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*Cochise Co.*

RECONSTRUCTION FINANCE CORPORATION  
MINING DIVISION  
REPORT OF SUPERVISING ENGINEER

Docket No. ND-5368  
Date authorization for  
Examination: September 23, 1943  
Date of Examination: Oct. 6, 1943  
Date of Report: October 16, 1943

This is an amended application sent in following a decline by the Directors of this Corporation on applicant's application for a loan of \$10,000. The original examination was made by Mr. Frisbie of this office, and you have his report of March 17, 1943. The applicant was notified of the Corporation's decision by letter on April 16, 1943.

During the interim between the notice of decline and this application, the applicant has put in a raise to the surface 174 feet which was part of the work outlined in the original application. This gives air circulation and a second entrance but did not develop any substantial quantity of ore. Only a small streak, 6 - 8 inches, was followed in driving the raise and not all of this streak was ore. In addition, the applicant has opened a few new faces on the lower level and has mined about 35 tons of ore now on a platform. A sample of this ore assayed 3.35 per cent copper and 2.0 ounces of silver per ton.

This report considers applicants' request for an amended loan of \$5,000, in place of \$10,000 originally requested. Only that which is new will be considered in this report as everything else is the same as reported by Mr. Frisbie.

Sampling:

All samples taken were from the lower level as the raise did not disclose ore of sufficient width to sample. Only that part of the ore zone considered ore by the applicant was sampled. Five samples were taken; four across vein material and one of ore in the bin. Sample No. 124 is below Frisbie's No. 1 and across 10 inches of copper stained material. This sample assayed 1.00 ounces silver and 0.95 per cent copper.

Sample No. 125 is below Frisbie's No. 2 sample and across the copper stained material. The sample assayed 0.80% silver and 3.75 per cent copper.

Sample No. 126 is between Frisbie's No. 2 and No. 3. Assay showed 1.6 ounces of silver and 3.10 per cent copper across 24 inches.

Sample No. 127 is across 24 inches of copper ore. This is a new face as applicant has mined out ore represented by Mr. Frisbie's No. 6 sample. The assay shows 1.4 ounces of silver and 5.65 per cent copper. A sample of ore in the bin gave 2.00 ounces silver and 3.35 per cent copper.

Mr. Frisbie's and my samples outline the extent of applicant's ore body as indicated on attached map, and represent the grade of ore exposed. This report cannot consider any ore developed by the mine to the surface and

can be used only in considering the probability of ore extending 100 feet on downward.

This is the basis of applicant's application for a loan of \$5,000.

The following is a tabulation of samples used in considering the grade of the ore body now exposed.

| Sample No. | width       | Oz. Ag      | % cu        | width x<br>oz. ag | width x<br>% cu |
|------------|-------------|-------------|-------------|-------------------|-----------------|
| 124        | 10"         | 1.00        | .95         | 10.0              | 9.50            |
| 125        | 10"         | .80         | 3.75        | 8.0               | 37.50           |
| 126        | 29"         | 1.80        | 3.10        | 43.2              | 74.40           |
| 3          | 42"         | 1.6         | 3.44        | 67.1              | 144.50          |
| 4          | 54"         | 1.6         | 2.32        | 86.5              | 125.00          |
| 5          | 25"         | 0.4         | 1.30        | 10.0              | 32.50           |
| 127        | 24"         | 1.4         | 5.65        | 33.6              | 135.60          |
| 9          | 44"         | 0.1         | 2.88        | 4.4               | 126.80          |
| 7          | 60"         | 0.8         | 2.02        | 48.0              | 121.20          |
|            | <u>293"</u> | <u>1.06</u> | <u>2.75</u> | <u>310.8</u>      | <u>607.00</u>   |

The weighted average of the samples gives 1.06 ounces silver per ton and 2.75 per cent copper at the Magma smelter in Superior, Arizona. This ore will bring as follows:

|  |               |
|--|---------------|
| 1.06 oz Ag x 95% x 70.5 cents =            | .70           |
| 2.75% cu = 55 lbs - 10 lbs. x 90% x .095 = | <u>3.85</u>   |
| Total smelter value . . .                  | .4.55         |
| Premium 55 lbs. x 97% x 5 cents =          | <u>2.65</u>   |
| Total . . . . .                            | <u>\$7.20</u> |

Applicant is applying for additional bonus over the A quota of 5 cents but at this time he has not heard from his request.

|                                       |                       |
|---------------------------------------|-----------------------|
| Hauling from mine to railroad station | \$ 1.00               |
| Freight from Hemet to smelter.....    | .50                   |
| Smelter treatment .....               | <u>3.50</u>           |
| Total .....                           | <u>\$ 5.00 \$5.00</u> |

Net from smelter, but before mining costs .... \$2.20  
 with an extra 5 cents premium, this would  
 amount to.....\$ 4.85

No large tonnage can be developed by sinking 100 feet as the width of the ore zone averages but 2.5 feet. Should the ore continue downward for 50 feet there would be developed a body of ore

$$\frac{50 \times 50 \times 2.5}{12} \text{ or } 500 \text{ tons.}$$

Should the ore continue the full 100 feet, about 1,000 tons would be developed.

The ore consists of copper carbonates and silicates replacing a soft shaly bed in the quartzite series that belong in the pre-Cambrian age. The quartzite beds dip uniformly about 30 degrees, but on the lower level the beds were overturned slightly which resulted in a thrust fault. Along this fault and near the places where the beds show buckling there has been a concentrating of copper solutions. The 174 foot raise to the surface revealed the beds dipping uniformly with practically no concentration of copper. Such a condition might continue on downward.

PROPOSED PROGRAM

The applicant proposes to do the following work:

- |  |               |
|--|---------------|
| 1. Sink a winze from lower tunnel 100 feet and place skids, ladders and timbers, ..... | \$2,000.00    |
| 2. Drift on mineralization 50 feet each way from bottom of winze. ....                 | 1,500.00      |
| 3. Move hoist from another property, install and place additional track . . . . .      | 700.00        |
| 4. General expense and contingencies . . . . .   | <u>800.00</u> |
| Total . . . . .  | \$ 5,000.00   |

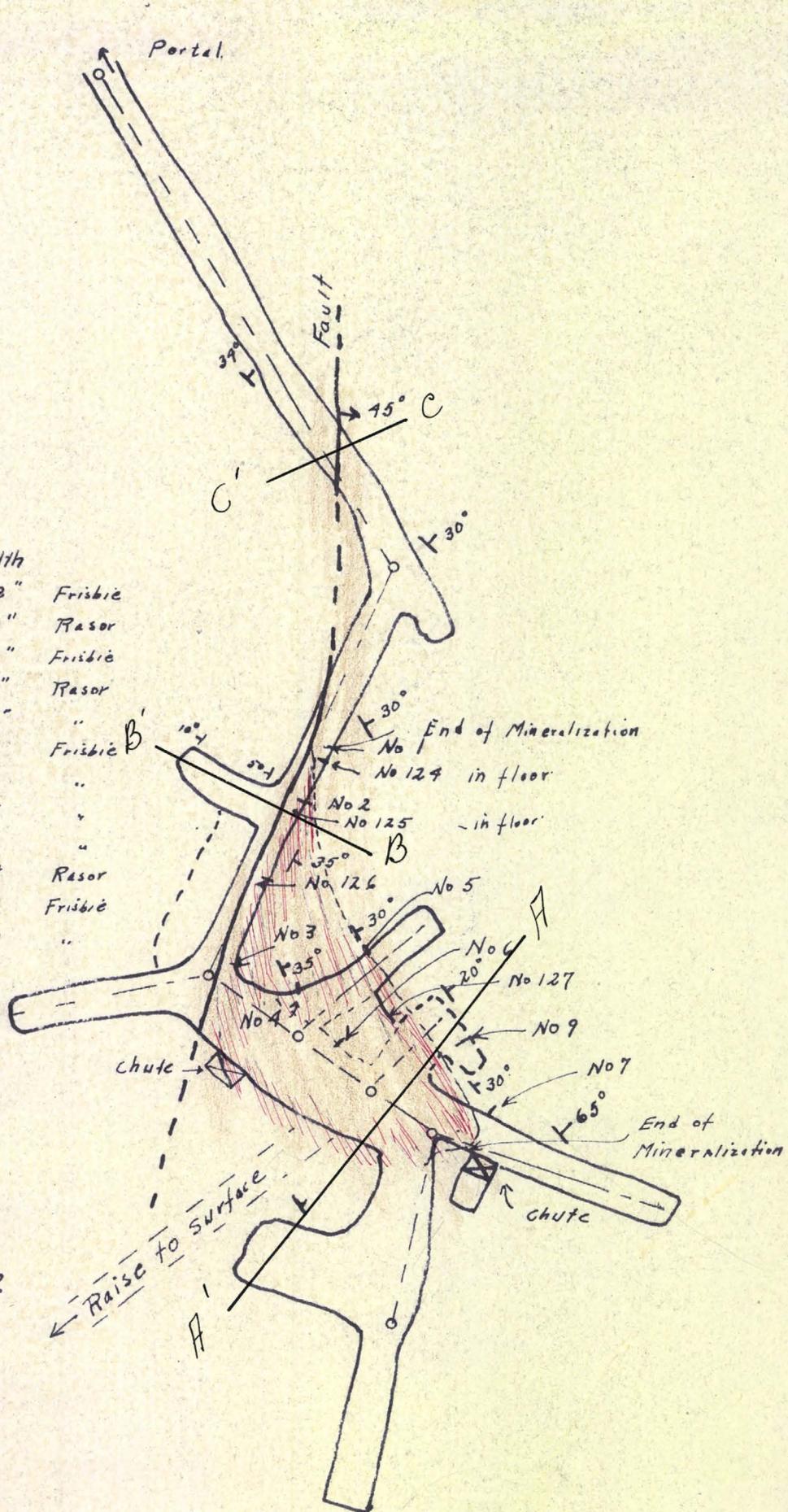
COMMENTS OF SUPERVISING ENGINEER

The applicant has a small property owned outright and equipped. The mineralization is not extensive, in fact length of ore is 50 feet and averages 2.5 feet in thickness. Assay on 9 samples averages 1.0 ounce of silver and 2.75% copper. With the present bonus of 5 cents the applicant cannot show a profit, but with an additional 5 cents the operator could show a profit provided the mineralization continues downward. Applicant does not expect to hire any additional labor, except one or two men. At the time of my examination the applicant, his brother and father were working on the property. The ore is siliceous and no doubt desirable at the smelter. Thus any recommendation depends on the extra premium the applicant may receive from the quota committee.

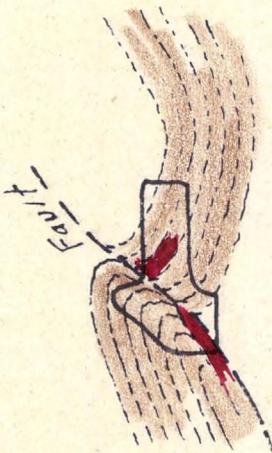
*CAE*  
CHARLES A. BASOR  
Supervising Engineer

Attachment:  
Plan of workings  
Section of workings  
Assay certificate

| No  | oz. Ag | % Cu        | Width |            |
|-----|--------|-------------|-------|------------|
| 1   | 0.2    | 0.13        | 42"   | Frisbie    |
| 124 | 1.0    | 0.95        | 10"   | Razor      |
| 2   | 1.4    | 0.64        | 32"   | Frisbie    |
| 125 | 0.8    | 3.75        | 10"   | Razor      |
| 126 | 1.8    | 3.10        | 21"   | "          |
| 3   | 1.6    | <b>3.44</b> | 42"   | Frisbie B' |
| 4   | 1.6    | 2.32        | 57"   | "          |
| 5   | 0.9    | 1.30        | 25"   | "          |
| 6   | 0.8    | 1.80        | 14"   | "          |
| 127 | 1.4    | 5.65        | 27"   | Razor      |
| 9   | 0.1    | 2.88        | 44"   | Frisbie    |
| 7   | 0.8    | 2.02        | 60"   | "          |



King Copper Mine  
 ND-5368  
 Scale 1"=20' Oct 6, 1943  
 Charles G. Rasor  
 Benton Survey by C. A. R.



Section B-B



Section C-C



Section A-A

King Copper Mine

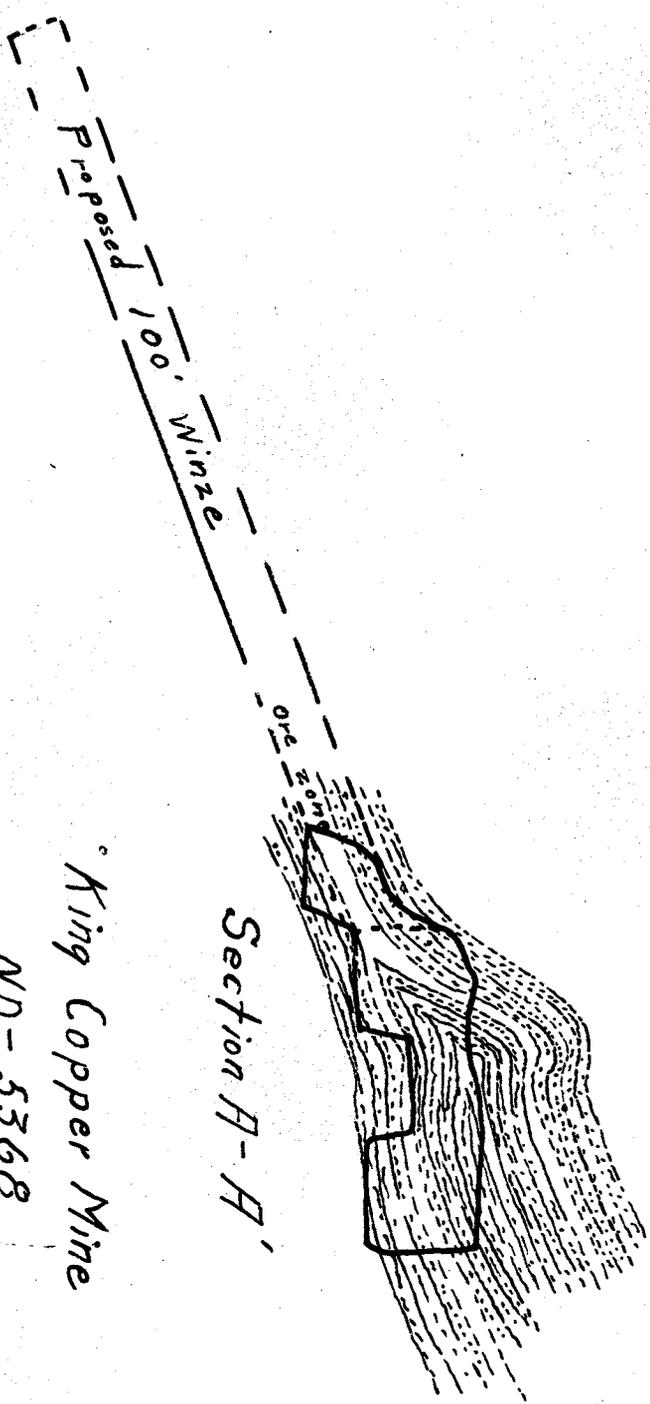
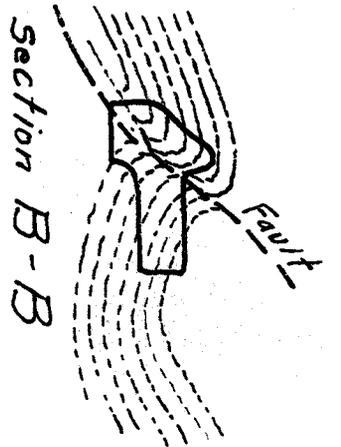
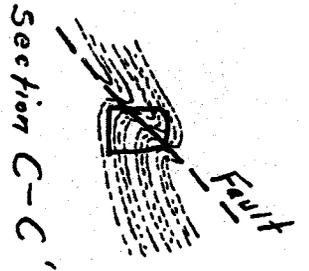
ND-5368

Sections

Scale 1" = 20' Oct 6, 1943

Charles A. Kasser





King Copper Mine

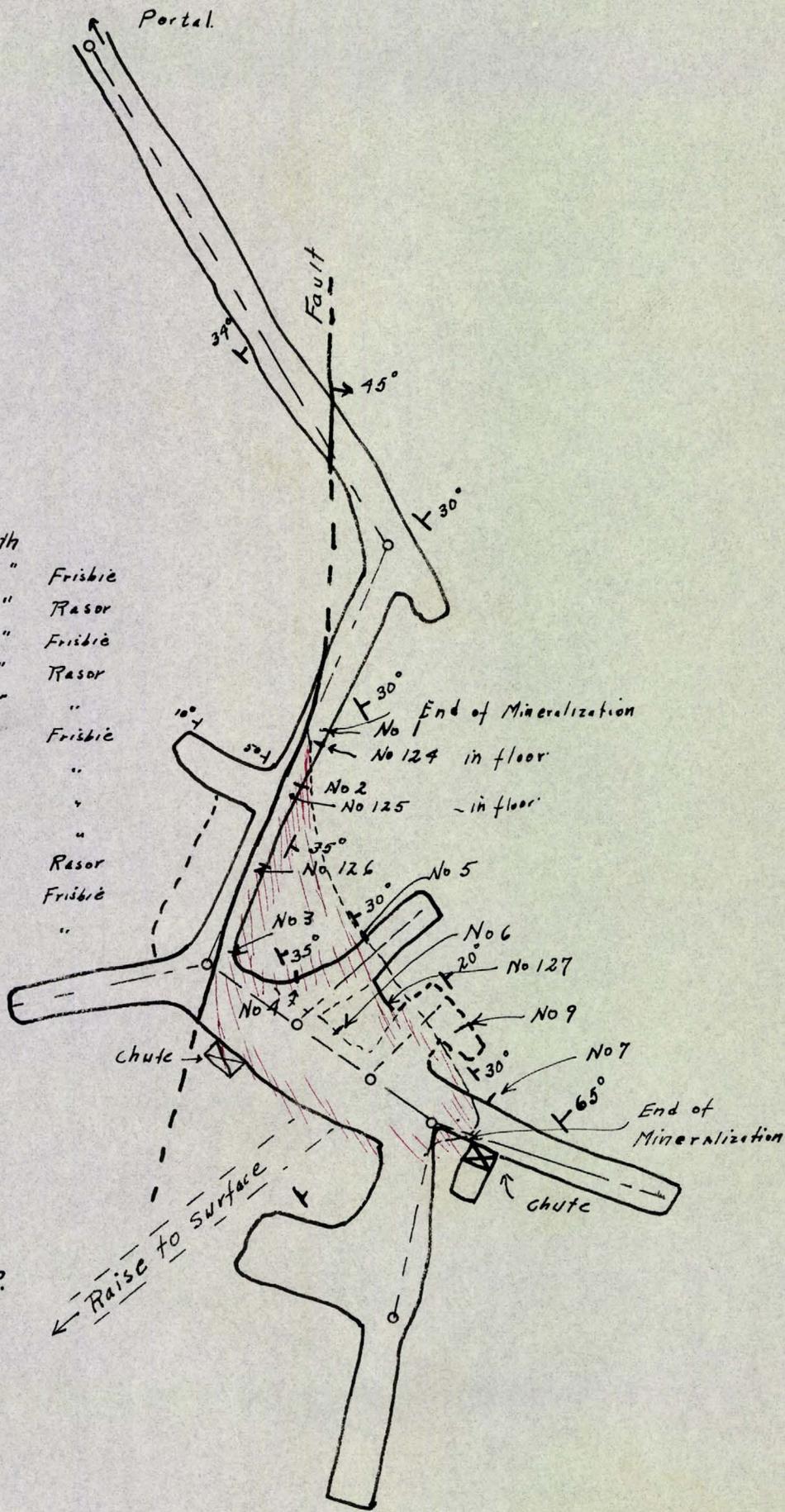
ND-5368

Sections

Scale 1" = 20' Oct 6, 1943

Charles A. Kason





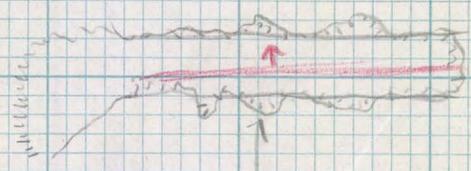
| No  | oz. Hg | % Cu | Width |         |
|-----|--------|------|-------|---------|
| 1   | 0.2    | 0.13 | 42"   | Frisbie |
| 124 | 1.0    | 0.95 | 10"   | Razor   |
| 2   | 1.4    | 0.64 | 32"   | Frisbie |
| 125 | 0.8    | 3.75 | 10"   | Razor   |
| 126 | 1.8    | 3.10 | 27"   | "       |
| 3   | 1.6    | 3.44 | 42"   | Frisbie |
| 4   | 1.6    | 2.32 | 57"   | "       |
| 5   | 0.4    | 1.30 | 25"   | "       |
| 6   | 0.8    | 1.80 | 14"   | "       |
| 127 | 1.4    | 5.65 | 27"   | Razor   |
| 9   | 0.1    | 2.88 | 44"   | Frisbie |
| 7   | 0.8    | 2.02 | 60"   | "       |

King Copper Mine  
 ND-5368  
 scale 1"=20' oct 6, 1993  
 Charles G. Razor  
 Branton Survey by C. H. R.

Dungan & assessment

second cut on carbonate fraction

1st cut N-S - vein not exposed to 50' long, 10-15' deep. 1st vein to east  
any extent - quantity vein not exposed before top of the ridge or beyond dump



Budget vein  
non granitic  
sub granite

Location in ground N70E  
Dyke NW 770

182  
in Fwy vein

Assume to clean out and search for Co

old weathered granite with budget vein's pay

King Mine

|                           |              |
|---------------------------|--------------|
| Docket No                 | B-ND-4632    |
| Date Auth for Exam Rec'd  | Dec 23, 1942 |
| Date of Examination, incl | Dec 30, 1942 |
| Date of Report            | Feb 5, 1942  |

1. Name and Address of Applicant

Name W. H. Wilson et al  
 Address Portal, Arizona

Correspondent

Name Ralph T. McKinnon  
 Address 4322 Talofa Ave  
 City & State H. Hollywood, Calif.

2. Character of Project

Development of lead-zinc deposit

3. Location of Mine

The mine is located in Township 17S Range 31E in the California Mining District in Cochise County, Arizona. The nearest rail point is, Rodeo, New Mexico, is 15 miles from the mine. The first three miles from Rodeo is paved highway and the balance is good graded road. The nearest supply centers are ~~Douglas~~ Douglas, Arizona, and Lordsburg, New Mexico each being approximately 60 miles from the mine via Rodeo and connected by paved highway with Rodeo.

The property is accessible at all seasons.

4. The Applicant is a partnership group composed of W. H. Wilson and several associates the principal of whom, <sup>Ralph H.</sup> McKinnon, is designated <sup>as correspondent</sup> in the application.

Since making application for a loan Mr. Wilson has accepted a position with the B. E. W. in Brazil. He had left the property several weeks prior to the present examination and will not be active in whatever development is undertaken. Mr. McKinnon will direct the affairs of the partnership. Mr. Wilson is described as a middle aged man with some 30 years mining experience in the U.S. and Mexico. Mr. McKinnon had had no experience in mining up to the time of his association <sup>several months ago</sup> with Mr. Wilson in the subject property and an adjoining property now operating under a "C" form (see below).

Mr. McKinnon is a middle-aged man who has recently been engaged in residential construction in California. He was for many years a commercial airline pilot but was forced to give up this work because of progressive loss of ~~the~~ hearing. He plans to handle the business end of the enterprise and to place the actual mining operations <sup>under</sup> the charge of Mr. E. F. Eppley. Mr. Eppley

was not present at the time of the examination ~~but~~ because of his confinement. ~~and~~ ~~was~~ ~~receiving~~ in a hospital <sup>with</sup> a broken leg. He is described as a man 68 years of age but active and <sup>qualified by experience</sup> ~~probably com~~ ~~petent~~ to handle a mining development.

Mrs. Eppley owns several near-by properties upon two which have been examined by an R.F.C. engineer from the Phoenix office, (Dockets Nos B-ND-4695 and B-ND-4487). The former application was refused and decision on the latter is pending.

The applicant-partnership is now operating the <sup>adjoining</sup> ~~Adjoining~~ group of claims under a Preliminary Development (Class "C") Loan, Docket No. C-ND-7817.

~~The examination was handicapped to some extent by the fact that none of the parties present during the examination had <sup>only</sup> slight knowledge of the ~~subject mine~~ <sup>and the subject mine</sup> mining, and ~~practically no~~ <sup>only very vague</sup> information regarding the past history of the property was available.~~

The examination was handicapped to a considerable degree by the fact that ~~some~~ of the parties present during the examination had only slight knowledge of mining and the subject <sup>property</sup> ~~mine~~, and only meagre and <sup>somewhat</sup> vague information was available regarding the history of past operations.

5 Loan Requested  
\$10,000

6 Description of Project

A. General Features

1. There are no mine workings etc. which are not confined within the ~~area~~ applicant's ownership.
2. The project would comply with state compensation and safety-first statutes.
3. There are no apparent legal discrepancies in the project.
4. There are no impeded right-of-way facilities.
5. There is no likelihood of surface or sub-surface trespass during the project.

B.

1. Mine is opened by shaft and tunnel
  - a. A compass and tape <sup>survey</sup> ~~map~~ was made of the <sup>main</sup> accessible workings. Plan and section is attached to this report.
  - b. Samples were picked and mixed and gathered on canvas. Location of samples and ~~assay~~ <sup>results</sup> are indicated on the attached sketch.
  - c. The principal workings in which ore was claimed and ~~in which~~ where the proposed development is planned were <sup>generally</sup> accessible and in good condition.

d. General Features of deposit, etc.

The property known as the King Group comprises 5 ~~patent~~ <sup>unpatented</sup> claims located by W. H. Wilson. Various <sup>percentage</sup> interests in the group of claims have been assigned by Mr. Wilson, as described in the application for loan.

A complete history of the property is not available. Apparently a considerable tonnage of ore has been shipped at various times in the past principally from the main tunnel development and the incline slope above it. There is no record of ~~such~~ <sup>the</sup> tonnage <sup>sums</sup>, nor of the ~~assays~~ metal content. Mr. Wilson estimates from the size of the opening ~~that approximately 3000 tons~~ and hearsay knowledge of the property that approximately 3000 tons of ore has been treated and shipped containing ~~an~~ averaging 25% combined lead and zinc. A mill was erected many years ago on the property but apparently very little material was put through. It is said that the ore was not amenable to treatment <sup>in the mill,</sup> probably because of the oxidized nature of ~~the~~ <sup>the material</sup> near the surface. There has been no notable production from properties in the immediate neighborhood.

No. 7

The Ainsworth property on the south and the Douglas property on the north have made some small past production ~~but~~ and a few tons have been shipped from other near-by ~~prospects~~ developments.

The mine is located ~~on the northeastern edge of the Chicahua mountains~~ in a region of low hills of only moderately rough topography on the northeastern edge of the Chicahua mountains.

The geology of the region has been worked out in detail by and reported upon by C. W. Botsford. A copy of his report together with maps is included in the supporting data which accompanies the application. The ore bodies thus far developed on the <sup>subject-</sup> property of the applicant ~~partnership~~ ~~are in~~ occur ~~as~~ replacements along bedding planes in a thick series of <sup>blue-gray cherty</sup> limestones. This limestone series is overlain by a ~~thick~~ broad band of quartzite which grades upward into a white sandstone. The quartzite body lies in the southern portion of the ~~subject~~ property and in places red shaly sandstone is noted between the limestone and the quartzite. The dump at the King shaft shows some of this material as well as quartzite and brown and blue-gray limestone. The principal ~~ore minerals~~ thus far developed are oxides and sulphides of lead and zinc and, in smaller amount, copper. ~~Following is a description of the~~

The <sup>more important</sup> ~~principal~~ workings ~~are~~ consist of an 800 foot "Treasury Tunnel", the Duplex shaft (inaccessible), and 2 shallow shafts and with <sup>a small</sup> connecting slope. These workings ~~are~~ in ~~a general~~ appear to lie in the same bed or <sup>slightly parallel</sup> group of beds in the limestone. Other less important workings consists of the <sup>300 ft vertical</sup> King shaft (inaccessible) which begins in the quartzite <sup>and penetrates the underlying limestone,</sup> and two tunnels 100 and 140 feet long driven <sup>southward</sup> in the quartzite in this same area, together with a number of ~~scattered~~ pits and cuts scattered over the surface of the property. The shaft and tunnels <sup>in quartzite</sup> have not produced any ore and ~~do not show anything of interest~~ <sup>nothing of interest can be seen on the dumps or in the tunnels.</sup> Following is a more detailed description of the important workings:

The Treasury tunnel has been driven into the hill for some 800 feet following the general strike of the limestone beds. The tunnel was begun with the objective of ~~cutting~~ exploring the downward extension of a surface exposure on the hillside some 50 feet above the portal. At 80 ft from the portal a raise was put up into the ore <sup>at 30 feet above the tunnel</sup> and a level was driven in the ore. It was found that the ore <sup>shoot</sup> ~~was~~ <sup>low</sup> ~~was~~ <sup>angled</sup> (10-12°) <sup>toward</sup> downward ~~and~~ the west. At 240 ft the ~~main~~ tunnel cut the ore shoot which <sup>here</sup> ~~at this~~ <sup>point</sup> ~~has~~ <sup>horizontal</sup> length

X

of approximately 75 feet. ~~The ore shoot~~  
~~has been rather completely mined out above~~  
~~the level and has been underhand stoped~~  
~~below the level, it is said reportedly to~~  
~~a depth of 40 feet.~~ The opening at the surface  
measures only <sup>about</sup> 20 feet on the strike and the  
~~stop~~ <sup>shoot</sup> in general is ~~20 to 25 feet high, and~~  
~~extends with in this case maintained~~  
a height on dip of 20 to 25 feet throughout  
<sup>a. rake</sup> its length of approximately 220 ft. to where  
it passed into the floor of the tunnel. The ore  
~~was~~ was underhand stoped below the tunnel floor and is  
now filled to the floor of the tunnel with <sup>waste</sup> ~~therefore~~  
and its outline  
and the nature of the ore in the bottom  
could not be observed. It is said that the  
underhand stoppe extends 40 feet below the  
tunnel level and that a good <sup>grade of sulfide</sup> ore continues  
in the bottom. The <sup>shoot</sup> has been rather  
completely mined out above the tunnel.  
Several small pillars and remnants of ore  
indicate that the material was mixed  
oxides and sulfides of lead and zinc with  
sulfides predominating in the deeper <sup>and</sup> part of  
the stoppe. As previously stated no  
records as to tonnage or grade of ore  
removed is available. It is said  
that the <sup>ore contained 25%</sup> combined metal content was lead  
~~25%~~ and zinc, <sup>and</sup> ~~samples~~ <sup>nos</sup> 3 and 4 <sup>representing</sup> ~~of~~  
remnant material in the stoppe seem to  
support this statement. ~~The size of the stoppe~~  
~~opening appears to be~~ Also, the size of

the slope opening appears to confirm Mr. Wilson's statement that upwards of 3000 tons <sup>has been</sup> produced from the area. The location of samples Nos. 3 and 4 is indicated on the ~~map~~ sketch accompanying this report. Sample No. 3 was ~~practically all composed of~~ <sup>all</sup> oxidized material. Sample No. 4 ~~was~~ <sup>contained</sup> mixed sulfide and oxide ore.

No. 11 The continuation of the tunnel ~~did not~~ disclosed occasional mineralized patches but nothing of importance in this same bed.

A short distance beyond the above described slope and at a distance of approximately 360 feet from the portal of the tunnel a crosscut was driven <sup>40 feet</sup> ~~10 feet~~ toward the north and a mineralized lime bed was encountered. A <sup>shallow</sup> ~~large~~ <sup>was sunk on this showing</sup> and a small slope was opened ~~on the showing~~ <sup>of the crosscut</sup> east and below the level. A good showing of ore is <sup>presently</sup> exposed in the top and east end of this working place. There is no ore in the west end. The bottom and lower part of the east end is partially filled with broken material and this part of the slope could not be examined. The ore <sup>limb</sup> appears to continue downward in the east end. The outline of this slope and the sampling in it ~~is~~ indicated on the ~~sketch~~ accompanying sketch. The ore material was all sulfide and varied from scattered impregnations to massive sulfide. The gangue was <sup>silicified</sup> ~~hard~~ <sup>hard</sup> with some quartz. The enclosing lime is quite hard and the

ore could be broken quite ~~deadly~~ clean  
~~in~~ <sup>in</sup> the bedding planes. The drift  
 west from the ~~part~~ <sup>crosscut</sup> shows no more ore.

Two shallow shafts on the hill above the  
 tunnel expose a limestone bed which is  
 closely parallel with those containing ore  
 in the tunnel. This main plane is approx-  
 imately 1000 feet east of the portal of the  
 tunnel and 250 ~~feet~~ <sup>ft</sup> high. The shafts  
 are about 30 feet apart and are connected  
 at a depth of 15 feet by a drift and a  
 small slope. The ~~more~~ <sup>eastern</sup> east shaft  
 which is 30 feet deep ~~passes out of the ore~~  
~~at 15 feet~~ appears to be flatter than the  
 one short and passes out <sup>start here</sup> of it on the  
 hanging wall. The west shaft which is  
 20 feet deep connects with the slope by a  
 short crosscut at that depth. This shaft  
 shows considerable copper staining <sup>near</sup> ~~at~~ the  
 surface. Sample No 6 ~~was cut~~  
 was cut near the collar of this shaft.  
 Sample No 5 was cut in the back of the  
 small slope near ~~the~~ east shaft ~~the~~  
~~ore~~ and contained massive, <sup>mixed</sup> sulfides of  
~~mixed~~ lead and zinc. The location of the  
 samples and the assay results ~~are~~ shown on the  
 accompanying sketch. There is no road to this  
<sup>working place</sup> ~~place~~. The duplex shaft is located  
 about 800 feet east of the portal of the  
 treasury tunnel. There was no ore present



It is proposed to send the one to Custom Mills, the nearest of which is the Shattuck-Dunn at Bishop. Other custom mills outlet are at Reno, New Mexico, and at Homan, New Mexico. It is reported that a mill is

to be built at the ~~Shattuck-Dunn~~ property in New Mexico and that this mill plans to accept custom

3. Expected capacity of operations

a. ~~It is~~ <sup>not</sup> possible to estimate ~~the~~ <sup>probable</sup> rate of production in ~~the~~ <sup>the</sup> present state of development <sup>of the property</sup>.

b, c, d. As noted before in this report there was no ~~person~~ representative of the applicant present ~~who was~~ at the time of the examination who was qualified to discuss the details of the operations. Estimates on expected performances are those which in this engineer's opinion ~~are~~ <sup>are</sup> reasonably ~~fit the case~~. Drift, crosscut, and raise advance is estimated at 3 feet per shift.

e. f. g. No milling <sup>on the property</sup> is contemplated at the present <sup>time</sup>.

h. Not applicable

i. Wages for miners would be about \$6.00 per 8 hour shift, ~~and for shaft men \$7.50 per shift~~, with an extra \$1.00 per shift for work in the mine.

D

1. There is no equipment on the property

2. There is no mill on the property

3. Not applicable

4. The mine will need to be fully equipped with:

Compressor and Pom Unit

Rock drills  
Air Hoist  
Mine cars

Trucks

Rail  
Pipe  
Blow out  
Blow Out

Tools etc.

- 5. No mill is recommended under the development <sup>project</sup>
- 6. There are no buildings ~~or housing facilities~~ on the property. A compressor shed, ~~and~~ work shop and store house will be needed.
- 7. No camp ~~would~~ <sup>will</sup> be needed. <sup>Living</sup> Accomodation ~~fac~~ are available at Portal 7 miles distant from the mine.
- 8. A Pick-up truck will be required and some road work is recommended.

E. Cost Estimates.

a. No <sup>close</sup> estimate of mining ~~oper~~ cost is possible in the present state of development of the property. The ground stands well and will not require timber for support. The anticipated ~~ore~~ <sup>ore</sup> body or bodies would be continuous and of ~~at~~ good stoping width. Mining costs therefore should be low probably not exceeding \$3.00 per ton ~~for~~ including development.

b.c.d. Estimated cost of drifting, crosscutting and raising ~~(the engineer's figure)~~ is \$15<sup>00</sup> per foot.

e. Estimated cost of <sup>sinking shallow mine</sup> ~~raising~~ is \$30<sup>00</sup> per foot.

f. No shaft sinking is contemplated.

g. No mill on the property is contemplated.

h. Trucking cost to Rodeo <sup>(17 miles)</sup> is estimated

at \$1.50 per ton

i. Freight to Shattuck Dam, <sup>custom mill</sup> at Bisbee mill  
is approximately 1.00 per ton.

j. Treatment charge at custom mill is \$3.50  
per ton.

k. Supervision is estimated at \$2.00 per month  
and this <sup>together with</sup> ~~general~~ ~~expense~~ is estimated at 50¢ per ton.

l. The mine will not require ~~any~~  
any timber except for chutes and  
occasional stulls.

m. <sup>Total</sup> cost <sup>per ton</sup> delivered to Custom Mill at  
Bisbee ~~for~~ would be about as follows.

|                         |         |
|-------------------------|---------|
| Mining and development  | 3.00    |
| Trucking                | 1.50    |
| Freight                 | 1.00    |
| Supervision and general | 1.50    |
|                         | <hr/>   |
|                         | \$ 6.00 |

3. Estimated approximate <sup>monthly</sup> premium  
on payroll for state compensation  
during the development project  
~~would be~~ <sup>is</sup> \$250 per month.

### F. Ore Reserves

1, 2, 3. There is no tonnage of ore presently  
blocked out.

4. If upon development the main ore  
shoot is found <sup>to</sup> ~~be~~ <sup>in the wise</sup> ~~to~~ ~~take~~ ~~under~~  
the tunnel as expected there  
would be available approximately  
the same tonnage as has already  
been mined or 3,000 tons with  
good ~~prospects~~ <sup>chances</sup> for  
more ore as the shoot is followed  
downward or its rake west of the

A  
14  
9  
10.0  
30.00

mining. It is not possible to estimate a tonnage in the north ore shoot since this ore ~~is exposed~~ is shot and no extension of it has been developed elsewhere in the mine. The work would start in one ~~good~~ <sup>good</sup> grade and the prospects seem good for developing a substantial amount of ore, ~~particularly~~

<sup>tunnel</sup> ~~hill~~ would have to be further developed in order to determine its ~~value~~ <sup>potential</sup> value. Unfortunately ~~nothing~~ <sup>nothing</sup> no information was available concerning the Duplex shaft but the appearance of the dump and statement that it has produced ore suggests that it holds possibilities

5. The ore which was removed from the main ore shoot presumably was of profitable grade and the ~~expected~~ <sup>expected</sup> ~~amount~~ <sup>amount</sup> ~~developed~~ <sup>developed</sup> in the ~~shoot~~ <sup>shoot</sup> ~~rights~~ <sup>rights</sup> to be about the same ~~as~~ <sup>as</sup> about the

same value. The average of the samples of ore presently exposed in the north ore shoot is as follows:

|       |       |       |
|-------|-------|-------|
| width | % Pb  | % Zn  |
| 28"   | 10.57 | 13.32 |

Since settlements from custom mills vary widely for mixed sulfide ore and are based upon test runs on

individual lots it is not possible to calculate an exact return upon the above one. The ore however is a clean sulphide and should treat readily and upon this basis the return <sup>per ton</sup> ought to work out about as follows:

|       |  |              |
|-------|--|--------------|
| Lead  | $10.57\% \times 2 \times 70 \times .0494 =$  | \$ 7.70      |
| Bonus | $10.57\% \times 2 \times .86 \times .0275 =$ | 5.24         |
|       |  | <u>12.94</u> |
|       | less marketing concentrate (approx)          | <u>2.00</u>  |
|       |  | 10.94        |

|       |   |              |
|-------|---|--------------|
| Zinc  | $13.32 \times 2 \times 70 \times .0796$ | \$ 14.84     |
| Bonus | $13.32 \times 2 \times 77 \times .0275$ | 5.64         |
|       |   | <u>20.48</u> |
|       | less marketing concentrate (approx)     | <u>6.50</u>  |
|       |   | 13.98        |

|                            |              |
|----------------------------|--------------|
| Total payment for metal    | <u>24.92</u> |
| less treatment and freight | <u>4.50</u>  |
| Net Value to shipper       | 20.42        |

Estimated profit per ton

|                             |                        |
|-----------------------------|------------------------|
| Net Value to shipping       | <del>21.42</del> 20.42 |
| less mining and development | 3.00                   |
| Trucking                    | 1.50                   |
| Freight                     | <u>1.00</u>            |
| General exp.                | <u>.50</u>             |
|                             | <u>5.00</u>            |
| Profit                      | \$ 15.42               |

## 7 Employment

- A. There is no crew now employed at the property.
- B. It is anticipated that the following crew will be employed during the development project.

C. ~~1 Boss~~ Boss  
 4 Miners  
 4 muckers  
 2 Hoist  
 2 Tram  
 1 blacksmith  


---

 14

- C. It is proposed to work 2 shifts per day, 6 days per week.

8. A. There are no local or regional objections to the project.
- B. The project promises to produce substantial appreciable amounts of lead and zinc.

9. A. Development project should be completed ~~in approximately~~ <sup>within</sup> 3 months time.
- B. Operations could be conducted the year round.
- C. If development results favorably project should repay loan within 18 months time.

# 10 Estimated Cost of Project

A Total Development. This planned to drift on the ore in the ~~west~~<sup>north</sup> slope and at the same time sink a winze in the floor of the tunnel west of the main shoot. The first of these pieces of work, since it begins in ore, is expected to pay its way in ~~ore~~

~~Installation~~ Installing trucks and pipes, etc \$250.00  
 Drift 50 ft. in north slope @ 15.00 750  
 Winze 100 ft in tunnel, west, @ 30.00 3000  
 Cross cut from winze 50 ft. @ 15.00 750 \$4000

## B. Purchase of Equipment etc. (mostly "used")

1 Portable Compressor (used) \$1200  
 2 Rock drills with mounts 800  
 2 Mine cars 100  
 Rail 200  
 Pipe 400  
 Blower and vent pipe 250  
 Blsm shop eqpt. 250  
 Rick-up Trucks 700 \$3900.00

## C Construction

Shop, Compressor House and store house 500.00

## D General Expense

1. Supervisor 3 mos @ 200.00 600.00  
 2. Insurance 100.00  
 3. Compensation - included in development cost  
 4. Interest during project \$10,100 3 mos @ 6% 200 900

|   |               |         |                |
|---|---------------|---------|----------------|
| E | Contingencies | ( 800 ) | 700            |
|   |               |         | <hr/> \$10,000 |

## 11 Nature and Sources of Revenue

- A.
1. Property should be self-sustaining <sup>successful</sup> upon completion of present project.
  2. Second loan will not be required.
  3. Property ought to be self-sustaining with loan repaid in the 18 months term.
  4. See below

## 1.2 Comments of Sponsoring Engineer

3/2

|    |     |              |
|----|-----|--------------|
| 25 | 1/2 |              |
| 26 | 1   |              |
| 27 | 1   |              |
| 28 | 1   | 5 3/4        |
| 29 | 1   | 3 1/4        |
| 30 | 1   | <u>9 1/4</u> |
| 31 | 1/4 |              |

The property presents several possibilities for developing a substantial out production of lead and zinc at comparatively small cost, and within a short time. These are listed as follows, in the order of their importance.

(1) Drift <sup>east</sup> on the <sup>main level with</sup> ore showing in the top and east end of the north <sup>on the main level</sup> slope. This work would begin in ore and if it of good <sup>shipping</sup> ~~and~~ milling grade.

(2) Sinking a mine to intersect the main ore shoot on its probable western side. Considering the length and continuity of the <sup>ore</sup> ~~slope~~ which <sup>has already been</sup> ~~was~~ stopped from within shoot the prospects for continuance of the shoot in depth appear <sup>to be</sup> ~~very~~ good.

(3) ~~Development of~~ The ore showing in the shallow ~~working~~ shafts workings on the hill above the

main tunnel deserves further development.  
~~The~~ <sup>fact that there</sup> is no road to this place and the ore is complex probably accounts for the limited exploration ~~here~~ which ~~has been done~~ <sup>has been done</sup> ~~in the past.~~ <sup>in the past.</sup>

4. The appearance of the dump at the Duplex shaft together with ~~the stop~~ <sup>the stop</sup> ~~holes~~ <sup>holes</sup>, the stop of some production having been made suggests that a shoot of ore may exist here. Unfortunately the workings were not accessible and ~~no~~ ~~reliable~~ ~~history~~ of no information was available regarding its history. It can be considered <sup>therefore</sup> only as an interesting possibility.

~~P~~

The quality of the management might be questioned since the principal <sup>member</sup> of the applicant-partnership has left the county and ~~the~~ the partner remaining who <sup>now</sup> plans to direct the work is not an experienced mining man. ~~The development is simple and plain~~ ~~and~~ ~~development~~

Mr TP He is however intelligent and sincere. <sup>Mr TP</sup> and the development is simple and plainly indicated and there is no doubt that.

He is intelligent and sincere and ~~there appears to be no doubt that he can~~ ~~be counted upon~~ for fullest co-operation with this office could be expected.

In view of the above - development loan appears justified.

T. P. Han