



CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
416 W. Congress St., Suite 100
Tucson, Arizona 85701
520-770-3500
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

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325 Heard Bldg.
Phoenix, Arizona
November 16, 1943

Alto Mine
R7C file

TULLY - Asst. Chief - Mining Section RFC - Washington (25) D. C.

Re: B. & R M nes - Docket No. B-WP-4601

On November 10th, I inspected the progress being made at this property, and found that the applicant is raising on the vein in the main drift, and slowly advancing the main drift ahead. Unfortunately they have not been able to open up a sizeable ore body, although they have been able to ship one car of ore. Since the mine was last inspected by Mr. Casier, in August, the main drift has been advanced to the East a distance of 28 feet, and the attached assay was taken in the new face across a width of 27 inches, and assayed .03 oz. of gold, .06 oz. of silver, .96% copper, .90% lead, and 1.05% zinc. This is not commercial ore, although from a geological standpoint the vein looks better here since it is now following a well defined fissure, and could open up into a commercial ore body for this reason. The raise which was started 110 feet back from the new East face sampled by me, is now up a height of 25 feet above the track level, and has been well timbered, and is in good condition. Unfortunately, the back of this raise is not now in commercial ore so was not sampled.

The ore shipped by the applicant, came from sorted high grade produced from the drift operation along the vein, and consists of two (2) different types of ore, one lead and the other copper. The lead ore amounted to 16.39 dry tons, assaying .02 oz. gold, 6.8 oz. silver, 21.0% lead, and 0.97% copper. The copper ore amounting to 17.036 dry tons, assaying .33 oz. gold, 9.0 oz. silver, and 3.29% copper. The zinc in these two (2) lots ran a little over 1%.

Since the applicant is now out of funds, he will be unable to do any further development on the mine. However, the adjoining property which is working on the same vein is applying for a Government loan, and the application together with my report will be submitted to Washington as soon as available.

WM. B. MAITLAND
Supervising Engineer

WBM:MMW

Docket No B-ND-4801

Date authorization for Examination

Received Jan 15, 1943

Date of Examination Feb 10, 11, 1943

Date of Report Feb 20, 1943

1. Name and Address of Applicant

Name - B + R. Mines Inc.,

Address - P.O. Box 892

City + State - Nogales, Arizona

Correspondent - Mr H. J. Brunswick, President
Same address

2. Character of Project

To develop a copper, lead, and zinc mine by means of an adit tunnel and raises.

3. Location of mine - Alto Mine

Township, range, section - Sec 12-13, T 21S, R 14E G + SR B + M

County + State - Lyndell Mining District, Santa Cruz Co
Arizona

Name + distance by road nearest railway station -

The property is 14 miles by road north
west of Patagonia a town on the
Southern Pacific Railroad

Condition + seasonal accessibility of road,

mine to railway - The road from
Patagonia to the mine is a well graded
dirt road except for the last two
miles near the mine. This ^{short} section of the road
is the narrow and rocky but is passable
for cars and trucks. The mine should be
accessible at all times of the year.

4 Applicant

The applicant H. J. Brunswicker, President and manager of the company and mine is an energetic and intelligent man of middle age. He has had considerable practical mining experience in Arizona and has had two years mining training in college. I was well satisfied with the ^{quality of the} work done to date on the property and his plan of operation in the future seems sound. I believe him fully capable of operating this project and he seems to be well above the average of the applicants I have contacted. Both he and his company enjoy a good reputation in this district. He now employs two men, a miner and a mechanic and both seem competent men.

5. Loan Requested

After thoroughly discussing the project with the applicant he has agreed with me on the nature of the expenditures and feels that \$10,000 will be sufficient to develop the property.

6. Description of Project

A General Features

(2) There are certain legal factors involved in this project that warrant some discussion. First, there are fixed minimum monthly payments due on the lease, second, the vein will be worked thru a common tunnel with the adjoining ^{mine} property, and third the applicant holds a lease from a second party who in turn leases from the owners.

1. The ~~repeal~~ present lease under which the B + R Mines are operating calls for a \$100 fixed monthly minimum royalty. The Washington office of the R. F. C. has requested that this contract be subordinated to the repayment of the loan. The applicant has informed me that the ~~lessor~~ Long Contact Mining Co. from ^{whom} ~~which~~ the applicant has a lease has refused to subordinate these payments. However as stated in the attached letter from the applicant, he would arrange the necessary bond with a local bank to guarantee the payment of this fixed royalty for the life of the loan. If satisfactory to Washington this eliminates this legal deficiency.

2. The B + R Mines entered into an agreement with the Long Contact Mining Co. to jointly drive the present 1200 foot crosscut to connect the alto vein 500 feet below its outcrop. This work has been completed with the B + R Mines paying their share of the tunnel cost. As the Long Contact Mining Company is apparently not the most agreeable and efficient partner for such a common tunnel operation I believe that our legal department should scrutinize the accompanying legal documents ~~and~~ ~~tidy~~ in order to make certain that any possible non-cooperative act, ^{in the future} on the part of the Long Contact Mining Co. will not harass present operation of the mine by the B + R Mines on their section of the vein. The only possible method of efficiently stopping the ore from this vein under the project necessitates the use of this common crosscut tunnel by the B + R Mines.

(3)

③ Attached to the application are copies of the leases from the Long Contact Mining Co to the applicant company (B + R Mines). However the Long Contact Mining Co merely holds a lease from E. D. Morton the claim owner. Mr Morton is Arizona manager of the Eagle Patcher Mining Co and is a reputable mining man. However in the event of the failure of the Long Contact Mining Co their lease would be voided and as a consequence the applicants ~~lease~~ sub-lease would also be voided. I have written the applicant suggesting that he obtain an option ^{on the property} from the claim owner that would go into effect when, as, and if the Long Contact Mining company forfeits their rights to the claims. Since my report will probably reach the Washington office before hearing from the applicant I suggest that the legal department examine this phase of the ~~matter~~ application more fully and decide on the proper procedure.

B Existing Development

This property has been worked at various times since 1687 to the present time. The total production is not known but could have been considerably over \$5,000,000. The principal metals produced have been gold, silver, lead, copper, and zinc. U. S. G. S. Bull 582, of which a copy accompanies the application, well describes the development and geology of this mine. I inspected all of the accessible workings and found the following general conditions: -

1. The adit vein has been stoped in places for a vein length of over 2000 feet.
2. Ore has been mined to a depth of 360 feet ^{lowest workings} below the vein outcrop with ore reported in the bottom of the

3. The vein as stopped varies from 6 inches to 12 feet wide with a probable average of 2 feet
4. One minerals are galena, cerussite, argentite, chalcopryite, pyrite, tetrahedrite, chalcocite, cuprite, & gold in a quartz gangue containing minor calcite and chalcedony.
5. The vein is in a fissure and it is banded shows a banded structure at various points
6. The country rock is latite, andesite, and granite porphyry.
7. There are three distinct veins outcropping on the surface with some stopping done on all three veins and apparently as shown by the dip these veins should come together at depth.
8. The Alto ~~to~~ vein is nearly vertical in dip and strikes a little north of west.
9. Commercial ^{sulfide} ore has been encountered in the lower crosscut which intersects the Alto vein 500 feet below its outcrop
10. and 200 feet below the lowest ^{old} workings
10. The applicant has a lease on the eastern half of ~~these~~ the Alto vein.
11. My sampling indicates that the lead and zinc values increase with depth while gold, silver, and copper values apparently decrease with depth.

(5)

12
 2 4 24
 4 4 42
 4 4 30
 7 4 108
 5 4
 15
 6

Ore Reserves

I examined all of the surface workings along the Alto Vein but could not enter most of them as they were partly covered and no ladders were available. My sampling of these workings is shown on the attached vertical section along the plane of the vein. It is obvious that a large tonnage of ore has been shipped from these upper workings. There are about 75,000 tons of low grade ore on the various dumps on the surface.

The lower 1200 foot crosscut intersects the vein about 300 feet below the bottom of these old stops. The accompanying U.S.G.S. report states that ore was found in the lowest of the upper workings and the new lower crosscut intersects a number of interesting looking veins and on the Strongest vein in this crosscut the Long Contact Co have drifted east to the property line of the 'B & R' Mines and are now starting a raise from this drift on their side of the property line.

⑥ The ore in this lower drift is entirely sulfide and while ^{the heavy sulfide band} it is narrow (a little over 1') the country rock is partly mineralized on both sides of this high grade section. It is my opinion that they have not as yet cut an ore shoot in this vein but there will be a considerable tonnage of ore available between this lower drift and the old workings above. My sampling of this ore is shown on my map.

The average of all 7 samples I took on the Alto Vein show 0.09 oz gold, 16.5 oz silver, 5.65 % copper.

probable or with a net profit of \$10 per ton or a total net of \$60,000.

Expenditures to date by Applicant Company

The applicant's Superintendent informed me his company has spent in excess of \$38,000 on the property to date. Of this amount \$4483.14 was spent as their share of the cost of driving the lower crosscut. He has kept accurate cost records of the crosscutting and for 546 feet of cross tunnel the total cost was \$15.57 per foot. The ground is hard and requires no timber. The crosscut is 6 by 7 in cross-section and is complete with tracks, air & water lines, vent pipe, etc. In doing the proposed development work the applicant estimates that the ore mined should pay one half of the drifting and raising costs.

The applicant company started work on this property in December 1940 and first planned to work the low grade dumps on the surface. Of a consequence they built a good mill constructed mill on the top of the hill. This mill consists of the following:-

1. Mill Building
2. 9x14 Allis Chalmers jaw crusher.
3. 1 - 14x24 rolls
4. 200 ton wooden ore bin
5. conveyor belts, elevator, feeder.
6. 2 southwestern 24" gigs
7. 2 Walflay Tables
8. 20,000 wooden sawwater tank
9. Necessary gasoline engines for above equipment

10. Machine shop containing lathe, drill press, power hacksaw, power grinder, welding outfit, blacksmith tools, power timber saw, and miscellaneous hand tools.

In addition at the lower crosscut the applicant has a 165 cu ft. compressor and gas engine, 2nd jackhammers, powder magazine, pipe, etc.

Near the mill there are three houses for operating personnel.

9) In order to furnish water for the mill the applicant intended to pump water from the old workings. He found however that the water contained so much copper that steel pump equipment was useless and he was unable to purchase the necessary brass or stainless steel ^{machinery} equipment. In addition he found that the old workings were so badly caved that a cheap and continuous supply of water could not be obtained from this source. Of a consequence the mill program was abandoned. In order to obtain water from the valley below a 5 mile pipe line with a lift of over 500 feet would be necessary and the applicant did not have the necessary funds for developing this water supply. Attached to the application is one copy of a shipment to the smelter of copper obtained from passing the mine water over tin cans and also one shipment of concentrates from the mill. I did not sample the old dumps so do not know if their treatment by milling is feasible.

At the present time three men are working on the ~~property~~ lower crosscut in preparation for the proposed development work. ~~The applicant~~ ^{these men are} the superintendent, a miner, and a mechanic. The applicant intends to proceed with the development program as outlined in this report whether or not the P.F.C. grants a loan. Since the funds of the stockholders are limited their work will be ^{very} slow hence the reason for a loan application.

Nature of Proposed Expenditures

Underground Work

200' of drift east on vein from present face of	
drift off ^{lower} crosscut @ \$20/ft	4000.00
100' of raises on vein off proposed	
drift @ \$17/foot	1700.00

Equipment Purchases

Rent on present compressor 6 mos @ \$50/mo	300.00
1 med I.R. 549 jackhammer + fittings	200.00
1 med automatic stoper	225.00
Steel + bits, hose, etc	250.00

Incidental Expense

Reconition camp	300.00
Ore chutes, timber, etc	400.00
Insurance deposit	300.00
Incidental expense + loan interest	2325.00

Total expenditures under loan \$10,000.00

I have discussed the above program and expenditures with the applicant and he is in full agreement.

believes

The applicant ~~feels~~ that the above program can be completed within 6 months and that with an expenditures of \$10,000 the property will be self sufficient.

It is contemplated to hire the following men under this project in addition to the miner, mechanic and superintendent now employed:

1 miner @ \$7.50/day ~~each~~

2 shoulers @ \$6.75/day.

all development will be done on the vein and shipping ore should be produced from the first drifting operations.

Comments of Supervising Engineer

The geology and ore indications are very favorable for the presence of a ~~large~~ high grade continuous vein available for stoping from the lower crosscut.

This project should become in a very short time a sustained producer of considerable amounts of copper and lead.

Only three additional employees will be necessary under this project and only a small amount of mining machinery will be ~~necessary~~ purchased. In addition only second hand equipment and local labor will be used.

⑪ It is my opinion that this property could develop into a large producer and the ore is of sufficient grade to assure a profitable operation.

The chief objection to this project are the legal complications already discussed in this report.

If these legal deficiencies can be rectified I would recommend a loan on this property as the operating personnel appear capable of making a success of this project

Wm B Marshall

Wm D. Mark

Enclosed please find my report on the above captioned docket together with the following data:

1. One original application
2. Three assay certificates
3. Three pencil sketches of mine workings
4. One surface plan
5. One topographic map
6. Blue print of mine

Wm B Marshall

(12)

9 300
4 320
4 300

200

10

300

Raise 300' @ \$32 labor + supplies \$9600.00

Cleaning out old drift top of hullshaft

Paymaster Horst (Tugger) + 750' cable 200.00

570

Haulage of supplies 300.00

1600
100

Supermin 6 mo @ \$200.00 1200.00

300
1100

Insurance, Social Security + Unemploy. clm 900.00

20

Bank charges 6 mo 75.00

Loan interest 6 mo 300.00

Reserve for contingencies

\$425.00

\$12,575.00

\$15,000.00

15
4
60



3 ft/day on raise 1 shift/day. 2° ft/day. 150 days

B + R spent 40,000.00

Long Contract spent 55,000.00

**AFFIDAVIT TO ACCOMPANY SEMI-MONTHLY PAY ROLLS
PURSUANT TO ACT OF JUNE 13, 1934**

STATE OF ARIZONA
COUNTY OF SANTA CRUZ } ss:

I, H. J. Brunswicker, President, do hereby certify that I am the Employee of the B & R MINES, INCORPORATED, who supervises the payment of the employees of said CORPORATION; that the attached pay roll is a true and accurate report of the full semi-monthly wages due and paid to each person employed by the said CORPORATION for the development of Alto Mine-East End, for the semi-monthly pay roll period from the day of, 194...., to the day of, 194....; that no rebates or deductions (other than Social Security and Victory Tax), from any wages due any person as set out on the attached pay roll have been directly or indirectly made; and that, to the best of my knowledge and belief, there exists no agreement or understanding with any person employed on the project, or any person whatsoever, pursuant to which it is contemplated that I or any one else shall, directly or indirectly, by force, intimidation, threat or otherwise, induce or receive any deductions or rebates in any manner whatsoever from any sum paid or to be paid to any person at any time for labor performed or to be performed under the contract for the above named project.

.....
Sworn to before me this day of, 194....

.....
Notary Public

Premium

$$\text{Cu} = 92 \text{ lbs} \times 85\% = 78 \times .05 = 3.91$$

$$\text{Pb} = 150 \text{ lbs} \times 95\% = 95 \times .0275 = 2.61$$

Premium

6.52

Smelter

8.40

Total

\$14.92

200 tons

Worth of one

\$3000

LONG CONTACT MINING COMPANY

Valley National Bank
PHOENIX, ARIZONA

Date.....194.....

Re: Long Contact Mining Co.
Sub-Requisition No.....
Docket No. ND- 5891

Gentlemen:

Requisition is hereby made for payment of the following sums from the "RFC Account" in accordance with the terms of the Deposit Agreement executed by the undersigned, to cover purchase of supplies, compensation insurance, equipment, and loan interest, when there are such funds available, for such purposes, in the "RFC Account".

ITEM	CHECK NO.	PAYEE	MATERIAL PURCHASED	AMOUNT
1				
2				
3				
4				
5				
6				
7				
TOTAL . .				

Requisition is hereby also made for the payment out of the "RFC Account" of the sum not to exceed \$..... to cover payrolls for the period194.... to194...., inclusive; payroll checks to be issued in amounts and in favor of employees, respectively, as will more particularly appear on verified (certified) payrolls delivered to the Depositary at the time payroll checks are issued covering said period. It is understood and agreed that any difference between said amount requisitioned for payrolls and the total amount of payroll checks issued to cover aforesaid period, shall remain in the "RFC Account".

APPROVED:

Reconstruction Finance Corporation

Very truly yours,

LONG CONTACT MINING CO.

.....
Chief, Self-Liquidating Engineer

By.....
Manager

.....
Supervising Engineer

$$50 \overline{) 0.51} \\ 2.55$$

$$5 \overline{) 7.50} \\ 1.50$$

$\begin{matrix} & \text{Au} & \text{Ag} & \text{Cu} & \text{Pb} & \text{Zn} \\ 3 - & 0.15 & 20.0 & 5.6 & 7.0 & 2.4 \\ 2 - & 0.10 & 15.0 & 4.3 & 8.2 & 4.8 \\ 3 & 0.15 & 13.5 & 4.1 & 7.0 & 5.7 \end{matrix}$

$\begin{matrix} 3) & 0.40 & 48.5 & 14.0 & 15.2 & 12.9 \\ & 0.13 & 16.8 & 4.6 & 5.0 & 4.3 \end{matrix}$

Smelter Pay

$$\text{Au} = 0.13 \times \$32.32 = 4.20$$

$$\text{Ag} = 16.8 - 0.5 = 16.3 \times 95 \times 0.69125 = 10.69$$

$$\text{Cu} = 4.6 - 0.5 = 4.1 = 82 \frac{1}{2} \times 0.0555 = 4.55$$

$$\text{Pb} = 5.0 - 1.5 = 3.5 = 70 \times 90 \times 0.049 = 3.09$$

22.53

Deduct

Smelter charge 3.50

Excess " 0.75

Bullion & tax 0.05

Insoluble 0.20

Su/Sur 2.50

B: 0.60

7.60

7.60

\$ 14.93

Net smelter

Freight

2.57

Hauling $\frac{1}{2} 2.75 + 0.08$

2.83

Switching

.05

Hawley

15

5.60

9.33

.93

\$ 8.40

Less 10% Roy

Net smelter pay.

LONG CONTACT MINING COMPANY

Valley National Bank
PHOENIX, ARIZONA

Date.....194.....

Re: Long Contact Mining Co.
Sub-Requisition No.....
Docket No. ND- 5891

Gentlemen:

Requisition is hereby made for payment of the following sums from the "RFC Account" in accordance with the terms of the Deposit Agreement executed by the undersigned, to cover purchase of supplies, compensation insurance, equipment, and loan interest, when there are such funds available, for such purposes, in the "RFC Account".

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TOTAL . .

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APPROVED:

Reconstruction Finance Corporation

Very truly yours,

LONG CONTACT MINING CO.

Chief, Self-Liquidating Engineer

By.....

Manager

Supervising Engineer

LONG CONTACT MINING COMPANY

191

Date

Valley National Bank
PHOENIX, ARIZONA

Re: Long Contact Mining Co.
Sub-Redemption No.
Docket No. ND-5881

Gentlemen:

Redemption is hereby made for payment of the following sums from the "RFC Account" in advance with the terms of the Deposit Agreement executed by the undersigned to cover purchase of supplies, compensation insurance equipment, and loan interest when the RFC Account.

B-24"-0.08-8.7-3.41-0.10-1.36

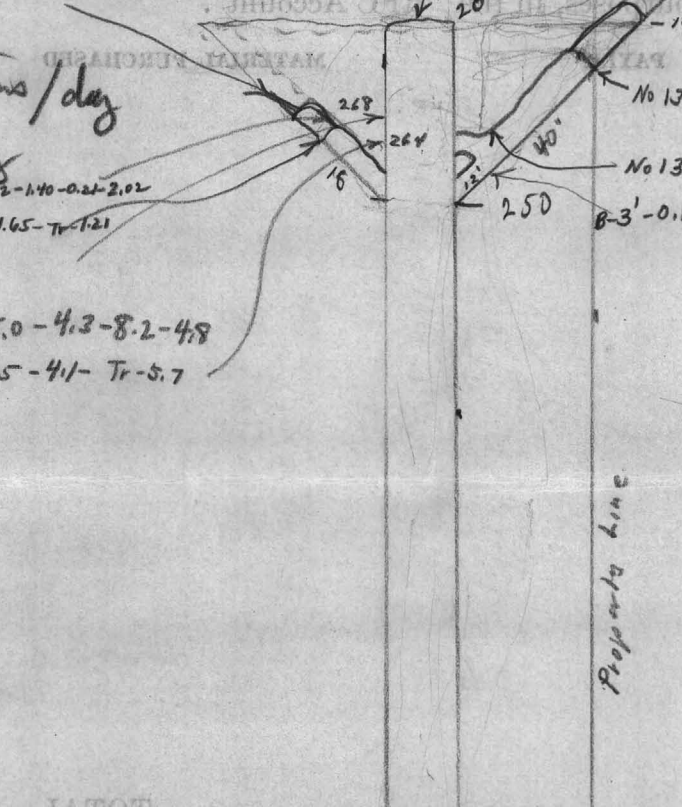
B-24"-0.07-2.5-2.50-0.05-1.00

50 x 50 x 2
10

Break 12 tons/day
every day

No 136-24"-0.14-3.2-1.40-0.21-2.02

No 135-24"-0.07-2.6-1.65-Tr-1.21



500 tons
Blocked
out

No 136-24"-0.13-5.3-1.60-0.21-1.15

No 137-30"-0.14-9.4-2.52-0.24-1.30

B-3'-0.15-20.0-5.6-7.0-2.4

B-2'-0.10-15.0-4.3-8.2-4.8

B-3-0.15-13.5-4.1-Tr-5.7

W.S. $\frac{2 \times 18 \times 5}{10} = 18$ tons

E.S. $\frac{2 \times 40 \times 5}{10} = 40$ tons

Raise $\frac{38 \times 2 \times 12}{10} = 91$ tons

149 tons
to 200 tons in
Raise

TOTAL

Redemption is hereby also made for the payment out of the "RFC Account" of the sum not to exceed \$ to cover payrolls for the period

191 to 191, inclusive; payroll checks to be issued in amounts and in full of 200 500 7000

24 3.8 192 72 912

250 x 5 x 5
18
4

Reconstruction Finance Corporation

Manager

Chief Self-Liquidating Engineer

Supervising Engineer

LONG CONTACT MINING COMPANY

Valley National Bank
PHOENIX, ARIZONA

Date.....194.....

Re: Long Contact Mining Co.
Sub-Requisition No.....
Docket No. ND- 5891

Gentlemen:

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2				
3				
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6				
7				
TOTAL . . .				

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APPROVED:

Reconstruction Finance Corporation

Very truly yours,

LONG CONTACT MINING CO.

Chief, Self-Liquidating Engineer

By.....

Manager

Supervising Engineer

CERTIFICATE OF ASSAY

FOR

Miller's Assay Office

Hugo W. Miller, Owner

Registered Mining Engineer

Established in 1913 — Nogales, Arizona

Laboratory Number	Customer's Marks On Samples As Submitted	GOLD (Oro)		SILVER (Plata)	COPPER (Cobre) Percent	LEAD (Plomo) Percent		
		Troy Ounces Per Ton (2000 Lbs.)						
	Face 2' gouge + pyrite	0.02	2.0		0.7	1.0		
	6" High grade ore shoot 47' long	0.10	39.5		5.9	22.5		
	36" S ₄ side center of face	0.08	20.0		2.7	11.5		
	Oct 22, 1928 - Dec 22, 1930							
	55,477 tons Aver.	0.09	36.00		8.85	22.5		
	Pillars from old Spanish workings on surface.							
	Also 65 car loads shipped during last war - no record.							

Note: Sample Pulp kept Thirty Days in Case Further Analyses Desired.

Date

1 oz. Troy has 31.1035 grams.

1 Kilo has 32.1507 oz. Troy

1 lb. avoirdupois has 14.583 oz. Troy.

Charges

Assayer.

ARIZONA TESTING LABORATORIES

**ANALYTICAL AND CONSULTING CHEMISTS
ASSAYERS, MINING ENGINEERS**
823 EAST VAN BUREN STREET

823 EAST VAN BUREN STREET

ASSAY CERTIFICATE

PHOENIX, ARIZONA November 1 1944

M. R. Wm. B. Waitland, Supervising Engineer, IBC

325 Heard Building
Phoenix, Arizona

WE HAVE ASSAYED THE SAMPLES RECEIVED FROM YOU AND FIND THE RESULTS AS FOLLOWS:

GOLD FIGURED AT \$ 35.00 PER OUNCE.

SILVER FIGURED AT \$ 0.70 PER OUNCE.

LAB. FORM 2

[illegible]

RESPECTFULLY SUBMITTED,

ARIZONA TESTING LABORATORIES

CHARGES \$12.00

Clayton E. McLean

ASSAYER

No. 428 Ma

Phoenix, Arizona,

CHAS. A. DIEHL

Oct. 20, 1944.

ARIZONA ASSAY OFFICE

Phone 3-4001

815 North First Street

P. O. Box 1148

This Certifies *That samples submitted for assay by*

Mr. Wm. B. Maitland,

contain as follows per ton of 2000 lbs. Avoir.

[illegible]Charges \$ 20.00

Assaver-

ARIZONA ASSAY OFFICE

62



1V-40612

2-18-44



New Man Power Commission

428 Security Bldg

11 # 5 $\frac{1}{2}$ 0222 $\frac{1}{2}$ "

2" expansion joint

line oilers Riggatt or
chloridesteel + jacks
clamp bolts

2 hasps + 2 locks ✓

bananas —

beef

soup —

dried fruit

Ovalation

bread

sublimity —

fish

dinner liners
Johnson cream
oil cloth

Long Content

70' - 80' above adit

.05	A ₄	15
8.0	A ₉	42/63
0.72	% Cu	42
29.00	% Pb	210
3.1	% Zn	210

Jig Conc .05 5.00, 0.64, 18.5, 12.1
Picked ore, .05 4.5, 0.55, 12.0, 3.2

25 ton ore

129' top of raise 27
23

5/23/44

Raise in 66' have made
63' since April 3 50 days

at 42' working days
1.5' per " "

220' to go

Bal 9/1/44 1950.62

Auto receivable, amount dep. received
etc 622.00

Estimate returns on 52. day tons 1000.00

\$3572.62

Auto payable, bills + payroll 436.00

\$3136.62

Payroll 400.00

Credit balance \$3736.62

Money available to Oct 15, 1944

Both chutes hold 312 tons to 260
292 tons to 258 to bottom of ore
20 tons of ore in chutes at top

258 x 16

ITEM CHECK NO. EXCEL PAYMENT RECEIVED AMOUNT

each funds available for each purpose in the "KFC Account".
Increase of employee's compensation insurance, retirement and loan interest when there are
in accordance with the terms of the Federal Agreement executed by the undersigned to cover
Redemption is hereby made for payment of the following sums from the "KFC Account".

Committed:

Docket No. MD- 2801

Sub-Redemption No.

Re: Long Contract Mining Co.

United National Bank

Date 1944

LONG CONTRACT MINING COMPANY

LONG CONTACT MINING COMPANY

Valley National Bank
PHOENIX, ARIZONA

Date.....194

Re: Long Contact Mining Co.
Sub-Requisition No.....
Docket No. ND- 5891

Gentlemen:

Requisition is hereby made for payment of the following sums from the "RFC Account" in accordance with the terms of the Deposit Agreement executed by the undersigned, to cover purchase of supplies, compensation insurance, equipment, and loan interest, when there are such funds available, for such purposes, in the "RFC Account".

ITEM	CHECK NO.	PAYEE	MATERIAL PURCHASED	AMOUNT
------	-----------	-------	--------------------	--------

1

2

3

4

5

6

7

TOTAL

Requisition is hereby also made for the payment out of the "RFC Account" of the sum not to exceed \$..... to cover payrolls for the period194 to

.....194, inclusive; payroll checks to be issued in amounts and in favor of employees, respectively, as will more particularly appear on verified (certified) payrolls delivered to the Depository at the time payroll checks are issued covering said period. It is understood and agreed that any difference between said amount requisitioned for payrolls and the total amount of payroll checks issued to cover aforesaid period, shall remain in the "RFC Account".

APPROVED:

Reconstruction Finance Corporation

LONG CONTACT MINING CO.

Very truly yours,

By

Chief, Self-Liquidating Engineer

Manager

Supervising Engineer

4.5 66.
1.0
3.3

Trench | El Paso

An 0.13 X 25.00 3.25 4.20

Ag 16.5 X .71 X .7111 8.33 11.06

Cu 10.46 X 0.035 3.66 5.25

Pb 96 X 0.03 2.88 2.91

Zn 52.8 X 0.025 1.32
19.44 23.42

Premium

Cu 104.6 X 87% X 0.05 4.55 4.45

Pb 96 X .86 X 0.0275 2.27 2.51

Zn 52.8 X .77 X 0.0275 1.12
7.94 6.96

Total 27.38

milling 3.00 3.50

Handling 4.37 1.84

Ungravel .15 2.00

Regulating 1.19 2.80

8.71 05

met 18.67 13.75

18.67
7.00
13069.00

1.99

9 assays

$\frac{.04}{12}$
48

Deep E drift °R & R Mines

width	Au		Ag		Cu		Pb		Zn		
12	0.04	0.48	7.4	88.8	0.40	4.80	17.1	205.2	5.2	62.4	
120	0.06	1.20	6.6	132.0	0.51	10.2	14.2	284.0	4.2	84.0	
20	0.14	2.80	8.8	176.0	4.53	90.6	0.51	10.2	1.65	33.0	
15	0.44	6.60	4.2	63.0	4.27	64.05	0.40	6.0	2.20	33.0	Maitland
10	0.06	0.60	0.7	7.0	1.01	10.1	0.72	7.2	1.65	16.5	+ Cazier
15	0.03	0.45	0.5	7.5	1.12	16.8	0.40	6.0	1.30	19.5	
38	0.01	0.38	1.1	41.8	0.84	31.9	0.51	19.4	1.11	42.2	
30	0.11	3.30	1.8	54.0	0.88	26.4	0.20	6.0	1.05	31.5	
27	0.03	0.81	0.6	16.2	0.95	25.65	0.90	24.3	1.05	28.35	
$\frac{187}{9} = 21''$	0.08	16.62	3.14	586.3	1.50	280.5	3.04	568.3	1.87	350.45	
24	.08	1.92	4.5	108.0	0.40	9.6	15.59	374.16	4.70	112.8	Raise
36	.05	1.80	8.3	298.8	0.70	25.2	17.60	633.60	2.69	96.84	Maitland
$\frac{60}{2} = 30''$	0.06	3.72	6.8	406.8	0.58	34.8	16.79	1007.76	3.49	209.64	

Average of Maitland, Cazier, Tonopah, Hugo Miller Assays

width	Au		Ag		Cu		Pb		Zn		
187 (9)		16.62		586.3		280.5		568.3		350.45	M + C
60 (2)		3.72		406.8		34.8		1007.76		209.64	Maitland
600 (19)		9.60		3658.8		426.9		2657.4		1522.4	Tonopah
66 (3)		29.88		1005.0		149.4		573.0		—	M. Iler
99 (7)		864.0		1633.2		559.8		1027.2		289.2	Maitland
$\frac{1012}{40} = 25.3''$	0.09	923.82	7.2	7290.1	1.43	1451.4	5.76	5832.7	2.51	2371.67	Aver

$\frac{1012}{66}$
946

Tonopah Tunnel Face 100'

width	Au	Ag	Pb	Cu	Cu	Zn		
16"	.01	4.2	67.2	10.4	166.4	0.1	1.60	—
34	Tr	3.2	108.8	5.5	187.0	0.1	3.40	—
16	02	15.6	249.6	8.4	134.4	2.4	38.40	—
47	Tr	3.2	150.4	1.0	47.0	Tr	—	—
15	05	31.2	468.0	8.8	132.0	5.1	76.5	—
20	.01	9.2	184.0	5.2	104.0	1.6	32.0	—
18	01	8.0	144.0	9.1	163.8	1.3	23.4	—
46	Tr	2.8	128.8	0.5	23.0	Tr	—	2.5 115.0
52	Tr	3.4	176.8	2.7	140.4	Tr	—	3.3 171.6
48	Tr	2.0	96.0	1.5	72.0	Tr	—	2.5 120.0
10	02	6.0	60.0	11.3	113.0	0.1	1.0	5.5 55.0
54	Tr	2.2	118.8	0.6	32.4	Tr	—	3.5 189.0
56	Tr	3.6	201.6	3.0	168.0	0.5	28.0	5.4 302.4
52	Tr	3.9	202.8	6.5	338.0	0.8	41.6	3.6 187.2
42	Tr	5.2	218.4	3.5	147.0	0.9	37.8	3.0 126.0
10	06	21.0	210.0	16.8	168.0	2.4	24.0	7.5 75.0
40	Tr	1.2	48.0	0.1	4.0	0.1	4.0	1.2 48.0
12	08	24.4	292.8	13.8	165.6	3.0	36.0	3.6 43.2
12	04	44.4	532.8	29.3	351.6	6.6	79.2	7.5 90.0
434	$\frac{600}{19} = 31.6"$.016	6.1	3658.8	4.43	26574	0.71	426.90 3.51 1522.4
0.48	24	0.02	2.0	48.0	1.0	24.0	0.7	16.8
0.60	6	0.10	39.5	237.0	22.5	135.0	5.9	35.4
28.80	26	0.8	20.0	720.0	11.5	414.0	2.7	97.2
29.98	$\frac{66}{2} = 22$	0.45	15.22	1008.0	9.68	2.26	149.4	

Tonopah
Face

Hugo Miller

.016
 $\frac{600}{9.6}$

Record of Shipments From Aldo Vein

Date	Tons	Per Ton Au oz	oz Gold	Per Ton Ag oz	oz Silver	Per Ton Cu %	Tons Copper	Per Ton Pb %	Tons Lead	Per Ton Zn %	Tons Zinc	
1928-1930	55.48	0.09	4.99	36.0	1997.3	8.85	4.91	22.5	12.48	—	—	
1940	25.37	0.095	2.41	10.6	268.9	5.27	1.34	6.0	1.52	1.2	0.304	
1941	25.72	0.055	1.41	16.4	421.8	2.48	0.64	16.6	4.27	2.2	0.566	
1941	36.7	0.065	2.39	16.7	612.9	2.9	1.06	13.3	4.88	3.0	1.10	
1941	32.7	0.064	2.09	15.59	509.8	2.6	0.85	13.2	4.32	2.5	0.82	
1942	7.28	0.07	0.57	21.3	155.1	5.7	0.42	7.3	6.53	2.0	0.15	
1943	16.39	0.02	0.33	8.8	144.2	0.97	0.16	21.0	3.44	1.7	0.28	
1943	17.04	0.33	5.62	9.0	153.4	3.20	0.55	—	—	1.10	0.19	
1943	45.0	0.005	0.23	17.6	792.0	2.36	1.06	23.0	10.35	2.60	1.17	
1928-1943	Total 261.68 tons	0.076	19.98	19.31	5055.4	4.2	10.99	17.08	41.79	2.22	4.58	Average

85

36
03
110

200

261.68

17.04

244.64

261.68

55.48

206.20

Sampling Record No 4 One Body

Samples Taken by Wm. B. Maitland for P.F.C.

No	Width	Oz Gold	Oz Silver	% Copper	% Lead	% Zinc
135	24" 2	0.07 ^{.14}	2.6 ^{5.2}	1.65 ^{3.30}	Trace ^{0.0}	1.21 ^{2.42}
136	24" 2	0.13 ^{.26}	5.3 ^{10.6}	1.60 ^{3.20}	0.21 ^{.42}	1.15 ^{2.30}
137	30" 2 1/2	0.14 ^{.35}	9.4 ^{23.5}	2.52 ^{6.30}	0.24 ^{0.60}	1.30 ^{3.25}
138	24" 2	0.14 ^{.28}	3.2 ^{6.4}	1.40 ^{2.80}	0.21 ^{.42}	2.02 ^{4.04}
Average	26" ^{8.5}	0.12 ^{1.03}	5.4 ^{45.7}	1.84 ^{15.6}	0.17 ^{1.44}	1.41 ^{12.01}

Samples Taken by H. J. Brunsvicker for Long Contact Mining Co

No	Width	Oz Gold	Oz Silver	% Copper	% Lead	% Zinc
B	36" 3	0.15 ^{.45}	13.5 ^{40.5}	4.1 ^{12.3}	Tr. 0	5.7 ^{18.1}
B	24" 2	0.10 ^{.20}	15.0 ^{30.0}	4.3 ^{8.6}	8.2 ^{16.4}	4.8 ^{9.6}
B	24" 2	0.08 ^{.16}	8.7 ^{17.4}	3.41 ^{6.82}	0.10 ^{.20}	1.36 ^{2.72}
B	24" 2	0.07 ^{.14}	2.5 ^{5.0}	2.50 ^{5.0}	0.05 ^{.10}	1.00 ^{2.00}
B	36" 3	0.15 ^{.45}	20.0 ^{60.0}	5.6 ^{16.8}	7.0 ^{21.0}	2.4 ^{7.2}
Average	29" ¹²	0.12 ^{1.40}	12.7 ^{152.90}	4.13 ^{49.56}	3.14 ^{37.70}	3.30 ^{39.62}
Average of Both Samples	27" ^{20.5}	0.12	9.69	3.18	1.90	2.52

Smelter Settlement for above ore :-

Smelter Payment on metals (New Schedule)

Gold	0.12 oz @ \$32.31825	3.88
Silver	9.69 oz - 0.5 = 9.19 @ \$0.69125	6.35
Lead	1.90 % - No payment	
Copper	3.18 - 0.5 = 2.68 = 536 lb @ \$0.0555	2.97
Total metal smelter payment.		\$ 13.20

Smelter Deductions

Base charge	3.50
Bullion freight tax	0.03
Insoluble	0.20
Sulfur $31.81\% - 2.0 = 29.81\% \text{ MAX}$	2.10
Bismuth	0.60
Total Smelter deductions	\$ 6.83

[Notes omit Red Figures!]

[Notes omit 48 2.4 2.50]

28.5 5.144 2.27 9.12030

13.20
6.83
6.37

Net smelter Payment

\$ 6.37

Marketing Charges

RR Freight + Tax 2.06

Hauling + tax 2.83

Switching 0.05

Unmature 0.15

Royalty 10% 0.13

Total marketing charges 5.22

Net Smelter payment

\$ 1.15

Premium Payments

Copper 63.6 lb @ 85% x \$0.05

2.70

Total value of ore per Ton at mine

\$ 3.85

50) 1.5
7.50
50
250

275
3
825

6.37
5.09
1.28

400' to junction with other vein
 drifting cost on 546' xint was \$15.57 200
600
Nature of Expenditures

Underground work or should pay 1/2 expenses

2 shifts 2 mo.	200' drift on vein	\$28/ft.	\$4000.00
1 mo.	100' raise on vein	\$17/ft.	1700.00
	Rent on camp 6 mo. @ \$50/mo		300.00
1500 300	1 used 549 IR jackhammer		200.00
300	+ fittings		225.00
	1 stoper used automatic		250.00
	Steel + bits		300.00
	Recondition camp		
	Chutes, timbers, repair vent pipe		1400.00
	chance deposit		300.00
		\$	7675.00
	Incidental expense + interest		2325.00
		\$	10,000.00

Hauling to Patagonia \$1.75
 Ext S.P. Cl Pass. 3.50

Mining cost/ton/stope (shrinkage) \$3.00
 Smelting charge 7.50
 total cost estimated \$15.75

less 15

10% roy - \$12/ton
 15% " \$12-25
 20% " +25

Spent \$38,000 on property
 includes investment in
 tunnel of \$4483.14
 since Dec 1940

B + R mine

Feb 10, 1943

Sample No 1A 1' in back of Nooners
inclined shaft 100' west of
west endline in ^{in hanging wall} surface works

Sample No 2A 1' in floor of above
shaft but in 11 vein
in footwall

Sample No 3A 18" in pillar of No 3 Shaft-
60' down on property

Sample No 4A 1' in adit tunnel 50' east
of shaft.

Sample No 5A- 20" face of E drift from
X cut at property line
vein frozen in walls but
vein making water. Massive
sulfides

Sample No 6A 10" from back of drift 5'
back from Sample No 5A

5
2

Sample No 7A - 12" 20' up in mine
25,000 tons mndumps
estimated @ \$6/ton } 30' back from face
X cut Sulfide

B + R agree to furnish Bond
to pay \$100/mo guaranteed royalty
for life of loan

have 3 men making will plan to run
2 shifts with total of 5 men: -

2 miners - have 1

2 shovelers -

2 surfacer - have 2

have 3 men only

have compressor 165 cu ft machine gas engine
built powder magazine

Set up equip at portal

40' headframe 3 houses

Mill Building

9x14 jam Crusher also Chalmers

14x24 rolls

200 ton wood ore bin

convey belt, elevator, feeder

2 Southwestern 24" jigs

2 Wilfley tables

gas engines 20,000 gal wood tank

Machine shop

lathe

drill press

power hacksaw

power grinder

welding outfit

Blacksmith outfit

power saw

tools complete

ALL SAMPLES ASSAYED IN DUPLICATE

E. A. JACOBS. SR.

BEN P. JACOBS

JACOBS ASSAY OFFICE

DUPLICATE

PHONE 130R

P. O. BOX 1889

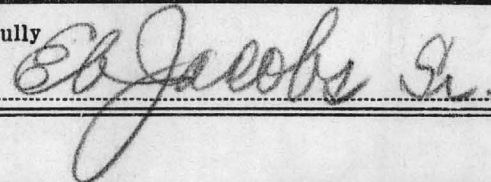
NO. 30 SO. MAIN ST.

REGISTERED ASSAYERSCertificate No. 41538TUCSON, ARIZONA, Feb-17-1943 194Sample Submitted by Mr. Reconstruction Finance Corp. Phoenix, Ariz.

SERIAL	SAMPLE MARKED	GOLD OZS. PER TON ORE	GOLD VALUE PER TON ORE *	SILVER OZS. PER TON ORE	COPPER PER CENT WET ASSAY	LEAD PER CENT WET ASSAY	Zinc PER CENT WET ASSAY
			\$				
104228	# 1-A	0.09		26.7	9.10	13.4	2.0
229	2-A	0.19		3.4	4.60	0.2	0.4
230	3-A	0.13		33.4	9.70	0.1	2.2
231	4-A	0.03		7.7	11.45	13.2	3.0
232	5-A	0.06		6.6	0.51	14.2	4.2
233	6-A	0.04		7.4	0.40	17.1	5.2
234	7-A	0.06		29.2	5.66	16.6	2.8
B & D	4801 Mr. Wm B Maitland- Supervising Engineer						

Gold Figured \$..... per oz. Troy

Very Respectfully

Charges \$ 31.50


WE DO NOT QUOTE ON SINGLE WORK

CHAS. A. DIEHL

Phoenix, Arizona,

Nov. 12, 1943.

ARIZONA ASSAY OFFICE

Phone 3-4001

815 North First Street

P. O. Box 1148

This Certifies That samples submitted for assay by

Mr. Wm. B. Maitland.

contain as follows per ton of 2000 lbs. Avoir.

[illegible]

Charges \$ 4.50

Assayer ARIZONA ASSAY OFFICE

642

B + R

No	width	Gold oz		Silver oz		Copper %		Lead %		Zinc %	
1A	1'	09	09	26.7	26.7	9.10	9.10	13.4	13.4	2.0	2.0
2A	1	19	19	3.4	3.4	4.60	4.60	0.2	0.2	0.4	0.4
3A	1 1/2	13	20	33.4	50.1	9.70	14.55	0.1	0.2	2.2	3.3
4A	1	03	03	7.7	7.7	11.45	11.45	13.2	13.2	3.0	3.0
5A	1 3/4	06	11	6.6	11.6	0.51	.89	14.2	24.9	4.2	7.4
6A	1	04	04	7.4	7.4	0.40	0.40	17.1	17.1	5.2	5.2
7A	1	06	06	29.2	29.2	5.66	5.66	16.6	16.6	2.8	2.8
(7)	$\frac{8.25}{7} = 1.2$	(09)	$\frac{72}{825} = .09$	(16.5)	$\frac{136.1}{825}$	(5.65)	$\frac{46.65}{8.25}$	(10.4)	85.60	(2.9)	24.1

$$\frac{200 \times 300 \times 1}{10}$$

6000

Charge to the account of

CLASS OF SERVICE DESIRED		CABLE
DOMESTIC	TELEGRAM	ORDINARY
DAY LETTER		URGENT RATE
SERIAL		DEFERRED
OVERNIGHT TELEGRAM		NIGHT LETTER
SPECIAL SERVICE		SHIP RADIOGRAM
Patrons should check class of service desired; otherwise the message will be transmitted as a telegram or ordinary cablegram.		

WES' WUN

A. N. WILLIAMS
PRESIDENT

NEWCOM
CHAIRMAN

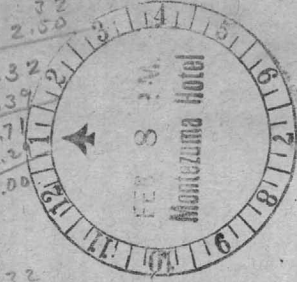
Send the following telegram, subject to the terms on back hereof, which are hereby

WB Maitland

I'll be in town Wed A.M
between 9 & 10 and show you
the way to the Alto East End
for the B & R Mines Inc.

Respectfully

HJ Brunswicker



05 5.0 10.5
1.60 3.30 9.72
3.30
1.60
14.62
11.00
3.62

3.00

RE SUBJECT TO THE FOLLOWING TERMS:

that is, telegraphed back to the originating office for comparison. For this, one-half the is an unrepeat message and paid for as such, in consideration whereof it is agreed between any, or for non-delivery, of any message received for transmission at the unrepeat-message delivery, or for non-delivery, of any message received for transmission at the repeated-for delivery arising from unavoidable interruption in the working of its lines;

in the transmission or delivery, or for the non-delivery, of any message, whether caused by the sum of five thousand dollars, at which amount the sender of each message represents that the message is tendered for transmission, and unless the repeated-message rate is paid or which such valuation shall exceed five thousand dollars.

and this message over the lines of any other company when necessary to reach its destination. the filed tariffs of the Company, the amount paid for the transmission of a domestic telegram for towns of 5,000 or more inhabitants where the Company has an office which, as shown by the two miles of any open main or branch office of the Company; in cities or towns of 5,000 or performed through the agency of a railroad company, within one mile of the telegraph office; within one-half mile of the telegraph office. Beyond the limits above specified the Company the sender, with the understanding that the sender authorizes the collection of any additional the addressee. There will be no additional charge for deliveries made by telephone within

re accepted at one of its transmitting offices; and if a message is sent to such office by one of message except an intrastate message in Texas where the claim is not presented in writing and in the case of an intrastate message in Texas the Company will not be liable for damages five days after the cause of action, if any, shall have accrued; provided, however, that neither on 415 of the Communications Act of 1934.

age or messages the prompt and correct transmission and delivery thereof shall be presumed, s enumerated below, shall apply to messages in each of such respective classes in addition

SERVICE

CABLE SERVICES

ORDINARIES

The standard service, at full rates. Code messages, consisting of 5-letter groups only, at a lower rate.

DEFERREDS

Plain-language messages, subject to being deferred in favor of full-rate messages.

NIGHT LETTERS

Overnight plain-language messages.

URGENTS

Messages taking precedence over all other messages except government messages.

UNION SERVICE FOR EVERY SOCIAL NEED

In the United States

—	25¢
—	35¢
—	20¢

GREETINGS AT

Christmas	New Year	Easter
Valentine's Day	Mother's Day	Father's Day
Jewish New Year	Thanksgiving	

CONGRATULATIONS ON

Anniversaries	Weddings
Birthdays	Commencement
	Birth of a Child

— 35¢

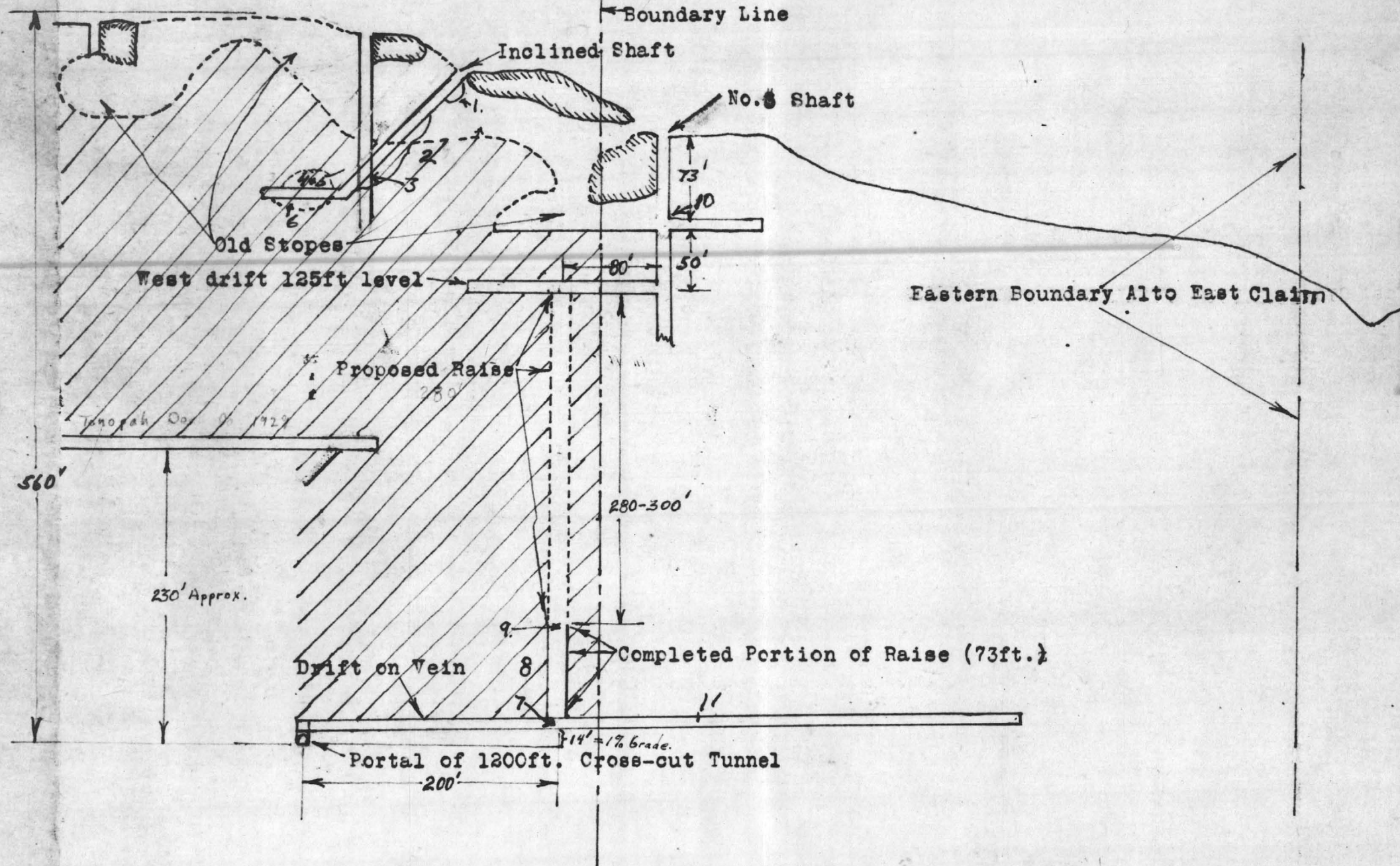
MISCELLANEOUS

Bon Voyage telegrams
Kiddiegrams (No 35¢ rate)
"Pep" telegrams

OR AGENCY FOR FULL INFORMATION

SITE OF PROPOSED DEVELOPMENT
Vertical Section Thru East End of Applicant's Property
(Alto East Claim)

Alto Mine-West End Alto Mine-East End



ALTO MINE (RFC)

SANTA CRUZ COUNTY
TYNDALL DIST.

See: ALTO GROUP (South Part) (file)
ALTO GROUP (North Part) (file)

RECONSTRUCTION FINANCE CORPORATION
MINING DIVISION
REPORT OF SUPERVISING ENGINEER
TO ACCOMPANY APPLICATION FOR AN ADDITIONAL LOAN

*Alt's Group
(South Part)
See B & R. Jones
(R7C file)*

Name: Long Contact Mining Company
Docket No. ND-5891
Date of Report: November 11, 1944

On February 2, 1944 a loan of \$15,000 was granted the Long Contact Mining Company to drive a 310 foot raise and develop ore containing gold, silver, copper, lead and zinc.

A three-compartment raise was completed to a height of 288 feet and two inclined raises were driven from the top of this main raise. In the driving of this raise, four separate small ore shoots were cut, but before these ore bodies could be stoped the main raise had to be continued towards the surface to connect with various old workings found above. The original loan I believe would have been sufficient to have driven the main raise another 60 feet, which would have made the necessary connection with some of the old workings above. However, since these old works are full of water and probably partly caved, considerable extra work would have been necessary before a second exit actually was completed. Due to the fact that sufficient loan funds were not available to rehabilitate the old workings and because ore was encountered in the last 40 feet of the raise, it was deemed advisable to drive untimbered finger raises off the main raise in order to block out enough ore to justify an additional expenditure of money. Also, these raises are, in effect, part of the second exit program and are much cheaper and quicker to drive than the main raise.

The applicant has shipped one car of ore so far in the driving of this raise. This ore came from the No. 2 and No. 3 ore bodies. The average of the applicant's place samples while raising through these ore bodies was 0.05 oz of gold, 7.0 oz silver, 1.25% copper, 12.7% lead and 1.7% zinc. The 52.5145 dry short tons of ore shipped ran 0.045 oz gold, 9.4 oz silver, 1.42% copper, 10.5% lead, and 1.9% zinc, and netted before mining cost \$9.59 per ton, including "A" premiums only. This ore was produced only from raising and was not selected ore, but the mixed ore and waste from the raise was run thru a small concentrating plant where the fines are jigged and the coarse ore picked out on a sorting belt. Applicant intends to run all ore through this plant so it is expected that the ore to be shipped in the future will assay higher than the average of the place samples as was the case in the past.

Each ore pass will hold about 300 tons of broken rock or a total of 600 tons for both sides. Including the main raise from 250 feet to 288 feet which is in ore, the 75 foot east finger raise, and the 25 foot west finger raise, I estimate that the two ore passes contain about 600 tons of broken ore. At the time of my last visit to the mine, the ore had started to appear at the mouth of the last chute. As has been pointed out in previous reports, it is impossible to draw all the ore from the main raise unless the project is to be abandoned. Therefore there will always be a backlog of about 600 tons of broken ore in storage.

Name: Long Contact Mining Company
Docket No. ND-5891
Date of Report: November 11, 1914

The applicant company has now exhausted all of the original loan but in order to keep the mine open, the two companies interested, the Long Contact Mining Company and the B. and R. Mines, have raised about \$1,500 which will maintain normal operations until the first of December. They hope that by that time either the new loan of \$5,000 that they have now requested will be available or it will have been denied and the broken ore can then be shipped and the project abandoned. Due to the lack of natural ventilation in the raise if work would cease during this waiting period the cost of rehabilitation, due to timber decay and packing of the ore in the chutes, would be excessive.

Attached to this report is the latest assay map and copies of the latest samples. Following is a summary of the ore available:

SAMPLING RECORD

Samples taken by Wm. B. Maitland for the R.F.C.

No	Width	oz Gold	oz Silver	% Copper	% Lead	% Zinc
138	30"	0.04	2.00	1.30	Trace	None
139	30"	0.06	2.60	1.20	"	"
140	30"	0.20	8.00	2.85	"	"
141	24"	0.18	11.00	4.35	3.94	"
142	30"	0.12	18.60	7.15	2.86	"
143	36"	0.10	6.70	1.85	3.40	0.30
144	24"	0.10	4.40	1.55	3.06	None
145	24"	0.04	3.60	1.65	3.47	0.80
146	30"	0.12	8.80	2.75	1.70	0.30
Average:	9 29"	0.11	7.35	2.73	1.98	0.15

Samples taken by H. J. Brunswicker for Long Contact Mining Company

No	Width	oz Gold	oz Silver	% Copper	% Lead	% Zinc
B	36"	0.15	13.5	4.1	Trace	5.7
B	24"	0.10	15.0	4.3	8.2	4.8
B	24"	0.08	8.7	3.41	0.10	1.36
B	24"	0.07	2.5	2.50	0.05	1.00
B	36"	0.15	20.0	5.6	7.0	2.4
B	36"	0.20	31.5	9.64	11.5	None
Average:	6 30"	0.13	16.5	5.23	4.8	2.64

Name: Long Contact Mining Company
Docket No. MD-5891
Date of Report: November 11, 1944

SCHEDULES FOR ORE MARKETING

Metal Payments	AS&R Copper smelter Hayden, Ariz.	AS&R Lead smelter El Paso, Texas	AS&R Trench Mill Patagonia, Ariz.	Approximately Eagle Picher Mill - Sahuarito, Ariz.
Gold: 0.11 oz	0.11 x \$32.31825 \$3.56	0.11 x \$32.31825 \$3.56	0.11 x \$25.00 \$2.75	0.11 x \$25.00 \$2.75
Silver: 7.35 oz	(7.35-0.5) x \$0.69125 \$4.74	(7.35-0.5) x \$0.69125 \$4.74	7.35 x .71 x \$0.7111 \$3.71	7.35 x .90 x 0.69125 \$4.57
Copper: 2.73% = 54.6 lbs	(54.6-8) = 46.6 x .95 x \$0.0905 \$4.01	(54.6 - 10) x \$0.0555 \$2.48	54.6 x \$0.035 \$1.91	(54.6 -.6) .95 x 0.0559 \$2.87
Lead: 1.98% = 39.6 lbs	No payment	No payment	39.6 x \$0.03 \$1.19	(39.6 - .6) x .90 x 0.0494 \$1.73
Zinc: 0.15% = 1.5 lbs	No payment	No payment	No payment	No payment
Total Metal Payment:	\$12.31	\$10.78	\$9.56	\$11.92
<u>Smelter or Mill Deductions:</u>				
Base Charge	\$3.50	\$3.50	\$3.00	\$6.08
Bullion Freight Tax	.03	.03		
Insoluble		.20		.01
Sulfur	2.50	2.50		0.01
Bismuth	.60	.60		.03
Total Deductions	\$6.63	\$6.83	\$3.00	\$6.13
Net Payment before Transportation	\$5.68	\$3.95	\$6.56	\$5.79
<u>Marketing Charges:</u>				
RR Freight & Tax	\$2.16	\$2.06		
Hauling & Tax	2.83	2.83	4.37	2.83
Switching		0.05		
Umpire	0.15	0.15	0.15	
Royalty 10%	0.55		0.20	0.20
Total Marketing Charges	\$5.19	\$5.09	\$4.72	\$3.03

Name: Long Contact Mining Company
Docket No. MD-5891
Date of Report: November 11, 1944

SCHEDULES FOR ORE MARKETING (Cont)

	AS&R Copper Smelter Hayden, Ariz	AS&R Lead smelter El Paso, Texas	AS&R Trench Mill Patagonia, Ariz	Approximate Eagle-Picher Mill - Sahuarito, Ariz
Net Smelter or Mill Payment				
Net Smelter or Mill Payment	0.49	-1.14	1.84	2.76
<u>Premium Payments:</u>				
Copper: 54.6 lbs	54.6 x .97 x \$0.05 2.65	54.6 x .85 x \$0.05 2.32	54.6 x .87 x \$0.05 2.38	54.6 x .87 x \$0.05 2.38
Lead: 39.6 lbs	No payment	No payment	39.6 x .86 x \$0.0275 0.94	39.6 x .86 x \$0.0275 0.94
Total Premium Payment	\$2.65	\$2.32	\$3.32	\$3.32
Net Payment for ore before Mining Cost	\$3.14	\$1.18	\$5.16	\$6.08

From the above analysis it would appear advisable to either ship to the Trench Mill or the Eagle Picher Mill. However, it must be remembered that the Eagle Picher schedule is just an approximation. Due to the fact that the ore is sorted at the mine, I believe the ore now exposed in the present workings will ship better than it samples. My sampling was taken at regular intervals while Brunswicker's samples were taken of the higher grade portions of the vein. While the average of my samples does not indicate very profitable ore, I believe with selective mining a shipping grade of about \$9.00 per ton net before mining cost can be maintained.

In addition to the 600 tons of broken ore in the chutes against which there will be no mining cost, there is, according to my calculations, about 800 tons of partially blocked out ore at the top of the raise.

600 tons @ \$5.16 per ton less \$1.00 per ton sorting cost:	\$2,496.00
800 tons @ \$5.16 per ton less \$2.00 mining and \$1.00 sorting cost:	\$1,728.00

Total net value of ore now developed:	\$4,224.00
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I believe that this net profit can be considered as a minimum and, of course, does not include any probable ore between the ends of the finger raises and the old workings above.

Name: 'Long Contact Mining Company
Docket No. MD-5891
Date of Report: November 11, 1944

With four men now employed, they are producing 15 tons of ore per day from driving the raises.

Due to the fact that most of the development work has been done, the mine is now completely equipped, and all of the development faces of the mine are in ore, I believe that a further loan of \$5,000 is justified for this project.

WM. B. MAITLAND
Supervising Engineer

WBM:sbm

TELEPHONE 3-6272

ANALYTICAL AND CONSULTING CHEMISTS

ANALYTICAL AND CONSULTING CHEMISTS, ASSAYERS, MINING ENGINEERS

823 EAST VAN BUREN STREET

ASSAY CERTIFICATE

PHOENIX, ARIZONA.

11/19/64

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Mr. W. H. Rutland,
M. Supervising Engineer, RFC.,
325 Heard Building,
Phoenix, Arizona

WE HAVE ASSAYED THE SAMPLES RECEIVED FROM YOU AND FIND THE RESULTS AS FOLLOWS:

GOLD FIGURED AT \$ 55.00 PER OUNCE.

SILVER FIGURED AT \$ 0.70 PER OUNCE.

LAB. FORM 2

RESPECTFULLY SUBMITTED.

ARIZONA TESTING LABORATORIES

BY Claudio E. Meloni

ASSAYER

CHARGES \$ 36.00

No. 429 Ma

Phoenix, Arizona,

CHAS. A. DIEHL

Oct. 25, 1944.

ARIZONA ASSAY OFFICE

Phone 3-4001

815 North First Street

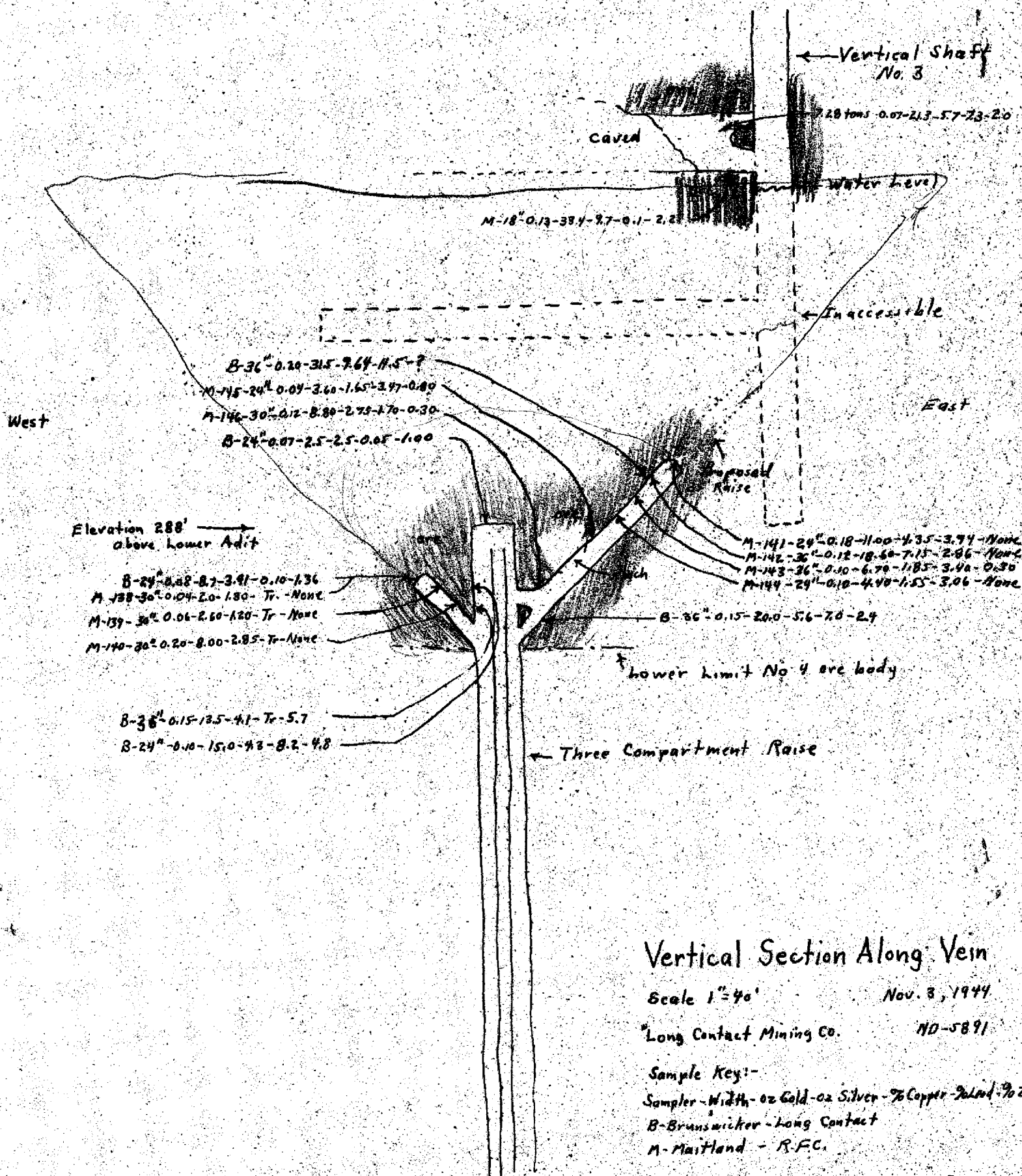
P. O. Box

This Certifies That samples submitted for assay by Mr. Wm. B. Maitland.

contain as follows per ton of 20

Charges \$ 9.00

Assayer ~~ARIZONA ASSAY OFFICE~~



Vertical Section Along Vein

Scale 1"=40'

Nov. 8, 1944

Long Contact Mining Co.

ND-5891

Sample Key:-

Sampler-Width-oz Gold-oz Silver-%Copper-%Lead-%Zinc

B-Brunsvicker-Long Contact

M-Maitland-R.F.C.

Wm. B. Maitland

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Report to accompany application for an additional loan

Long Contact Mining Co.

ND 5891

Nov 19, 1944

On Feb 2, 1944 a loan of \$15,000 was granted the Long Contact Mining Co. to drive a 310' Raise and develop ^{ore} ~~a mine~~ containing gold, silver, copper, lead, and zinc.

A three compartment raise was completed to a height of 288 feet and two inclined raises were driven from the top of this main raise. In the driving of this raise four separate small ore shoots were cast, but before these ore bodies could be stopped the main raise had to be continued towards the surface to connect with various old workings found above. The original loan I believe ~~was~~ ^{subsidy} should have been sufficient to have driven the main raise another 60 feet which would have made the necessary connection with some of the old workings above. However, since these old works are full of water and probably partly caved, considerable extra work would have been necessary before a second pit actually was completed. Due ~~to~~ the fact that sufficient loan funds were not available to rehabilitate the old workings and because ore was encountered in the last forty ⁴⁰ feet of the raise it was

intimbered

deemed advisable to drive finger raises off the main raise in order to block out enough ore to justify an additional expenditure of money. also these raises are in effect part of the second pit program and are much cheaper and quicker to drive than the main raise.

The applicant has shipped one car of ore so far in the driving of this raise. This ore came from the No 2 and 3 ore bodies. The average of the applicants ^{THROUGH} place samples while raising these ore bodies was 0.05 oz of gold, 7.0 oz silver, 1.25% copper, 12.7% lead and 1.7% zinc. The 52.5145-ton short tons of ore shipped ran 0.045 oz gold, 9.4 oz silver, 1.42% copper, 10.5% lead, and 1.9% zinc and returned netted before mining cost \$9.39 per ton including "A" premiums only. This ore was produced only from raising and was not selected ore, but the mixed ore and waste from the raise was run thru a small concentrating plant where the fines are jigged and the coarse ore picked out on a ~~pick~~ sorting belt. Applicant intends to run all ore thru this plant so it is expected that the ore, ^{to be} shipped, ^{in the future} will assay higher than the average of the place samples as was the case in ^{the} past.

Each ore pass will hold about 300 tons of broken rock or a total of 600 tons for both sides. including the main raise from

250 feet to 288 feet which is in ore, ~~and~~ the 75 foot east finger raise, and the 25 foot west finger raise, I estimate that the two ore passes contain about 600 tons of broken ore. At the time of my last visit to the mine the ore had started to appear at the mouth of the east chute; ~~obviously it would~~. As has been pointed out in previous reports, it is impossible to draw^{all} the ore from the main raise unless the project is to be abandoned. Therefore there will always be a backlog of about 600 tons of broken ore in storage.

The applicant company has now exhausted all of the original loan but in order to keep the mine open the two companies interested, the 'Long Contract Mining Co and the 'B & R' Mines, have raised about \$500 which will maintain stop normal operations until the first of December. They hope that by that time either the new loan of \$5000 that they have now requested will be available or it will be denied and the broken ore can then be shipped and the project abandoned. Due to the lack of natural ventilation in the raise if work would cease during this wintering period the cost of rehabilitation, due to timber decay and packing of the ore in the chutes, would be excessive.

Attached to this report is the latest assay map, ~~and~~ copies of the latest samples. Following is a summary of the ore available

Sampling Record

Samples taken by Wm B Matland for R.F.C.

Total figures in red

No	Width	oz Gold	oz Silver	% Copper	% Lead	% Zinc
138	30"	0.04 ^{1.20}	2.00 ^{60.0}	1.30 ^{3.90}	Trace ⁰	None ⁰
139	30"	0.06 ^{1.80}	2.60 ^{78.0}	1.20 ^{36.0}	" ⁰	" ⁰
140	30	0.20 ^{6.00}	8.00 ^{240.0}	2.85 ^{85.5}	" ⁰	" ⁰
141	24	0.18 ^{4.32}	11.00 ^{264.0}	4.35 ^{104.4}	3.94 ^{94.56}	" ⁰
142	30	0.12 ^{3.60}	18.60 ^{558.0}	7.15 ^{214.5}	2.86 ^{85.80}	" ⁰
143	36	0.10 ^{3.60}	6.70 ^{241.2}	1.85 ^{66.6}	3.40 ^{122.40}	0.30 ^{10.8}
144	24	0.10 ^{2.40}	4.40 ^{105.6}	1.55 ^{37.2}	3.06 ^{73.44}	None ⁰
145	24	0.04 ^{0.96}	3.60 ^{86.4}	1.65 ^{39.6}	3.47 ^{83.28}	0.80 ^{19.2}
146	30	0.12 ^{3.60}	8.80 ^{264.0}	2.75 ^{82.5}	1.90 ^{51.0}	0.30 ^{9.0}
Average 9	²⁵⁸ 29"	^{27.48} 0.11	^{1897.2} 7.35	^{705.3} 2.73	^{510.4} 1.98	0.15

Samples taken by H. J. Brunswick for Long Contract Mining Co

^{3.5}
^{2.5} Average

No	Width	oz Gold	oz Silver	% Copper	% Lead	% Zinc
B	36"	0.15	13.5	4.1	Trace	5.7
B	24	0.10	15.0	4.3	8.2	4.8
B	24	0.08	8.7	3.41	0.10	1.36
B	24	0.07	2.5	2.50	0.05	1.00
B	36	0.15	20.0	5.6	7.0	2.4
B	36	0.20 ^{2.0}	31.5	9.64	11.5	—
Average 6	^{2.0} 30"	^{2.0} 0.13	16.5	5.23	4.8	2.64

Schedules for Ore Marketing

Approximate.

metal Payments

Gold 0.11 oz

A.S. & R. Smelter
Hazen, Ariz
0.11 X \$32.31825

A.S. & R. Smelter
El Paso, Tex
0.11 X \$32.31825

A.S. & R. Trench Mill
Patagonia, Ariz
0.11 X \$25.00

Eagle Picher Mill
Sahuarito, Ariz
0.11 X \$25.00

\$3.56

\$3.56

\$2.75

2.75

Silver 7.35 oz

(7.35-0.5) X \$0.69125

(7.35-0.5) X \$0.69125

7.35 X .71 X \$0.7111

7.35 X .90 X \$0.69125

\$4.74

\$4.74

\$3.71

4.57

Copper 2.73% = 54.6 lbs

(54.6-8) = 46.6 X \$0.0905

(54.6-10) X \$0.0555

54.6 X \$0.035

(54.6-6) X \$0.0559

\$4.01

\$2.48

1.91

2.87

Lead 1.98% = 39.6 lbs

No payment

No payment

39.6 X \$0.03

(39.6-6) X \$0.0496

—

—

1.19

1.73

Zinc 0.15% = 1.5 lbs

No Payment

No payment

No payment

No Payment

—

—

—

—

Total Metal Payment

12.31

10.78

9.56

11.92

Smelter or Mill Deductions

Base charge

3.50

3.50

\$3.00

6.08

Bullion freight tax

.03

0.03

—

—

Insoluble

—

0.20

—

0.01

Sulphur

2.50

2.50

—

0.01

Bismuth

0.60

0.60

—

0.03

Total Deductions

6.63

6.83

3.00

6.13

Net payment Before transportation

5.68

3.95

6.56

5.79

Marketing Charges

R.R. Freight & Tax

2.16

2.06

—

—

Hauling & Tax

2.83

2.83

4.37

2.83

Switching

—

0.05

—

—

Umpire

0.15

0.15

0.15

—

Royalty 10%

0.5

—

0.20

0.20

Total Marketing Charges

5.19

5.09

4.72

3.03

Net smelter or Mill Payment

0.49

- 1.14

1.84

2.76

Premium Payments

Copper 54.6 lbs

54.6 X \$0.05

54.6 X \$0.05

54.6 X \$0.05

54.6 X \$0.05

2.65

2.32

2.38

2.38

Lead 39.6 lbs	No payment	No payment	$39.6 \times .86 \times 0.0275$	$39.6 \times .86 \times 0.0275$
	—	—	0.94	0.94
Total Premium Payment	2.65	2.32	3.32	3.32
Net payment for ore before mining cost	3.14	1.18	5.16	6.08

From the above analysis it would appear advisable to either ship to the French Mill or the Eagle Patcher Mill. However it must be remembered that the Eagle Patcher schedule is just an approximation. Due to the fact that the ore is sorted at the mine I believe the ore now exposed in the present workings will ^{ship better than} ~~run higher than~~ samples. My sampling was taken at regular intervals which would not include Brumby's samples were taken off the higher grade portions of the vein. While the average of my samples does not indicate ^{very} profitable ore I believe with selective mining a shipping grade of about \$9 per ton net before mining cost can be maintained.

In addition to the 600 tons of broken ore in the chutes against which there will be no mining cost there is according to my calculations about 800 tons of partially blocked out ore at the top of the raise.

600 tons @ \$5.16/ton less \$1.00/ton sorting cost \$2496.00

800 tons @ \$5.16/ton less \$2 mining + \$1 sorting cost \$1728.00

Total net value of ore now developed \$4224.00

4.16
2496
216
1728

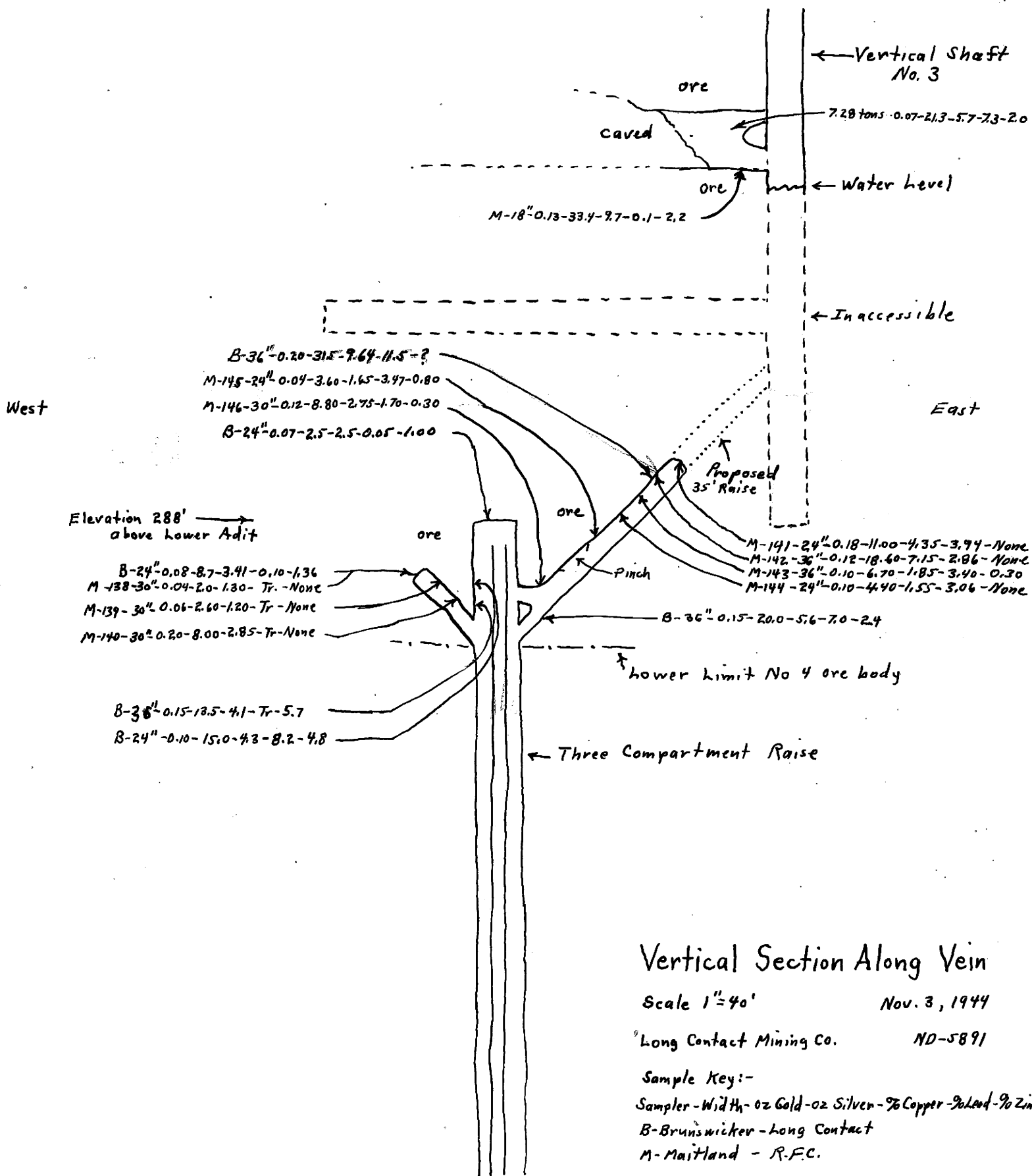
40
02
80

I believe that this net profit can be considered as a minimum and of course does not include any probable ore between the ends of the finger raises and the old workings alone.

90 With four men now employed they are producing 15 tons^{of ore} per day ~~of~~ from ~~driving~~ the raises.

Due to the fact that most of the development work has been done, the mine is now completely equipped, and all of the development faces of the mine are in ore, I believe that a further loan of \$5,000 is justified for this project.

Wm B Muntz
Sup. Eng.



Vertical Section Along Vein

Scale 1"=40'

Nov. 3, 1944

Long Contact Mining Co.

ND-5891

Sample Key:-

Sampler-Width-oz Gold-oz Silver-%Copper-%Lead-%Zinc

B-Brunswick-Long Contact

M-Maitland - R.F.C.

Wm. B. Maitland

325 Heard Building
Phoenix, Arizona
September 21, 1944

Long Contact Mining Co.
Box 892
Nogales, Arizona

Re: Long Contact Mining Co
Docket No. ND-5891

Attention: Mr. H. J. Brunswicker

Dear Butch:

I am enclosing three maps I have made at various times of your project and I hope they agree with your ideas of the mine. I thought perhaps they might be of interest to you. I am also returning your raise cost sheet, with a few corrections. Wish to thank you for this information as it has been very useful. I trust by this time that you have started stoping and that the ore is holding out very well.

We have just received your smelter return on the first car of ore shipped under the loan, and I calculate that based on the A premiums for copper and lead, you will receive \$338.02 as a premium and \$139.36 from the smelter, or a total of \$577.38 for the car of ore which is considerably under what we estimated. It is my opinion that the smelter deductions and penalties on this car of ore are out of all proportion, and I feel confident that if the Eagle Picher Company will accept your ore they can make you a better deal than the El Paso Smelter. If you will stop to analyze the smelter sheet, I believe you will find the following facts to be true:-

The value per ton of the ore figured at market price without deductions or penalties would amount to \$24.19. Of this amount the smelter has charged you \$7.08 or 29.3% of the ore value. In addition, they have deducted \$9.25, or 38.2% of the ore value. In other words, of the \$24.19 the smelter has retained, in one way or another, \$16.33 or 67.5% of the value of the ore. Your freight, hauling and royalty amounted to \$5.21 or 21.5%, while you receive only \$2.65 or 11% of the market value of the ore. In my opinion, the smelter is making all the best of it in this case and you are taking a beating. It seems to me that their charges for sulphur penalty is too high. If I were in your shoes I would discuss this with Brent Ricard, and if this is the best he can do I certainly would try and get another marketing source for my ore, because as it is now you are apparently working for the smelter.

I appreciate that your ore had a high pyrite content and I think it is possible that Eagle Picher Company in their custom mill could depress this pyrite and I know that in other cases their maximum milling charge is \$5 per ton and their mill recovery is based upon the average mill recovery for the month. If you will calculate

Long Contact Mining Co.
September 21, 1944

-2-

the percentage deductions for the various metals, I think you will find that in the case of lead you are getting about 60% of the market value; in the copper, you are getting about 15% although in the gold and silver you are getting fairly high recovery payment. My suggestion to you would be to take a good long sample of the ore, together with this smelter settlement sheet, over to Mr. Crabtree at the Eagle Picher Company and frankly discuss the matter with him.

In any event, Butch, keep up the good work! We are depending upon you to make this mine pay out. And if there is anything that we can do for you, let us know.

Sincerely yours,

Wm. B. Maitland
Supervising Engineer

Encs:

3 maps
raise cost sheet

WBM-bkb

325 Heard Building
Phoenix, Arizona
September 21, 1944

TULLY - ASS'T CHIEF - MINING SECTION R.F.C - WASHINGTON
In Re: Long Contact Mining Co. - Docket No. 5891

Enclosed please find two copies of my Progress Report on the
above captioned docket, together with two copies of map.

Wm. B. Maitland
Supervising Engineer

Enc - Progress Report
in duplicate
2c - Map

WBM-bkb

RECONSTRUCTION FINANCE CORPORATION
MINING SECTION
PROGRESS REPORT OF SUPERVISING ENGINEER

Long Contact Mining Co.
Locket No. ND-5891
Date of Report: September 21, 1944

On September 13, 1944, I inspected this project. Applicant Company is driving a three compartment raise which had reached a height of 283 feet above the lower adit. The accompanying map shows the location of this raise and the assays taken. From the driving of this raise they obtained one car of ore which was shipped to the El Paso Smelter on August 28, 1944, but the returns from this shipment are not as yet available. I estimate that there is another car of ore (mixed with waste) still remaining in the raise.

As of September 11, 1944, this project had the following financial position:

Balance in loan funds	\$1950.62	
Accts. Receivable - insurance deposit, gasoline refund, etc	622.00	
Estimated return of 1st car of ore	600.00	
Total Credits		\$3172.62
Unpaid Bills estimated	\$ 436.00	
Payroll Sept 1-15, 1944	434.02	
Total debits		\$ 920.02
Credit Balance		\$2252.60

Mr. Brunswicker estimates that the above funds which are available will carry the present raising operations until October 15, 1944, which at the present rate of advance will not "hole thru" the raise as it has about 55 feet to go. Since this raise will connect with an inaccessible drift off an old shaft there will be a considerable additional expense to complete this second exit. Therefore in order to obtain sufficient working capital to continue the project, Mr. Brunswicker and I have concluded that stoping of ore should be started at once as shown on the accompanying map. Another factor that necessitates immediate stoping is the fact that 258 ft. of raise will contain about 290 tons of broken ore so with the two ore passes there would be 580 tons of broken ore held in the raises at all times as it would be dangerous to empty the raise unless the project is abandoned. Also at the rate of production of 25 tons per day it would take over 20 days before the newly broken ore would reach the bottom of the raise.

Mr. Brunswicker believes that if they are short of money due to the fact that the ore is tied up in the raise, he can obtain an advance either from the Long Contact Mining Co. or from the Smelter or from both sources.

In mining the ore now found in the top of the raise an open stilled stope method will be used and in order to comply with the State mining law requiring two exits the stope will be driven in the direction of the old shaft above. Incident^{ally} there will be considerable danger and difficulty in connecting the stope with the old shaft as the shaft contains a large amount of acid copper water which if allowed to flood the raise will corrode and replace most of the nails, bolts, vent pipe, and cable now in the raise. Moreover, in the canyon below the mine there is a water storage dam used by the cattlemen. If this reservoir becomes full of acid copper

Long Contact Mining Co
Docket No. ND-5891
Progress Report
Sept. 21-1944

-2-

water a damage suit may be the result. In making the connection it is planned to drive long pilot holes ahead of the face in order to tap this water in the shaft and draw it out slowly.

I see no reason why this project should not produce a large tonnage of ore and pay off the loan because there are now three ore shoots exposed in the raise. Mr. Brunswicker intends to contract the stoping of the ore on the basis of so much per square foot of vein area. He is now negotiating this contract.

Attached to this report is the applicant's calculation of the cost per foot for driving the raise.

Wm. B. Maitland
Supervising Engineer

DETAILED COST OF THREE COMPARTMENT 283' RAISE
5' x 14' outside, only center mamway timbered
BASED ON 5 LINEAL FT. OF ADVANCE (1 set timber)

Timber Cost

2 - 8 x 8 x 7 equals	75 bd. ft. @ \$63.22	equals	4.74
6 - 6 x 8 x 4' 4" "	104	"	6.46
6 - 2 x 6 x 4' 4" "	26		1.63
2 - 2 x 8 x 4	15		0.94
12 - 2 x 12 x 5	120		7.50
3 - 1 x 6 x 5	8		0.48
3 - 2 x 4 x 5	10		0.64
1 - 1 x 2 x 5	1		0.06
1 - 1 x 4 x 6	2		0.13
2 Hanging Rods 6' @			1.92
	361 bd. ft.		\$24.50

Explosives Cost

150 sticks powder @ 7½¢	\$ 11.25	
Caps and fuse	2.15	
		13.40

Fuel Cost

Gasoline - 115 gals @ 13½¢	15.53
----------------------------	-------

Trucking Cost

Rent	\$ 8.90	
Gasoline	2.40	11.30

Labor Cost

Mining 2 men @ \$14.50/ft.	\$ 72.50	
Surface - 1 man @ \$6.68/ft.	33.40	
Supervision - 1 man @ \$10.22/ft.	51.10	
		157.00

Misc. Costs

Compensation Insurance	\$ 12.65	
Unemployment Insurance	5.85	
Social Security	1.80	
Bank interest on loan	7.90	28.20
Total cost for 5 feet		\$249.93
Total cost per foot		49.99

Progress Report

Long Contact mining
ND 5891

Sept 21, 1944

On Sept 13, 1944 ~~the~~ inspected this project. Applicant company is driving a three compartment raise which had reached a height of 283 ft above the lower adit. The accompanying map shows the ~~progress~~ location of this raise and the assays taken. From the driving of this raise they obtained one car of ore which was shipped to the El Paso Smelter on Aug 28, 1944 but the returns from this shipment are not as yet available. I estimate that there is another car of ore (mixed with waste) still remaining in the raise.

As of Sept 11, 1944 this project had the following financial position :-

Balance in loan funds 1950.62

Auto, Receivable - maintenance dep., gasoline

refund, etc 622.00

Estimated return of 1st car of ore 600.00 1000.00

Total Credits \$3572.62

Unpaid Bills estimated 436.00

Payroll Sept 1-15, 1944 484.02

Total Debits 920.02

Credit balance

\$2252.60
\$2652.60

Mr Brunsvicker estimates that the above funds available which are available will carry the present

3572.62
920.02
2652.60

raising operations until Oct 15, 1944. which
at the present rate of advance will not "hole
them" the raise as it has ^{about} 55 feet to go. Since
this raise will connect with an accessible
drift off an old shaft there will be a
considerable additional expense to complete
this second pit. Therefore in order to obtain
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ore passes there would be 580 tons of broken
ore held in the raises at all times as it
would be dangerous to empty the raises ^{unless}
I estimate at the present time there is
a ton of ore now tied up in the raises.
also at the rate of production of 25 tons
per day it would take over 20 days
before the newly broken ore would reach
the bottom of the raise.

Mr. Baumwacker believes that if
they are short of money due to the fact
that the ore is tied up in the raises
he can obtain an advance either from
the Long Content Mining Co. or from
the Smelter or from both sources.

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20
25580

abandoned
project

top of the raise an open stalled stop method will be used and under to comply with the state mining law requiring two exits the stop will be driven in the direction of the old shaft above. Incidentally ~~the connection~~ there will be considerable danger and difficulty in connecting the stop with the old shaft as the shaft contains a large amount of acid copper water which if allowed to flood the raise will ~~be~~ corrode and replace most of the rails, bolts, vent pipe, and cable now in the raise. ~~in~~ Moreover in the canyon below the mine there is a water storage dam used by the cattlemen. If this reservoir becomes full of acid copper water a damage suit may be the result. In making the connection it is planned to drive long pilot holes ahead of the face under to tap this water in the shaft and draw it out slowly.

I see no reason why this project should not produce a large tonnage of ore and pay off the loan because there are now three ore shoots exposed in the raise. Mr. Brunsen intends to contract the stoping of the ore on the basis of so much per square foot of vein area. He is now negotiating this contract.

Attached to this report is the applicants calculation of the cost per foot for driving the

raise

Wm B Marshall
Cyrus

~~Estimated~~

5' x 14' outside only

Detailed cost of Three Compartment 283' Rail

Based on 5 lineal ft of advance (1 set timber)

Timber Cost

2 - 8 x 8 x 7	= 75 bd ft @ \$63.22	= 4.74
6 - 6 x 8 x 4'4"	= 104	62.10 6.46
6 - 2 x 6 x 4'4"	26	62.55 1.63
2 - 2 x 8 x 4	15	62.55 0.94
12 - 2 x 12 x 5	120	62.50 7.50
3 - 1 x 6 x 5	8	60.00 0.48
3 - 2 x 4 x 5	10	64.35 0.64
1 - 1 x 2 x 5	1	63.00 0.06
1 - 1 x 4 x 6	2	67.05 0.13
2 Hanging Rods 6'	@ 0.96	1.92

361 bd ft.

\$24.50

Explosives Cost

150 sticks powder @ 7 1/2 ¢ 11.25

Caps + fuse 1/2

2.15

fuel
Gasoline Cost

13.40

Gasoline 115 gals @ 13 1/2 ¢

15.53

Timbering Cost

Rent

8.90

Gasoline

2.40

Labor Cost

11.30

Mining 2 men \$14.50/ft

72.50

Surface 1 man \$6.68/ft

33.40

Superintendent 1 man \$10.22/ft

51.10

Misc Costs

157.00

Compensation insurance

12.65

Unemployment insurance

5.85

Social Security

1.80

Bank interest on loan

7.90

28.20

Total cost for 5 feet
Total cost per foot249.93
\$49.99

One Value	\$ 24.19	100.0 %
Smelter return	16.33	67.5 %
Fat + Handling + Pay	5.21	21.5 %
Butch	2.65	11.0 %

Smelter charges	7.08	29.3 %
Smelter deducts	9.25	38.2 %
	<u>16.33</u>	<u>67.5 %</u>

1438.9 lb Cu. @ 4.25¢ \$ 61.15
10,607.9 lbs Pb. @ 2.61¢ \$ 276.87
\$ 338.02

Smelter

139.36
\$ 577.38

\$ 11/ton

\$ 24.19 oz
 14.94
 # 9.25
 .34
 7.08

16.67 smelter

7.52 Butch

34

786 Butcher
 16.33 Smelter

13.13 Pb 58% -
 1.23 Au 92% -
 6.64 Ag 88% -
 3.19 Cu 13% -
~~2.86~~

24.19

0.34 Mountain

23.85

325 Heard Building
Phoenix, Arizona
July 15, 1944

TULLY - Ass't Chief Mining Division - RFC - Washington, D. C.

Re: Long Contact Mining Company -
Docket No. ND-5891

On July 12th I visited this project and discussed with Mr. Brunswicker the progress being made. The raise is now up 214 feet above the adit level and although he is only working on one shaft he is averaging about three feet a day. The ore in the raise has averaged from 12 inches to over 36 inches in width and is now 18 inches wide on the face. Mr. Brunswicker's sample of the 50 tons of ore from the raise ran .05 in gold, 14 oz in Silver, 19% lead, 2% copper and 2.5% zinc. Mr. Brunswicker expects to ship this ore next week and believes that during the next 100 feet of raising he will be able to ship another car. The high grade portions of the vein consist of tetrahedrite, galena, chalcopryite, sphalerite in quartz and associated with pyrite.

In order to expedite the driving of this raise the applicant is blasting the whole raise face at one time and then runs all of the ore and mixed waste through a small sorting plant in which the fines are jigged. They have not attempted to do any stoping along the raise but he has kept an accurate record of where the best ore occurs.

I believe that this project will be completed with the loan funds available and that it should produce considerable tonnage of ore, especially near the top of the raise.

WBM/b

Wm. B. Maitland
Supervising Engineer

RECONSTRUCTION FINANCE CORPORATION
MINING DIVISION
PROGRESS REPORT OF SUPERVISING ENGINEER

Date of Inspection: May 23, 1944
Date of Report: May 27, 1944
Docket No. ND-5891
Long Contact Mining Company

On May 23, I visited the project being operated by the Long Contact Mining Company. They are driving a raise between the lower crosscut and the old workings near the outcrop of the vein. They are following the ore up with this raise; and of the original \$15,000 loan granted they had a balance, on May 15, of \$9,009.12.

They started actual raising operations on April 3rd, and in the 42 working days up to and including May 23rd, they have advanced this raise 66 feet - which is approximately 1-1/2 ft. per day. They have about 220 ft. yet to go. The ore at the top of this raise at the time of my visit was about two feet wide and has been widening out for the last 6 or 8 feet. At a point 70 to 80 feet above the adit level they ran into a lens of ore three feet wide that assayed .05 gold, 8.0 oz. silver, .72 % copper, 29% lead and 3.1 % zinc.

Since the raise is much wider than the ore contained therein, they have constructed a small sorting plant from machinery and equipment already owned by either the B & R Mines or the Long Contact Mining Company. So for a labor investment of approximately \$400 ^{on the mill} they have obtained 25 tons of ore to date from the raise. The sorting plant consists of a grizzly, trommel, a jig and a picking belt. The oversize from the trommel goes to the picking belt, and the undersize goes to the jig. They submitted a sample of the ore from the picking belt which averaged 0.05 in gold; 4 1/2 ounces of silver; 0.55% copper; 12% lead; and 3.2% zinc. The jig concentrate ran .05 gold; 5 oz. silver; .64% copper; 18.5% lead; 2.1% zinc. The Superintendent of the project assured me that with the funds remaining they could complete the raise, and I suggested to him that since they are only mining on one shift that it would be advantageous to drive the raise ahead on two shifts, thus cutting down the overhead cost per foot. They are making a very good job of the raise and should be able to increase the footage as they are now in better ground than previously.

The face of the raise is now 129 ft. above the adit level and 66 ft. of this distance was driven prior to the granting of the loan.

The initial cost of this operation was fairly high due to the fact that it was necessary to retimber part of the original raise and buy a large amount of supplies which are now on hand. I have requested the Borrower's superintendent to supply me with the detailed cost on the raising operation as soon as they have completed two months of work in the raise.

WILLIAM B. MAITLAND
Supervising Engineer

325 Heard Bldg.
Phoenix, Arizona
April 13, 1944

TULLY - Asst Chief - Mining Division RFC - Washington
Re: Long Contact Mining Company - Docket No. ND-5891

Enclosed please find my progress
report, in duplicate, on the above
captioned project.

W. B. MAITLAND
Supervising Engineer

WBM:ep
Enc.
Progress in duplicate.

RECONSTRUCTION FINANCE CORPORATION
MINING DIVISION
PROGRESS REPORT OF SUPERVISING ENGINEER

Long Contact Mining Co.
Docket ND-5891
April 13, 1944

On March 29, 1944 I visited the above project in order to examine the progress being made. The applicant has cleaned out and partly retimbered the raise, installed a tugger hoist and timber slide, completed the installation of the vent pipe and was starting to drive the raise ahead under contract. All of the workings were in good shape and most of the supplies for the raise were on the ground.

Of the \$15,000 loan granted for the driving of the raise there remained a balance of \$11,906.38. The expenditures to date have been as follows:

Payroll	\$957.69
Petty Cash	392.84
Compensation Ins. Dep.	206.50
Air Tugger hoist	80.00
Powder, caps, fuse, steel	379.59
Gasoline & drum deposit	232.52
Timber (mine)	520.07
Truck rental (1 Mo.)	50.00
Withholding Tax	92.70
Social Security	10.61
Drill Steel	<u>171.10</u>
Total Spent to April 1	\$3093.62

Four men were being employed on the project and work is apparently progressing satisfactorily.

W. B. MAITLAND
Supervising Engineer

WBM:ep

Progress Report

Long Contract Mining Co
ND 5891

April 12, 1944

On March 29, 1944 I visited the above project in order to examine the progress being made. The applicant has cleaned out and partly retimbered the raise, installed a tigger burst and timber slide, completed the installation of the vent pipe and was starting to drive the raise ahead under contract. All of the workings were in good shape and most of the supplies for the raise were on the ground.

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Truck rental (1 mo)	50.00	
Withholding tax	92.70	
Social Security	10.61	
Drill Steel	171.10	

Total spent to April 1 \$ 3093.62

Four men were being employed on the project and work is apparently progressing satisfactorily
Wm B. Munt

325 Heard Building
Phoenix, Arizona

December 7, 1943

Re: Long Contact Mining Co.
Docket No. ND-5891

TULLY, Asst. Chief Mining Division, RFC, Washington, D. C.

Enclosed please find two copies of Supervising Engineer's Report, and one copy of original application with supporting data.

Wm. B. Maitland
Supervising Engineer

Encs.
2 copies of Sup. Eng. Report
1 copy Original Application and Data

WBM-b

SL00b
15291
hbccc

325 Heard Building
Phoenix, Arizona

December 3, 1943

Long Contact

Mr. P. S. Haury
U. S. Bureau of Mines
Box 4097, University Station
Tucson, Arizona

Dear Mr. Haury:

Enclosed please find the two maps I promised you. Most of the data was compiled from old maps and reports, so I do not know how reliable the information is although I trust that it will give you a fairly accurate over-all picture of the mine.

Sincerely yours,

Wm. B. Maitland
Supervising Engineer

Enc.
2 maps

WBM-b

RECONSTRUCTION FINANCE CORPORATION
MINING DIVISION
REPORT OF SUPERVISING ENGINEER

Long Contact Mining Co.

Docket No.ND-5891
Date Authorization for Exam. rec'd.....Nov. 19, 1943
Date of Examination.....Nov. 10, 1943
Date of Report.....Dec. 6, 1943

1. NAME AND ADDRESS OF APPLICANT

Long Contact Mining Company
1301 W. Jackson Blvd.
Chicago, Illinois

Correspondent

H. J. Brunswicker
P. O. Box 892
Nogales, Arizona

2. CHARACTER OF PROJECT

To finance the further development of a silver, copper, lead, zinc vein now exposed by a deep level adit and raise.

3. LOCATION OF MINE

Alto Mine
Sec.-11, 12, 13, 14 T-21-S, R-11-E G. & S. R. B. & M.
Tyndall Mining District, Santa Cruz County, Arizona

Name and distance by road nearest railway station:
Patagonia - a town on the Southern Pacific.
Railroad is 18 miles southeast of the mine.

Condition and seasonal accessibility of road, mine to railway:
Except for the last mile of road which is steep and rocky, the road from the mine to the railroad is a good graded dirt road that should be accessible at all times of the year. The elevation at the mine is about 5,000 feet so the summers are cool and there is no snow in the winter time.

4. APPLICANT

The applicant company is composed of a group of Chicago business and professional men who are not experienced in mining. They informed me that they have spent about \$55,000 on this property and all past work was under the direction of Mr. E. J. Neuner, one of the partners in the company. Since Mr. Neuner was a poor superintendent, the actual work done on the mine represents a normal investment of about \$35,000.

Recently the applicant company (partnership) has hired Mr. E. J. Brunswicker, a competent and experienced mining operator. He is also in charge of the B. & R. Mines Inc. (B-ND-4801) and has proven himself to be trustworthy and efficient.

5. LOAN REQUESTED

Application requests a loan of \$15,000 to complete the present raise and prepare the mine for production. I believe it will take this amount to complete the projected work and that a loan to this mine is justified.

6. DESCRIPTION OF PROJECT

A. Legal Considerations

1. Attached to the application is a partnership agreement between the seven general partners.
2. Also attached is a copy of the Lease and Option dated July 21, 1939 from E. D. Morton (Arizona Mgr. of Eagle Pitcher Mining Co.) to E. J. Neuner, one of the partners. Property consists of 16 patented claims. All royalty payments shall apply against a purchase price of \$10,000 due on or before July 1, 1945. Royalty amounts to 10% of net smelter payments. Minimum work requirement is 60 shifts per month. The Long Contact Mining Co. must pay all taxes levied against the property.
3. Likewise attached to the application is a copy of a lease granting the east end of the property to the B. & R. Mines Inc. from the Long Contact Mining Company. A copy of this lease is already in Washington under Docket No. B-ND-4801 and the property lines are shown on my map accompanying my report.

If a loan is granted the Long Contact Mining Co., I believe that the applicant should agree to the following conditions in order to protect the interests of the R. F. C. in the B. & R. Mines:-

1. The Long Contact Mining Co. should waive all fixed monthly payments and minimum work requirements affecting the B. & R. Mines for the life of both loans.
2. The Long Contact should agree that all surface and underground facilities could be used jointly by the B. & R. Mines with them and that the B. & R. Mines could use their raise for extraction of ore on the other side of the property line because if ore is found in the raise it will undoubtedly extend over the property line onto the B. & R. ground.

The applicant states that they are free and clear of all debt.

The state mine inspector has ruled that the raise must be completed before the ore is stoped and it was for this reason that the applicant has requested a loan as they do not have enough money to complete the raise before shipping ore. However, the mine inspector will allow them to develop and mine the ore by a series of finger raises off the main raise. In any event, a raise is necessary in order to determine the extent and value of the ore body, to provide ventilation for the lower crosscut, and is necessary later for the mining of the ore developed.

3. The life of the lease should be extended past July 1, 1945.

B. Existing Development

Previous reports already on file in Washington describe this project as well as the B. & R. Mines (B-MD-4801) so reference is now made to this docket.

Briefly the mine consists of a long persistent vein known as the Alto Vein. The outcrop of the vein has been stoped for long distances ever since 1687 although most of the surface workings are now inaccessible and no complete data is available on the production from the surface workings. These workings extend to a probable depth of 150' below the outcrop.

From 1926-1929 the Tonopah Development Co. of Nevada drove a 2200 foot drift east along the vein and this tunnel has an average depth of 250' below the vein outcrop. The assay map on this drift is available but the tunnel is now caved and inaccessible. Furthermore, it is my opinion that this drift was not extended east far enough to expose the probable ore above the applicant's lower workings although the face of this long drift is now in ore according to the maps. This drift is approximately 100 feet below the bottom of the surface workings.

The Long Contact Mining Co. together with the B. & R. Mines drove a 1250 foot crosscut to intersect the vein at a depth of about 500 feet below the outcrop and 220 feet below the Tonopah drift. The two companies have drifted along the vein from the lower crosscut for a distance of 480 feet with half of the drift being in the B. & R. Mines ground and the other half on the Long Contact property. Also, the Long Contact Co. has raised up in the vein for 73 feet and it will take another 260 feet of raise to connect with the old surface workings.

Attached to this report are two maps of the workings which also show the samples taken and the ore shipped. These maps were compiled from various old maps and data that is believed to be reliable although there may be some local inaccuracies.

C. Surface Improvements

The mine is completely equipped with compressor, drilling equipment, camp, ore bins, and all necessary mining equipment.

The applicant company has also built a small concentrating mill (jig) but it has not been properly constructed so will not be considered under this project.

Since all the proposed work will be by means of raising above an adit no hoisting or pumping equipment is necessary. The present lower main crosscut furnishes sufficient water for the mine equipment use.

D. General Geology of Area

The Alto vein, covered in large part by the Long Contact Mining Company lease, is the largest and most persistent vein in this district. Other mines in this area include the Jefferson Mines (B-ND-4070) and the Bland Mine (A.T. Russell - ND-5877). The geology of the region has been well covered by U. S. G. S. Bulletin 582, by F. C. Schrader, a copy of which is included with the application. This area has not produced any large mines, but has furnished considerable high grade ore.

The country rock in this region consists of intrusive and extrusive igneous rocks while the ores of the district are usually complex sulfides of copper, lead, and zinc, with a considerable gold and silver content. There is no available geologic map of this area.

E. Economic Geology of Deposit

The Alto vein is a fissure vein following a poorly developed fault. The vein is irregular in dip and strike and often splits and branches. In some parts of the vein it is partly frozen to the walls and locally there are some evidences of the vein replacing the wall rock. Quartz is the principal gangue mineral, while galena, argentite, chalcopyrite, pyrite, tetrahedrite, and chalcocite are the major ore minerals.

There is apparently no faulting of importance in this mine and oxidation and secondary enrichment are of importance only in the old surface workings.

While the vein is fairly continuous for several thousand feet along its strike, only two areas are sufficiently mineralized to warrant stoping. The largest ore shoot, and the only one under consideration in this report, is the ore found between the new lower crosscut and the bottom of the old surface workings above. In this area the vein varies in width from 6 to 40 inches with an average sample width of 25 inches.

F. Ore Reserves

The average of all samples shown on the assay map is 0.09 oz. gold, 7.2 oz. silver, 1.43% copper, 5.76% lead, and 2.51% zinc. In order to obtain payment for all of the metal content, it would be necessary to ship this type of ore to a custom mill (Shattuck-Denn at Bisbee).

The average value of the known shipments from this property (including B. & R. Mines) for 261.68 short dry tons was 0.076 oz. gold, 19.31 oz. silver, 4.2% copper, 17.08% lead, and 2.22% zinc. In the case of the shipments from the B. & R. Mines, the ore was sorted so that part of the ore containing most of the lead was shipped to a lead smelter and the copper rich ore sent to a copper smelter. This procedure could be followed in future ore produced from the Long Contact Mine.

My last samples taken at the head of the new raise from the lower tunnel averaged 0.06 oz. gold, 6.8 oz. silver, 0.58% copper, 16.93% lead and 2.49% zinc across 30 inches. This raise is now up 73 feet and has produced 45.0 tons of ore for which the shipper was paid at the mine \$1307.73 or \$29.06 per ton. This amounts to a net payment per foot of \$17.91, which can be credited against the estimated raise cost per foot of \$32.00.

The following is an estimation of the net value of the ore if shipped to the El Paso Lead Smelter:-

Smelter Payment on Ore in Face of Raise (30") (El Paso Smelter)

Gold 0.06 oz. x \$32.31825 =	\$1.94
Silver 6.8 oz. -1 = 5.8 x \$0.69125 =	4.01
Copper 0.58% - less than 1% - no payment	-
Lead 16.79% - 1.5 = 15.29 x 2000 x 90% =	
275.2 x \$0.049 =	13.49
Zinc 3.49% - no payment - no penalty	-
Total Smelter Payment	\$ 19.44

Bonus Payments on Copper and Lead

Copper 0.58% x 70% - no payment	-
Lead 16.79% x 2000 x 93% x \$0.0275 =	8.77
Total Bonus Payment	\$ 8.77

Total Ore Payments \$ 28.21

Marketing Charges

Smelting	\$ 3.94
Bullion Tax	0.06
Insoluble, Sulfur, Sb, Bi	4.00
Freight & Tax (R.R.)	2.67
Hauling (truck)	2.00
Royalty (10% x \$8.77)	.88

Total Marketing Charges \$ 13.55

Net Profit before Mining Cost \$ 14.66/ton

Estimated Mining Cost \$8.00/ton

Estimated Net Profit \$6.66/ton

Ore Produced from each Foot of Raise (5' x 14' cross section)

$$\frac{2\frac{1}{2}' \text{ vein width} \times 14' \text{ stope length}}{12 \text{ cu. ft./ton}} = 2.9 \text{ tons/ft.} - 0.9 \text{ tons dilution}$$

$$\text{loss} = 2 \text{ tons/ft.} \times \$14.66 = \$29.32 \text{ gross value of ore per foot at raise}$$

Estimated Tonnage Available for Mining (Probable Ore) 12,000 tons less dilution (1/4) and narrow vein areas (1/4) = 6,000 tons x \$6.00 net/ton = \$36,000 probable amount available for loan repayment

G. Economic Considerations

After the raise is completed to the upper workings (260') it is planned to stop the ore, using filled stopes after picking the ore in the stopes.

Besides the Superintendent it is estimated that four men will be employed for one shift and these men are now working either for the applicant company or for the B & R Mines, Inc.

The wage scale will be:

Superintendent -	\$200/mo
Raise miner	\$ 8/day
Helper	\$ 7/day
Mucker and trammer	\$ 6/day
Outside man	\$ 7/day

Estimated cost per foot for raising	\$32.00
Drifting cost per foot	15.56
Estimated stoping cost per ton	8.00

After the raise is completed which will take about six months, the mine should produce from 30 to 50 tons per day from stoping.

The Long Contact Mining Company estimate they have spent \$55,000 of their own money to date on the mine. Their former superintendent was wasteful and inexperienced so the Company was never able to complete the raise as planned and they are now out of funds.

7. Proposed Expenditures

Raise approximately 300' @ \$32/ft	\$9,600.00
Payment on tugger hoist and 750' cable	200.00
Haulage of supplies	300.00
Supervisor six months @ \$200/mo	1,200.00
Insurance, social security, unemploy. ins.	900.00
Bank charges, six months	75.00
Loan interest, six months	300.00
Reserve for contingencies and stoping	2,425.00
Total for loan	\$15,000.00

8. Comments of Supervising Engineer

I believe a loan is justified for this project for the following reasons:

1. The applicant now has all the equipment and labor available to complete the project.
2. The applicant already has spent a considerable sum of money on the mine.
3. The successful development of this mine may enable the loan on the adjoining B & R Mine to be repaid.

4. Applicant now has a competent superintendent to operate the project.
5. The mine has economically produced considerable high grade shipping ore in the past and can operate without extra premiums for copper and lead.
6. The mine contains a large area of vein matter (260 feet of backs) that could produce a large tonnage of ore.
7. The present face of the raise is in ore as are the various lower faces in the upper workings.
8. While there is no blocked out ore, the mine could, if the proposed development work is successful, produce sufficient shipping ore to more than repay the loan requested.

WM. B. MATTLAND
Supervising Engineer.

No. 394

Ma

CHAS. A. DIEHL

Phoenix, Arizona,

Nov. 12, 1943.

ARIZONA ASSAY OFFICE

Phone 3-4001

815 North First Street

P. O. Box 1148

This Certifies That samples submitted for assay by **Mr. Wm. B. Maitland.**

contain as follows per ton of 2000 lbs. Avoir.

LONG CONTACT MINING No. MARKS Width	SILVER		VALUE (Oz.)		GOLD		VALUE (Oz.)		TOTAL VALUE Of Gold and Silver	PERCENTAGE			REMARKS
	Ounces	Tenths			Ounces	Handths				COPPER	LEAD	ZINC	
77	24"	4.5			.08		\$2.80			.40	15.59	4.70	
78	36"	8.3			.05		\$1.75			.70	17.60	2.69	

Charges \$ 9.00

Assayer **ARIZONA ASSAY OFFICE**


Report of Supervising Engineer

Docket No. ND 5891

Date Authorization for

Exam recd Nov 19, 1943

Date of Exam unless - Nov 10, 1943

Date of Report Dec 6, 1943

1. Name & Address of Applicant

Name - Long Contact Mining Co.

Address - 1301 W. Jackson Blvd.,

City & State - Chicago, Ill.

Correspondent - H. J. Brunsbacher

P.O. Box 892, Nogales, Ariz

2. Character of Project.

~~Type of Mine - To finance~~

① To finance the further development of a ~~gold~~, silver, copper, lead, zinc vein now exposed by a deep level adit and raise

3. Location of Mine

Name of mine - 'Alto

Township, range, section - Sec 11, 12, 13, 14, T21S, R14E

B. & S. R. B + M

Mining District, County, State - Tyndall Mining District,

Santa Cruz Co., Arizona

Name and distance by road nearest railway station -

Patagonia a town on the Southern Pacific

Railroad is 18 miles south east of the mine.

Condition and seasonal accessibility of road, mine to railway - Except for the

last mile of road which is steep and rocky the road from mine to railroad is a good graded dirt road that should be accessible at all times of the year. The elevation at the mine is about 5000 feet so the summers are cool and there is no snow in the winter time.

4. Applicant

(2) The applicant company is composed of a group of Chicago business and professional men who are not experienced in mining. They informed me that they have spent about \$55,000 on this property and all past work was under the direction of Mr. E. J. Meener one of the partners in the company. Since Mr. Meener was a poor superintendent the actual work done on the mine represents a normal investment of about \$35,000.

Recently the applicant company (partnership) has hired Mr. E. J. Brunswick a competent and experienced mining operator. He ^{is also} ~~was~~ in charge of the B. & P. Mines above (B.V.D. 4801) and has proven himself to be trustworthy & efficient.

(5) Loan Requested.

Application requests a loan of \$15,000 to complete the present raise and prepare the mine for production. I believe it will take this amount to complete the projected work and that a loan to this mine is justified.

6. Description of Project

A Legal Considerations

1. Attached to the application is a partnership agreement between the seven general partners.

2. Also attached is a copy of the lease and Option dated July 21, 1939 from 'E. D. Morton (Dir. Mgr. of Eagle Pitcher Mining Co) to 'C. J. Mearner, one of the partners. Property consists of 16 patented claims. All royalty payments shall apply against a purchase price of \$10,000 due on or before July 1, 1945. ~~Monthly payments on the property amount to \$100 per month and to apply against the purchase price~~

(3)

Royalty amounts to 10% of net smelter payments. Minimum work requirement is 60 shafts per month. The 'Long Contact Mining Co. must pay all taxes levied against the property.

3. Likewise attached to the application is a copy of a lease granting the east end of the property to the 'B + R Mines Inc. and from the 'Long Contact Mining Co. The copy of this lease is already in Washington under Pocket No BND 4801 and the property lines are shown on my map accompanying my report.

If a loan is granted the 'Long Contact Mining Co I believe that the applicant should agree to the following conditions in order to protect the interests of the R. F. C in the B + R Mines: -

1. The 'Long Contact Mining Co should receive all fixed monthly payments and minimum

work requirements affecting the 'B+R' mines for the life of both loans

2. 'The Long Contact should agree that all surface and underground facilities should be used jointly by the 'B+R' mines with them and that the B+B mines could use their raise for extraction of ore on the other side of the property line because if ore is found in the raise it will undoubtedly extend over the property line onto the B+R ground.

④ The applicant states that they are clear and free of all debt.

The state mine inspector has ruled that the raise must be completed before the ore is stopped and it was for this reason that the applicant has requested a loan as they do not have enough money to complete the raise before shipping ore. However the mine inspector will allow them to develop and mine the ore by a series of finger raises off the main raise. In any event ~~the~~ a raise is necessary in order to determine the extent and value of the ore body ~~and~~, to provide ventilation for the lower crosscut, and is necessary later for the mining of the ore developed.

B Existing Development

Previous reports already on file in Washington describe this project as well as the 'B & R' mines (BVID 4801) so reference is now made to this docket.

Briefly the mine consists of a long persistent vein known as the Alto Vein. The outcrop of the vein has been stope for long distances ever since 1687 altho most of the surface workings are now inaccessible and no complete data is available on the production from the surface workings. These workings extend to a probable depth of 150' below the outcrop.

(5) From 1926-1929 the Tonopah Development Co of Nevada drove a ~~long~~ 2200 foot drift east along the vein and this tunnel has an average depth of 250' below the vein outcrop. The assay map on this drift is available but the tunnel is now caved and inaccessible. Furthermore it is my opinion that this drift was not extended east far enough to expose the probable ore above the applicants lower workings altho the face of this long drift is now in ore according to the maps. This drift is approximately 100 feet below the bottom of the surface workings.

The 'Long Contact Mining Co Together with the 'B & R' mines drove a 1250 foot crosscut to intersect the vein at a depth of about 500 feet below the outcrop and 220 feet below the Tonopah drift. The two companies have drifted along the vein from the lower crosscut for a distance of 480 feet with

half of the drift being ~~in~~ the B+R Mines ground and the other half on the Long Contract property. Also the Long Contract Co has raised up in the vein for 73 feet and it will take another 260 feet of raise to connect with the old ~~under~~ surface workings.

Attached to this report are two maps of the workings which also show the ^{samples} ~~assays~~ taken and the ore shipped. These maps were compiled from various old maps and data that is believed to be reliable altho there may be some local inaccuracies.

C. Surface improvements

⑥ The mine is completely equipped with compressor, drilling equipment, camp, ore bins, and all necessary mining equipment.

The applicant company has ^{also} ~~also~~ built a small concentrating mill (jig) but it has not been properly constructed so will not be considered under this project.

Since all the proposed work will be by means of raising above an adit no hoisting or pumping equipment is necessary. The present lower main crosscut furnishes sufficient water for the mine equipment use.

D. General geology of area

D. General Geology of Area

The 'Alto vein covered in ^{large} part by the Long Contact Mining Co. Lense is the largest and most persistent vein in this district. Other mines in this ^{area} district include the Jefferson mines (B-ND 4070) and the Bland Mine (A.T. Russell ND 5877). The geology of the ^{region} ~~area~~ has been well covered by U.S. G.S. Bulletin 582 by F.C. Schrader a copy of which is included with the application. This area has not produced any large ~~for~~ mines but has furnished considerable high grade ore.

(7)

The country rock in this region consists of intrusive and extensive igneous rocks while the ores of the district are ^{usually} complex sulfides of copper, lead, and zinc with a considerable gold and silver content. There is no available geologic map of this area.

Economic Geology of Deposit

The 'Alto vein is a fissure vein following ~~an~~ a poorly developed fault. The vein is irregular in dip & strike and often splits and branches. In some parts of the vein it is partly frozen to the walls and locally there are some evidences of the vein replacing the wall rock. Quartz is the principal gangue mineral while galena, argentite, chalcocite, pyrite, tetrahedrite, and chalcocite are the major ore minerals.

There is apparently no faulting of importance

in this mine and oxidation and secondary enrichment are of importance only in the old surface workings.

While the vein is fairly continuous for several thousand feet along its strike only two areas are sufficiently mineralized to warrant stopping for ore. The largest ore shoot and the only one under consideration in this report is the ore found between the new lower crosscut and the bottom of the old surface workings above. In this area the vein varies in width from 6 to 40 inches with an average sample width of 25".

F Ore Reserves

The average of all samples shown on the assay map is 0.09 oz gold, 7.2 oz silver, 1.43% copper, 5.76% lead, and 2.51% zinc. In order to obtain payment for all of the metal content it would be necessary to ship this type of ore to a custom mill (Schattuck-Denn at Butte).

The average value of the known shipments from this property (including B+R Mines) for 261.68 short dry tons was 0.076 oz gold, 19.31 oz silver, 4.2% copper, 17.08% lead, and 2.22% zinc. In the case of the shipments from the B+R Mines the ore was sorted so that part of the ore containing most of the lead was shipped to a lead smelter and the copper rich ore sent to a copper smelter. This procedure could be followed in future ore

produced from the Long Contact mine
My ~~last~~ samples taken at the head of
the new raise from the lower tunnel averaged
0.06 oz gold, 1.8 oz silver, 0.58 % copper, 16.93 %
lead and 2.49 % zinc across 30 inches. This
raise is now up 73 feet and has produced 45.0 tons
of ore for which the shipper was paid at the
mine \$1307.73 or \$29.06 per ton. This amounts
to a net payment per foot of ^{estimated} \$5.91 ~~per ton~~ ~~the~~ ~~case~~
be credited against the ^{estimated} raise cost per foot of
\$32.00.

Following is an estimation of the net
value of the ore if shipped to the El Paso
Lead Smelter:-

(9)

$280 \times 2 \frac{1}{2} = 1200$
 $7 \times 14 \times 2 \frac{1}{2} \times 1 = 12$
 $12 \times 6 = 72$
 500
 40
 250×280
 11200

$14 \times 5 = 70$
 39
 17.5
 $6 \times 12.5 = 75$

Smelter Payment on Ore in Face of Raise (30") (El Paso Smelter)

Gold $0.06 \text{ oz} \times \$32.31825 = 1.94$

Silver $6.8 \text{ oz} - 1 = 5.8 \times \$0.69125 = 4.01$

Copper 0.58% - Less than 1% - no payment

Lead $16.79\% - 1.5 = 15.29 \times 2000 \times 90\% = 2752 \times 0.049 = 13.49$

Zinc 3.49% No payment, no penalty

Total Smelter Payment \$19.44

Bonus Payments on Copper + Lead

Copper $0.58\% \times 70\%$ No payment

Lead $16.79\% \times 2000 \times 95\% \times \$0.0275 = 8.77$

Total Bonus Payment 28.21

Total Ore Payments

Marketing Charges

Smelting 3.94

Bullion Tax 0.06

Insoluble, Sul/Sur, Sb, Bi 4.00

Freight + Tax (R.R) 2.67

Hauling (truck) 2.00

Royalty ($10\% \times \$8.77$) .88

Total Marketing Charges 13.55

Net profit before mining cost

\$14.66 / ton

Estimated Mining Cost

\$8.00 / ton

Estimated Net Profit

\$6.66 / ton

Ore Produced from Each Foot of Raise (5' x 14' cross section)

$2 \frac{1}{2}' \text{ vein width} \times 14' \text{ slope length} = 2.9 \text{ tons/ft} - 0.9 \text{ tons dilution}$
 12 cu. ft/ton

loss = $2 \text{ tons/ft} \times \$14.66 = \$29.32$ gross value of ore per foot of Raise

Estimated Tonnage Available for Mining (Probable ore) 12,000 tons less

dilution ($\frac{1}{4}$) and narrow vein areas ($\frac{1}{4}$) = $6000 \text{ tons} \times \$6.00 \text{ net/ton} = \$36,000$ probable amount available for loan repayment

G. Economic Considerations

after the raise is completed to the upper workings (260') it is planned to slope the ore using filled stopes after picking the ore in the stope.

Besides the superintendent it is estimated that four men will be employed ^{for 1 shift} and these men are now working either for the applicant company or for the 'B + R' Mines Inc.

The wage scale will be:-

Superintendent	- \$ 200/mo
Raise miner	\$ 8 /day
Helper	\$ 7 /day
Mucker + trimmer	\$ 6 /day
Outside man	\$ 7 /day

Estimated cost per foot for raising \$ 32.00

Drifting cost per foot \$ 15.56

Estimated stoping cost per ton \$ 8

After the raise is completed which will take about 6 months on a ~~two shift~~ basis, the mine should produce from 30 to 50 tons per day from stoping.

The 'Long Contact Mining Company' estimate they have spent \$55,000 of their own money to date on the mine. Their former superintendent was wasteful and inexperienced so the company was never able to complete the raise as planned and they are now out of funds.

7 Proposed Appenditures

Raise approx 300' @ \$32/ft	\$ 9600.00
Payment on trigger hoist & 750' cable	200.00
Haulage of supplies	300.00
Supervision 6 mo @ \$200/mo	1200.00
Insurance, road security, Unemployment	900.00
Bank charges 6 mo	75.00
Loan interest 6 mo	300.00
Reserve for contingencies & stoping	2425.00
Total for loan	\$ 15,000.00

8. Comments of Engineering Engineers.

(12) I believe a loan is justified for this project for the following reasons: -

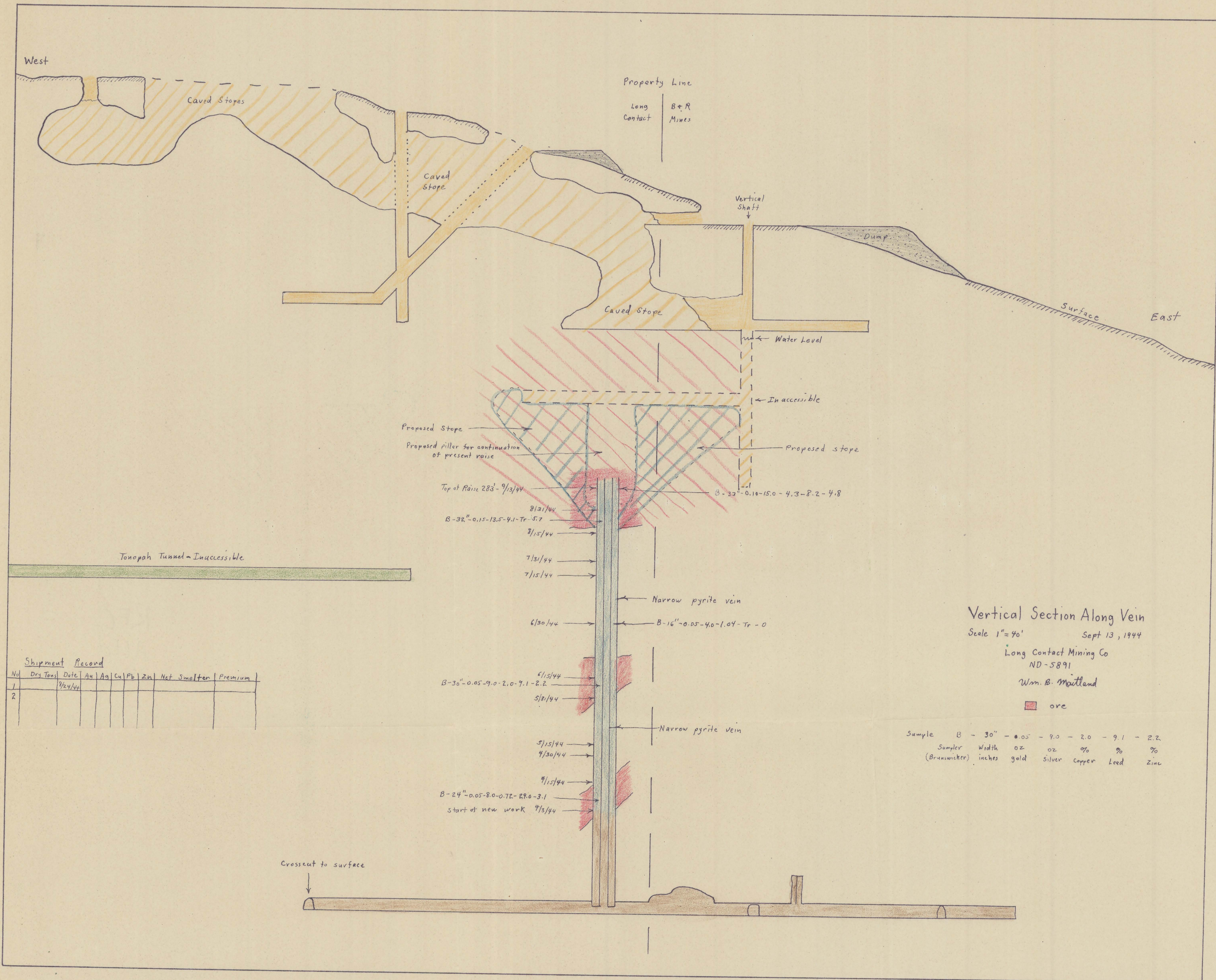
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8. While there is no blocked out ore,
~~in~~ the mine could, if the proposed development work
is successful, produce sufficient shipping ore to
more than repay the loan requested.

Wm B Menthel

Sys. Engr.

(B)



Vertical Section Along Vein

Scale 1" = 40' Sept 13, 1944

Long Contact Mining Co
ND-5891

Wm. B. Maitland

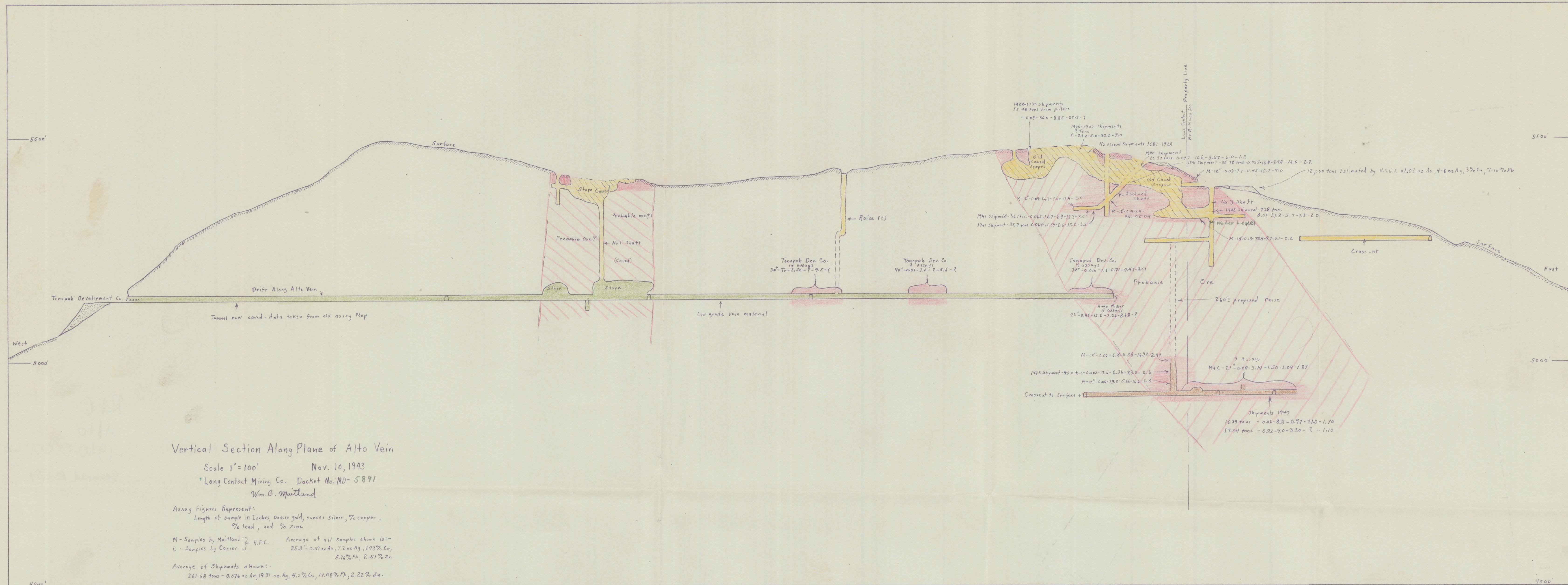
ore

Sample B - 30" - 0.05 - 9.0 - 2.0 - 9.1 - 2.2
Sampler Width oz oz % % %
(Brunswick) inches gold silver copper lead zinc

Shipment Record

No	Dry Tons	Date	Ag	Cu	Pb	Zn	Net Smelter	Premium
1		8/24/44						
2								

1960-01-0011-04
Scanned B25/14



1960-01-0011

