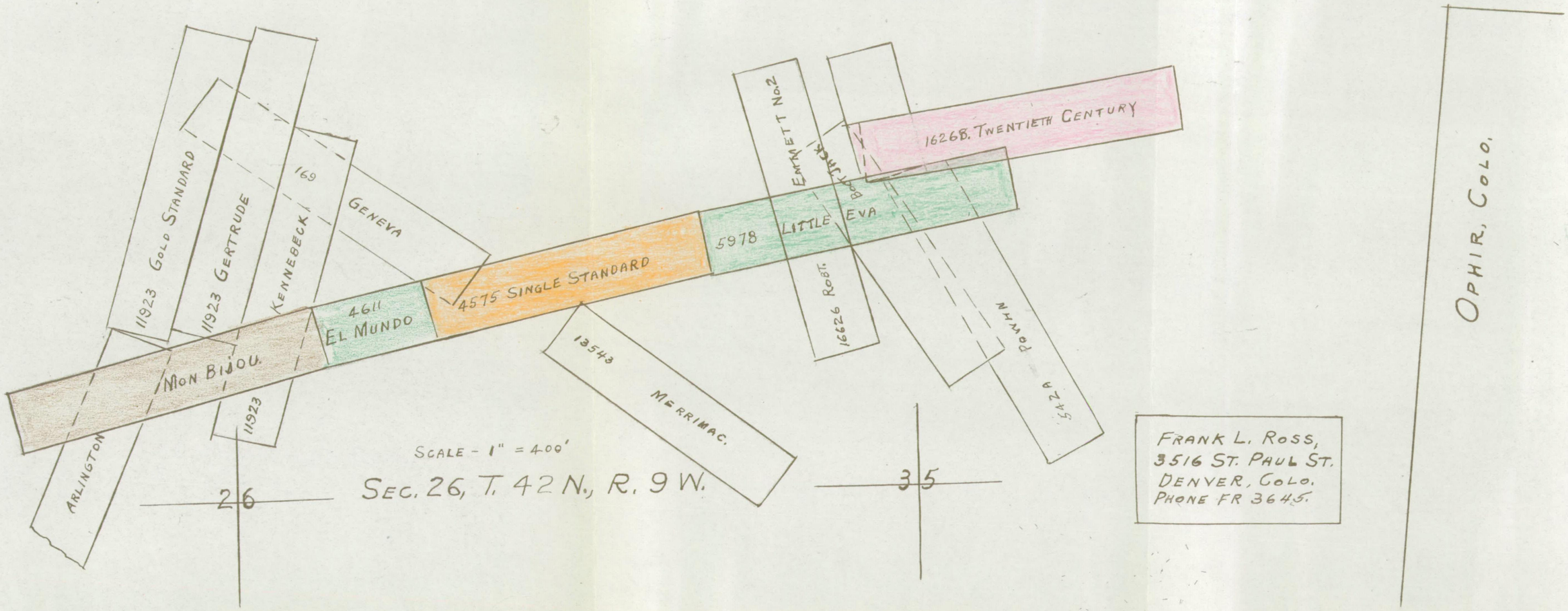
FROSS RARE METAL

MINIG CLAIMS IN

County of WASHINGTON, State of UTAH.

600 acres in Sec. 21, TP. 42, S. R. 11 W.

COPY



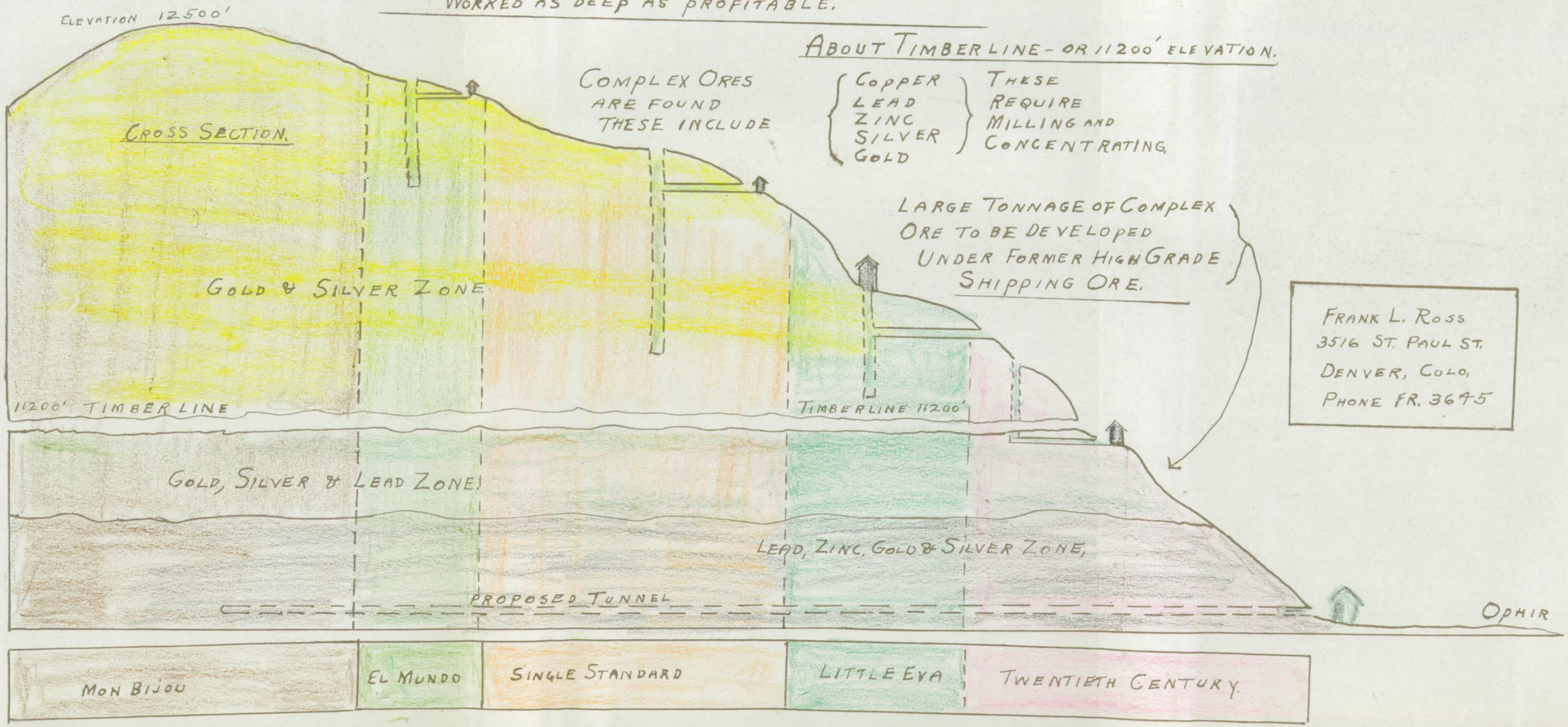
FRANK L. ROSS,
3516 ST. PAUL ST.
DENVER, COLO.
PHONE FR 3645.

Cross Section of Ophir District. — San Miguel County, Colo.

Early Day Mines were

Mon Bijou Elmuno Single Standard Boot Jack Emmet	Gold and Silver, High Grade, Shipped Crude Ore.

Later Brewster Opened Twentieth Century.
Worked as deep as profitable.



Frank L. Ross
3516 St. Paul St.
Denver, Colo.
Phone FR. 3695