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REPUBLIC & MOORE MINE & MILL

COCHISE COUNTY
COCHISE (JOHNSON) DIST.

Repairs to the Republic mill of the Coronado Copper and Zinc Company, near Dragoon, Arizona, have been completed and the plant resumed a regular milling schedule the first week of March. The repairs included rebuilding eight flotation units, the installation of two new pumps and replacement of two reagent feeders. Production from the mine is running at the rate of 225 tons daily, or about 6,500 tons per month, the ore reported to average about 2.6 percent copper and 6.9 percent zinc, all sulphides. The ore is mined from one large stope, extending from the 400-foot level to the 500-foot level. It is dropped down to the 600-foot level, from which point it is hoisted up the Moore shaft, then trucked to the Republic mill for concentration. Lessees and operators of both the mine and mill are McFARLAND AND HULLINGER of Tucson, Arizona. In charge of local operations are W. D. Nelson, superintendent; G. H. Stoffers, mine foreman; K. L. Erickson, mill superintendent; Jesus Alvarez, mill foreman; Ralph Peterson, chemist, and Forrest Baker, purchasing agent.

Taken from MINING WORLD, June, 1960, p 61

CYPRUS JOHNSON COPPER COMPANY

COCHISE COUNTY

RRB WR 5/10/85: Visited Cyprus Johnson Copper Co. in Cochise Co. Mr. Sierakowski, General Manager reported that it is very unlikely that they will ever mine again unless the price of copper goes over \$1.00 per pound for an extended period. They are still leaching the heaps, however, and intend to do so as long as it is profitable. He could give no estimate of how long that would be as he was surprised that they have lasted as long as they have.

CJH WR 1/31/86: Eddie Martin, Asst. State Mine Inspector (c) reported that the Scott Building Co., Drawer 1420, Benson, Az. 85602; phone 586-9710 is in the process of signing a contract with Cyprus Johnson Copper Co. to mine the oxide in the Cyprus Johnson pit to provide leach material for the existing SW-EW pads. Information was given by Monty Scott, Specialties Div., Scott Building Co.

MG WR 11/7/86: Have heard that Cyprus Johnson Copper Co. plans to shut down the copper leaching operation at Johnson Camp (Cochise Co) file in December, 1986.

KAP WR 10/16/87: In the company of Mike Greeley a visit was made to the Cyprus Johnson Camp Copper Leaching Operation (Johnson Mine - file) Cochise County. The operation is idle and nearly all of the mobile equipment has been moved off the property. The operation is fenced and apparently guarded, although no one could be found at the time of our visit. Electric meters were in place at the property as well as at each of the water wells supplying the operation.

REPUBLIC & MOORE MINES

COCHISE COUNTY

NJN WR 9/14/84: Cyrus Johnson Mine (f) reports that their mining operations are shut down and they are currently only leaching dumps.

CYPRUS JOHNSON COPPER COMPANY

William Rundle that Cyprus-Johnson Copper Company would operate the Johnson Pit formerly called the Burro Pit. GWI WR 7/29/74

At Johnson Camp, Cyprus started on their Johnson project which has been amply reported in Pay Dirt. GWI AR 73-74

Johnson Camp: Continental Copper Co. continues evaluation their mineralized area just east of the Moore shaft. GWI QR 4/1/71

Mine visit - Johnson Camp - very little apparent activity. GWI WR 4/19/71

Mine visit - Republic Mine. Mr. Ira Mosely closing mine entrances. GWI WR 6/7/71

Johnson Camp: Continental Copper Company continues evaluating their option located east of the Moore shaft. GWI QR 6/30/71

Johnson Camp: Superior Minerals has taken over the CF&I project at Dragoon, the Continental Copper project north and east of Johnson Camp, and has a joint project with Cyprus on their Johnson Camp holdings. They also have added claims on their own in the area. GWI QR 9/71

Johnson Camp: Superior Minerals continuing their exploration campaign. GWI QR Oct-Dec '71

Johnson Camp: Superior Minerals have continued drilling, there is a possibility that four separate ore areas in the camp will be mined in the future. 1-A mixed ore area under the I-10 highway, 2-the Burro owned by Cyprus, 3-An area NE of the Moore shaft. 4-An area under the SP tracks SW of Dragoon. GWI QR Jan.-March '72

Johnson Camp: Superior Minerals are continuing same as previous report. Mr. Clell Chambers of Kansas Settlement is keeping up the work on his Texas-Arizona mine. Superior Minerals has claims staked all around, but think that they will give them up, as drilling indicates the ore body lies somewhat to the west. GWI 4 1/4 '72

MG WR 10/2/81: Discussed tungsten resources and production in the U.S. with Ted Eyde. He reports that the old mill tailings at Johnson Camp (Cochise County) assayed about 0.915% WO_3 . These tails are unfortunately buried under the current (Cyprus Johnson) waste dump. It is interesting to note that the Climax Molybdenum Mining Co. produced one-third of U.S. tungsten production from its Climax mine in Colorado in 1976 -- at an average byproduct ore grade of 0.006% WO_3 .

2/19/82

MG WR: Provided grade and tonnage figures for the Johnson Mine, Cochise County, owned by Cyprus Mines Corp., to Mr. David Emmons of Exxon Mineral Co., Tucson.

William Stoffers has continued shipping from the Moore Shaft at Johnson Camp to the Klondyke mill, returning the copper and zinc concentrates to Dragoon for shipment to the smelters. GWI QR 4-1-68

Active Mine List April 1968 - 4 men

Mine visit to Moore Shaft, Johnson Camp. Three men working, 5 days at mine, 3 days at mill. GWI WR 5-18-68

On the 1st of June Mr. Stoffers had about 700 tons of copper zinc ore in the mill bins. Five men were working at the mine during the week. GWI QR 6-1968

Mine visit to Moore Shaft, Johnson Camp. Bill Stoffers - closed until some arrangement can be made to mill the ore. GWI WR 9-14-68

Active Mine List Oct. 1968 - 2 men

Mine visit. Continental option - no one around. Visited Moore Shaft also. GWI WR 11-16-68

Mr. Wm. Stoffers is still looking for an outlet for ore from his Moore Shaft lease. Until arrangements can be made the mine is closed.

Continental Materials is still holding their option on the 87 claims at Johnson Camp. This is the Tilman, Burham, Moseley and Strong Group. The claims are northeast of the Moore and Pittsburg shafts. According to John Roscoe, Continental is still evaluating the results of their drillings and mapping. GWI QR 12-1968

John Roscoe still drilling at Johnson Camp. GWI WR 2-7-70

Continental Exploration is still drilling and evaluating their option north and east of the Moore shaft. GWI QR 2-27-70

Continental Copper (formerly Continental Exploration) is still drilling at Johnson Camp. GWI QR 6-30-70

Continental Copper continues evaluation of results at their Johnson Camp project. GWI QR 10-1-7

Continental Copper is continuing their exploration activities at the Control mine. GWI QR 12-31-70

To Moores lime plant - no changes in operation. FTJ WR 1-29-71

Mine visit - Republic mine - no activity. GWI WR 2-8-71

REPUBLIC & MOORE MINES

COCHISE COUNTY

Visited the Moore Shaft, Johnson Camp - talked with R. Barclay. GWI WR 11-18-67

Active Mine List Nov. 1967 - 5 men

REPUBLIC & MOORE MINES

COCHISE COUNTY

Visited Moore shaft, Cyprus Corp. Leased to Bill Stoffers. GWI WR 9-20-65

Visited Moore shaft - 3 men working. GWI WR 1-17-66

Visited Moore shaft, Johnson Camp. Bill Stoffers, leaser. Talked with Archie Dunham, hoistman. Reported that they were shipping 6 cars a month to the Deming mill of American Zinc. GWI WR 2-4-66

Visited the Moore shaft in the Johnson Camp. Now are employing 4 men and producing about 3 cars a week. GWI WR 4-8-66

Mine visit to Moore shaft at Johnson Camp. Mr. Stoffers underground - talked with hoistman. Still have 4 men working. 3 cars per week. GWI WR 6-11-66

Mine visit to the Cyprus Mines operation. Observed 2 Joy riggs drilling in the camp housing area. GWI WR 12-10-66

Visited the Moore shaft. William Stoffers operations - talked with hoistman. Closing down Feb. 17 until milling facilities can be located. GWI WR 2-10-67

Visited the Moore shaft - William Stoffers resuming operations soon. GWI WR 3-18-67

William Stoffers, Box 25, Dragoon, Arizona, is reported to have leased the Athletic flotation mill at Klondyke, Arizona. He plans to recondition the 125- ton mill to handle the zinc-copper ore he produces from the Moore shaft of the Coronado Copper and Zinc Co.'s property near Willcox. The ore will be trucked from the mine to the mill, a distance of 82 miles. The mill and mining properties of the old Athletic Mining and Smelting Co. in the Klondyke area, last active in 1957, were purchased in 1963 by American Zinc Company. Stoffers has been producing about three cars a week, employment for four men. Pay Dirt 4-12-67

Mine visit to Moore shaft - Stoffers lease - 3 men mining, planning to ship soon. GWI WR 5-7-67

CYPRUS MINES LEACHING PROJECT

COCHISE COUNTY

Johnson Camp: Superior Minerals has taken over the CF&I project at Dragoon, The Continental Copper project north and east of Johnson Camp, and has a joint project with Cyprus on their Johnson Camp holdings. They also have added claims on their own in the area. GWI QR 9/71

FVR15.3

Arizona Department of Mines and Mineral Resources

FIELD VISIT REPORT

1. Information from: Ken Phillips and Nyal Niemuth
Address:
2. Mine: Johnson Camp (Cyprus) 3. ADMMR Mine File Johnson
4. County: Cochise (Az MILS 567) 5. District
6. Township Range Sec(s)
7. Location:
8. No. of Claims - Patented Unpatented
9. Owner (if different from above)
10. Address:
11. Operating Company:
12. Pertinent People and/or Firm: Caretaker
13. Commodities:
14. Operational Status:
15. Summary of information received, comments, etc.:

Caretaker living on property. Facility shut down, nearly all rolling stock removed. White sulfate (?) "blume" on leached heaps has become prominent visible feature.

Although rumors of sale to Arimetco are circulating, caretaker reported he continues to be paid by Cyprus and could not verify change of ownership.

Date: May 11, 1989

Signature



ADMMR

August 8, 1942

Mr. W. A. Hooton
Dragoon, Arizona

My Dear Mr. Hooton:

Many thanks for your letter of August 7, and if you are successful in getting an assay and showing the results of sampling on the nine hundred foot level, I believe that information together with the reports and your shipments should be sufficient to make a proper setup for the class "B" loan. Under the conditions I believe your judgement is good in holding back on the application for a "C" loan until we find out whether or not the assay map is available. When and if it is map is on hand, I do believe we can take on the information on hand and make a new complete setup with all the information in the proper chronological order, and this should allow us to get quick action in Washington.

Yesterday a Mr. W. R. Shanklin of San Antonio, Texas was in at the office. I have talked with Mr. Shanklin before on mining matters and he has some large substantial experience with him in trying to locate a real mine. At the time I talked with him he was reviewing some of the public data and outlined to me your difficulties in the past six months and your desire and wish to stay with the Republic and make a real mine of it. Mr. Shanklin may be possible to be in Tucson within the next few days and if you are in Tucson, he would like to talk with you there, and if not, he will drive to the mine at Dragoon. I have given him the telephone number to call in Tucson and if you will leave word as to your whereabouts from Tuesday or Wednesday on, I am sure you will be pleased to discuss this situation with Mr. Shanklin. He agrees with me and I believe also with you in the fact that the policy of the government in calling on the seasoned large mine operators to take over creation and operation of a project such as you are considering is a bad one. Such a policy simply makes the large companies larger and prevents the establishment of a new independent operation. I know you will be pleased to meet Mr. Shanklin and I would be glad to hear your reactions.

It is possible that I will be in Tucson before or around noon on Monday and I will telephone there and see if you are in town.

With best wishes and kindest regards, I am,

Yours truly,

J. S. Cougal

CC: W. A. Hooton, Pioneer Hotel, Tucson, Arizona

0140

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA

August 7th, 1942.

Mr. J. S. Coupal,
Phoenix,
Arizona.

Dear Mr. Coupal;-

Relative to the assay plan of the Republic, I am endeavoring to secure one, as I have known for a long time that at least two were owned by people who have no claim to them but who attempted to sell them to me, one of them for \$1,000.00. Obviously I would not pay anything at all for them and if I could be sure that the parties concerned had them in their possession, I would obtain a writ of replevin and have the sheriff take them. Then, I believe I could borrow them long enough from the sheriff to have them photostatic copied and after that, I would let the suit go. One of the persons who has the plan for sale I cannot find in the City and I am trying to locate the other. In the meantime I have wired a friend of mine in Los Angeles to get in touch with the engineer who made these plans and who surveyed the mine. I believe he must have copies in his files and if he has, I feel sure my friend can borrow them long enough to have the photostatic copies made. If this can be accomplished, and I shall hear by wire from my friend there today, there will be no necessity for making application for the Class A loan. While I know the stipulations for a defense loan include assay plans, still, in such an emergency and owing to the fact that the Government needs copper so badly, I feel that it is only living up to the letter of the law which makes the W. P. B. require such plans. Surely they have sufficient data to warrant them in making the loan and this, coupled with the fact that I am shipping ore every day and have been doing so for several months, should satisfy them, however, I am making an attempt to get the old assay plan for them.

I would call to your attention that this plan, if I succeed in obtaining it, will only have the copper values and not the zinc, and here again we may run into trouble. If we do, I can only say that I am averse to borrowing money, after all the money I have spent, to sample the workings for zinc. If I were to borrow money for this purpose I would certainly have to repay it and I believe my patriotism has gone far enough in this case and if the Government wants to sample it at their own expense, they are at liberty to do so; I shall not. The ratio of copper to zinc is fairly constant thruout the mine and as the old operators could not ship the latter they had to leave areas which were too high in zinc, therefore there are many sections of the workings which contain high zinc and low copper values, which were left by the former operators. I only mention this as a factor which might influence the W. P. B. in their consideration of the loan for the mill.

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W.A.
Mr. J. S. Coupal, Page 2.

If the reports of Tenney and Botsford were forgeries, or if they are not correct copies, then there would be some doubt as to the value of the property but Tenney is available to confirm his report and he knew of Botsford's also, so I can see no logical reason for the hesitancy of the Government to take their appraisal of the mine. They are both reputable engineers with many years of experience in the copper deposits of Arizona and their integrity is above question. In addition, I have the daily reports and many assays of J. M. Libby who was the former manager, when the mine was in full operation and producing 300 or more tons per day. These reports on the lower levels as well as on the 700 are informative and show, to my satisfaction, at least, the condition of the mine below the water. They are available and I have carefully read and confirmed those which were made on the 700 and above. Daily mine reports and assays, such as these, are better evidence, in my opinion, than any assay plan as they not only contain daily assays as the work progresses but give information as to the structure and geological conditions every day as the work progresses. It is from these reports that I have based my conclusions that the 900 level is in ore and if it is, there is an additional tonnage of approximately 300,000 tons. Further confirmation of this is the fact that my present mine foreman has been on the 900 and has actually seen the ore; Ed Holderness, of Tucson, who is well known and a prominent figure in mining circles, has also told me he has seen the ore on the 900 as well as that below, on the 1150, 1250 and 1350 levels. Men now working for me, formerly worked on these levels and all are unanimous in saying that the ore goes down to the 1350 level and is of better grade there than on the 700. I well know the hazard of taking anyone's word as to conditions below the water but in this case I am convinced the ore is there, however, I can see enough measurable ore above the water to permit me to ship for a long time to come and while I am anxious to increase the production for the sake of the war effort, still, I am not anxious to spend my own money to convince the Government that it is there. If they wish to prove it at their own expense, I am perfectly willing that they may do so but I shall not prove it for them.

As soon as I hear from my friend in Los Angeles as to whether or not he can borrow the maps of this engineer, I shall communicate with you and if I am successful in getting them, I shall mail the photostats to you immediately and you may do with them as you think best.

Thanking you and Mr. Willis for your kindness and regretting the turn events have taken, I am,

Yours very truly,

WILLIAM A. HOOTON.

WASHINGTON, D.C.
Aug. 7, 1942

SUBJECT: Mine Loan Application,
Republic Mine
W. A. Hooton

As per your wire, I returned the Republic Map.

I am still holding the RFC applications for the A loan.

As you know, the A or General Loan is a pet of the RFC, which has had good experience with them because of the complete security of the element of satisfactory ore reserves.

I should judge from your memo that there is not enough ore exposed above the water to show sufficient security for the \$100,000 asked for if the profits on operating are applied to amortizing over a reasonable time, the investment.

When you see Hooton, ask him to show you the WPB questionnaires... especially the one which he received second, and note the inquiries regarding the milling situation. They are quite similar, but not precisely, to the one on zinc I sent you for the custom mill setup. I am going to get a copy for you, as I believe this questionnaire of the copper branch is better laid out than that of the zinc section.

It is too bad that Hooton is not prepared to supply proper information as with it in hand, I believe I could get pretty good action on this loan.

But failing this, I guess the Class C is the best foundation. I am interested in how this will work out, as although it is using the C loan for a very sensible purpose as a foundation for an A loan, the usual basis is for a B loan.

Bill Broadgate

August 7, 1942

Mr. W. A. Hooton
Dracon, Arizona

My dear Mr. Hooton:

I have just received your letter of August 5 with the copy of your letter of July 30 to Mr. Frank A. Ayer. It would as though they give sufficient information to justify action on your proposal to buy the Penn Metals Can any mold erected at Dracon and provide working capital for your operations. However, from Mr. Broadgate's remarks a more developed setup is required which will include an assay map of the ore above the nine hundred (900) foot level and more complete data on the mill operation.

I believe you can furnish all the information needed to quickly get a \$5,000.00 preliminary development loan and it is still be sufficient to put the entire project in definite shape so that you can get prompt action from Washington on the entire program that we have discussed.

Under the conditions I do not feel as though you should be out of pocket the cost for doing this work and the C' loan is justified at this time.

There is certain information I would like on hand so that in reviewing your application I can make comments from data which I have looked over and probably assist in quickly getting action on the preliminary development loan. In your letter of July 3 to Frank A. Ayer on page two line five you state "Nevertheless, I have the daily reports for over three years of former operations both above and below the present water level." If you can send me this information, I can comment on it and then return it directly to you. In addition I would like to have a list also on the report which you filed with your application answering questions on the mimeographed sheet entitled "Technical Data Required By Metal Branches" which you filled out during the visit with Bob S. Allen.

Under heading "D", sub-heading (2), line eight you state "As well as daily mine reports and assays when this was being driven, all tend to show this level is all in ore." (This was regarding the nine hundred (900) foot level).

W. A. Hooton
Page 2

I wish I could have that information also. It would aid in making rather strong comments on the advisability of the loan. We have a complete list of your shipments for April and May. Could you supply the same information for shipments made during June and July? Showing the date of shipment, tons shipped, copper content, and zinc content? Our records here are complete to and including Lot 43, all of which are to the Toru Mining Company.

I do believe your application for a preliminary mine loan can be very simple. I suggest that you estimate the cost of unwatering and also a rough estimate on the cost of sample assaying and on raising the mine hundred (300) foot level. If there is any balance it can be used in setting up the project for the installation of the mill.

With best wishes and kindest regards,

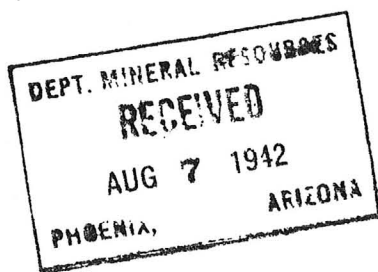
J. J. Crupar,
Director

JSC:hnl

Enclosure

CC: Mr. W. A. Hooton
Elmer Hotel
Tucson, Arizona

P. S. I have taken the liberty of having three photostatic copies made of the Horaden Map and am sending you the original and one copy and retaining the others to accompany the C' loan application. I also enclose the bill for these proofs which is \$3.03 which you can pay direct if you so desire and if not, I will take care of it personally.



REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA

Dragoon, Arizona.
August 5th, 1942.

Mr. J. S. Coupal,
Phoenix,
Arizona.

Dear Mr. Coupal;-

Herewith enclosed is the data requested by Mr. Ayer in his last letter. I have omitted sending the settlement sheets as I had to send Mr. Ayer two originals and I have only those representing other cars of concentrates which I want to keep for my records. I understand the exhibits sent to Washington are not always returned, altho my assay map of the ore blocks was, as well as the two mine reports by Tenney and Botsford.

Naturally I was quite disappointed at the turn of events after speaking with you this morning over the phone. I had gone ahead with Shattuck Denn and with plans for the contemplated mill, presuming sufficient data was submitted to answer any questions, however, the law being what it is and the regulations what they are, I presume there is nothing to be done but to comply if we wish to secure Government aid.

In my humble opinion, the assay plan of the blocks of ore as outlined in the map of the Peru Company, should be sufficient for the purpose for which it was intended. I do not know that there was an assay plan made but I feel certain that the present map was made for the purpose of obtaining a loan, which I understood was to accompany the report of the Peru Company in their application for a loan. It is more inconceivable to me that, when this map shows only ore available immediately above the 700 level and when Tenney's report gives a **conservative** estimate of ore from the 700 to the surface, there should be any question about the tonnage above the 700. I have put back into the mine all of the profits I have made from the shipments to date and I have the mine opened up so that with but some stope preparation, an appreciable tonnage can be broken and hoisted therefore I do not feel it fair to me nor incumbent upon me to keep on putting all the profits back for the purpose of putting more ore in sight when I have sufficient in sight now to last a long time. I am patriotic but I feel I should have a few dollars for myself after nearly a year's work and a year's chance taking. It must be remembered that all the big companies turned the mine down and only since I came here and opened it up have they evinced a desire to take it over. I took the initial gamble to open it up and by all the rules of the game I should derive some benefit from it. These are my reasons for not wishing to spend the money to unwater it.

Mr. J. S. Coupal, Page 2.

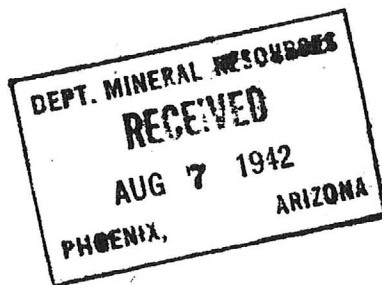
If you send me the forms for a Class A. Loan application, I shall fill them out to the best of my ability but you will recall I mentioned to you that I had already made such an application and withdrew it when I learned it would take longer than I was led to believe. I presume if this Class A application is considered at all the powers that be in Washington will also want an assay plan or something else in the line of data that I shall not be able to furnish. In this connection I have heard there is an assay plan in the possession of some people in Tucson. Obviously they have no right to it inasmuch as it properly belongs to the owners of the mine and thru them, to me however, I have heard this plan is for sale for \$1,000.00 or \$1,500.00 but I have never considered for one moment buying it nor do I consider it now. The facts are that there is sufficient ore above the 700 to keep me busy a long time at the rate Shattuck Denn can take it and I am making a good profit out of the small tonnage and altho I am patriotic enough to want to build a mill or to turn the property over to some major company so its maximum production can be obtained, still, I can go along at the present rate and make my profit as long as the Government is unwilling to furnish funds for its further expansion.

Thanking you for your interest and with kind regards to both Mr. Willis and to you, I am,

Very truly yours,


WILLIAM A. HOOTON.

WAH:SMC



Dragoon, Arizona.
July 30th, 1942.

Mr. Frank A. Ayer,
War Production Board,
Washington, D. C.

Dear Mr. Ayer,

The following data is that which you requested in your letter of the 24th inst. If any of the information contained is not clear or if you desire any further data I shall be pleased to furnish it.

1. Estimated annual production;-

It is estimated that from 1,800 to 2,000 tons of copper will be produced based on an average of 150 tons per day milling capacity and 4.0% copper heads. It is also estimated that 2,250 to 2,500 tons of zinc will be produced with 5.5% heads.

2. (a) Very little mine equipment would have to be purchased; the main item would be power for the 1,000 foot compressor, which is presently powered by a steam boiler. Operation of this boiler is too expensive at the price of fuel oil delivered. A diesel engine of 150 to 200 HP belted to this compressor, if it were not decided to build a power line, would cost approximately \$3,000.00 to \$4,000.00. Such an engine is available nearby. Shaft repairs, headframe strengthening, water and air lines to prepare new stopes, pumping the water from the 800 to the 900 levels to allow of stope preparation on the latter level, short raises on the 900 to allow of starting stopes, five additional machines, five tons of additional drill steel, and miscellaneous equipment and items it is estimated would not exceed \$12,500.00. Including \$12,500 for working capital, the total amount would not exceed \$25,000.00.

(b) A milling plant with a capacity of at least 130 tons per day is available for purchase from the Penn Metals Co, 45 miles from Yuma, Arizona. This plant, with the addition of additional flotation cells, classifier, thickeners, etc would cost approximately \$60,000.00. Tearing down, moving and construction on the property would cost approximately \$35,000.00.

(c) Power can be purchased from a power plant south of Cochise, and the addition of an 8 mile power line would bring it to the property. This cost has been estimated at \$1,200.00 per mile. Transformers would cost approximately \$3,000.00. The above mentioned mill, which can be purchased for \$40,000.00 has its own power plant, motors etc and with a diesel engine to run the compressor, also mentioned above, it would not be absolutely necessary to have power.

Doc

(d) Water for milling purposes would be pumped from the Republic and Copper Chief shafts. The former makes approximately 75 gals per minute and reports of the latter would indicate that it makes more than this amount. Reports state that a No. 7 Cameron could not hold the Copper Chief shaft even. This would be sufficient for a 150 ton operation and would not be subject to seasonal variation. In addition there is a deep drill hole which furnishes ample domestic water for a camp of 500 persons. Pumping the mine water back would materially increase the tonnage which could be treated.

(e) No roads would have to be built.

(f) Sufficient accommodations are available with some minor repairs for 40 to 50 men. Further wooden shacks and a few cottages for married men would have to be constructed for a crew of 100 men. This cost would approximate \$5,000.00 to \$7,500.00.

3. It is estimated that four to five months would be required to bring the mill into full production but ore could still be shipped while mill construction proceeded. Returns from these shipments, if made to Shattuck Denn, would approximate \$9,000.00 per month net. If shipments were made to a copper smelter, about \$4,000.00 per month net could be expected.
4. Assay plan showing blocks of ore immediately available together with reports by J. E. Tenney and Chas Botsford have already been supplied. Since last November, when property was first put on production, after an idle period of nearly 25 years, shipments have totaled over \$50,000.00, including some 1,800 tons shipped to a smelter before premium payments were made. The grade of ore shipped during this period has averaged over 4% copper and 5.5% zinc. A far greater tonnage could have been shipped if mill capacity had been available. (custom.)
5. The grade of ore remaining in the old stopes above the 700 is between 3% and 4% copper and 5% and 6% zinc. By sorting less than 10% of ore hoisted or by sorting in the stopes, a grade of over 4% copper and 5.5% zinc can be maintained.
6. Full production could start within four or five months upon completion of a mill and 150 tons per day could easily be maintained, in fact, with the 900 level unwatered, a production of 250 tons per day could be maintained.
7. Cost data, mill ore;-
Grade of mill ore, with less than 10% sorting, 4% Cu and 5.5% Zn.
Grade of concentrates Cu 30%, Zn 53%. (See mill settlement sheets attached, one copy of each for reference.)
Mill recovery 90% for both metals.
Smelter treatment rates and deductions,- see settlement sheets attached.
R. R. freight on concentrates, average \$4.40 per ton.
Moisture,- see settlement sheets attached.
Trucking of concentrates, from Dragoon, .50 cents per wet ton.
Trucking of concentrates per dry ton .55 cents per ton.
Copper recovered per ton concentrates,- see settlement sheets attached.

Cost of production, mill ore;-

| | |
|-------------------------------|---------|
| Mining, open stope and pillar | \$ 1.90 |
| Development | 1.00 |
| Milling | 1.25 |
| Overhead | .20 |
| Trucking concentrates | .10 |
| R. R. Freight | .90 |
| Smelting | 2.75 |
| Miscellaneous | .25 |

Total Direct Costs

\$ 8.35

\$ 8.35

Operating profit per ton;-

Based on 4% Cu - 5.5% Zn.

| | |
|-------------------------------|---------|
| 72 lbs payable copper @ .1405 | \$10.12 |
| 84 lbs payable zinc @ .0652 | 5.47 |
| Precious metals credits | .30 |

Total Value per ton

\$ 15.89

15.89

Total Direct Costs

8.35

Operating profit per ton

\$ 7.54

| | | | |
|---|------|----------------|---------|
| " | " | " lb of copper | \$.071 |
| " | " | " lb of Zinc | .026 |
| " | cost | " lb of copper | .099 |
| " | " | " lb of zinc | .084 |

Amortization of Loan;- Any equitable arrangement.

Miscellaneous data;-

6. The labor supply for unskilled labor is available in the surrounding country. Mexican labor is used.
8. Name of owner of property, Arizona United Development Co., Roy B. Wilson, Young, Arizona. Copy of lease attached.
9. There is at present an agreement between Peru Mining Co., and William A. Hooton, outstanding but Peru Mining Co., has agreed to cancel this agreement upon payment to it of balance of loan made to Hooton for construction of rough concentration plant. The balance, amounting to about \$10,000.00 will be paid by Hooton from proceeds of shipments now being made to Shattuck Denn Mining Corp. Hooton has the above mentioned rough concentration plant and other equipment and supplies of a value exceeding \$10,000.00 as well as ore in transit and premium payments due.

10. The only critical materials required would be the additional drills and drill steel and the diesel engine for power for the compressor. Additional units for the proposed mill would consist of conditioner tanks, thickener tanks, classifier, flot cells etc could be secured from used equipment for sale in the country. All motors, wiring, switch board equipment is included in the proposed used mill. There is ample copper wire, track, hoists and compressors in operating condition on the property, so that no new equipment of this nature would have to be purchased. The pumps are overhauled and renewed and have been in operation up to a month ago, when costs of fuel made it advisable to discontinue unwatering of shaft. There is a 600 foot compressor, belted to a 75 HP diesel engine on the Peabody mine which it is planned to move to the Mammoth shaft, thus furnishing ample air for the operation of this mine also. Hoists on both Republic and Mammoth shafts are in good condition and are operating now. New cable has recently been purchased for the Republic shaft and that on the Mammoth is in good condition.

Respectfully submitted,

WILLIAM A. HOOTON.

WAH:SMC

August 5, 1942

Mr. W. A. Hooton
Dragoon, Arizona

Dear Mr. Hooton:

I have just wired Mr. Broadgate in Washington and asked him to mail the Tenney map. I am enclosing the application blanks for a preliminary development loan, also revised circular No. 14 which explains the \$5,000 loan.

Bill Broadgate in Washington has discussed the proposal for the Republic loan with the Copper Branch people and in spite of the fact that reports by Botsford and Smith are available stating a definite tonnage, it appears that they require an assay map before they will make a decision or go into further detail regarding your proposal.

Mr. Ayer has written Mr. Willis regarding this subject and stated, "If we can get assay maps or other proof of ample ore reserves and can arrange for efficient construction and operation as suggested, we will look with favor on this project." The Tenney map is in no sense an assay map and it seems as though the only answer to your problem is to make application for a preliminary development loan for the purpose of unwatering the mine to the 900 foot level, mapping the workings and sampling at such intervals as is necessary to estimate the tonnage and grade of ore exposed above the 900 foot level. If this is done, I believe the project can be pushed to a quick successful conclusion. On the application I would suggest that you roughly estimate the cost of unwatering, mapping, sampling, and assaying the ore exposed.

If this is submitted along with the Tenney and Botsford reports, I believe the preliminary loan can be put through in very short order and that the preparation of a complete setup for the project can be made out of the preliminary loan money. The preliminary development loan should be mailed directly to me, that is, two copies to me and retain an original for your own records. I will take these copies over to the RFC office where they will receive a docket number and I will then submit my comments on a review of the application and return such comments to the RFC office where they will be recorded and immediately mailed to Washington.

It seems as though we should be able to get a decision within a week from the time I receive the loan application papers. You should be able to carry out this work without interference with your mining your 1,000 or 1,500 tons a month for the shipments to Shattuck Denn.

I have been unable to locate a copy of the questionnaire submitted to you by Mr. Ayer. I would like very much to see this questionnaire and your reply to it.

With best wishes and kindest regards, I am

Yours very truly,

201

August 5, 1942

MEMORANDUM

MINE LOAN APPLICATION
REPUBLIC MINE
W. A. HOOTON

TO: W. C. BROADGATE

FROM: J. S. COUPAL

Your memorandums on this subject of July 31 and August 3 have been carefully noted.

The Tenney map is not an assay map. It is, however, the only map available. As for the ore reserves in the mine I thought that the Tenney report and the Botsford report would be sufficient.

As the requirements seem to be a properly prepared assay map showing ore reserves, there seems to be but one answer and that is to make one.

I talked with Hooton today on the telephone and he is not prepared at this time to unwater the mine to the 900 foot level so as to expose the ore developed above that point. The water now stands just above the 800.

I have forwarded Hooton a set of forms for a preliminary development loan and he will immediately return these to Phoenix where I will review them and have them forwarded to Washington at an early date. The job of preparing an application of this sort is one that calls for very careful work on the ground with all information available and we simply do not have the time to do it, so that the best solution undoubtedly will be to get a preliminary mining loan and get the work done in that manner.

Dragoon, Arizona
August 4, 1942

Mr. Frank A. Ayer
War Production Board
Washington, D. C.

Dear Mr. Ayer:

Since my last letter to you relative to the Shattuck Denn mill, I have had a conference with Mr. Wilcox, the Manager of Shattuck Denn, in which he told me the matter of moving their mill had been considered, but owing to the fact that they did not now have the mine (Republic) they had decided not to move their mill. He was doing some exploratory work in the Denn mine and was in hopes that it might be productive. Furthermore, the margin of profit is so small on their ore it would be impossible to ship their ore to Dragoon in the event they have moved their mill.

In the matter of acquiring my lease and option under the terms which I offered it to them, he assured me they regarded the matter very favorably, but that the deal could not be consummated because of the fact the Shattuck Denn directors are scattered throughout the country and it takes considerable time to get them together for an important meeting such as this would be. Mr. Barden, President of Shattuck Denn in New York, has advised Mr. Wilcox to continue negotiations with me looking toward the acquisition of the property and also the construction of a mill financed through the M.R.C.

Toward the end of this week or the first of next week Mr. Hendricks, mill superintendent of Shattuck Denn, and I are going to Yuma to look at the other mill which I have mentioned to you and which is for sale. My thought is both he and I should make a very careful survey of the machinery and equipment which is there, its condition and an estimate of the cost of moving it to the Republic. Further, I should have definite information and prices of other necessary equipment which will be needed for a complete milling plant to successfully treat the Republic ore. Mr. Hendricks is preparing a flow sheet from the information he has gained through the milling of the ore during the last two months. I am shipping an additional 1,000 to 1,500 tons to him this month, the milling of which will also give him additional information.

Mr. Frank A. Ayer

-2-

August 4, 1942

In addition to the copper and zinc values in the ore, we plan to install additional units for the recovery of the scheelite ✓ and molybdenum values, as together they would probably pay all of the milling expenses. .

As soon as I have assembled all of these definite facts relative to the equipment, the flow sheet, and other important items I shall furnish you with the complete data rather than only estimates as heretofore.

Very truly yours,

WILLIAM A. HOOTON

CC: Mr. Charles F. Willis
Phoenix, Arizona

WAH:SMC

B88

WASHINGTON, D.C.
Aug. 3, 1942

SUBJECT: Mine Loan Application,
Republic Mine
Wm. A. Hooton

I discussed this matter at the WPB Copper Branch this morning and they agree that Hooton should not send in material piecemeal and that he should assemble a complete case as I outlined, before filing.

I should be pleased if we could have someone to advise Hooton, and especially with the idea of checking over the questions asked in the questionnaire which he has just received.

I believe you will find that it will be most satisfactory to make a combined report based on the questionnaire I sent back and the new one just received. If this is not done carefully, there will be duplication of material.

I hope that the completed job can then be sent to our Phoenix office and checked over to see that it is properly presented and arranged in a businesslike engineering fashion and then sent to me in duplicate as I requested.

I will get good action on it if this is done.

Bill
Bill Broadgate

11/16/42

August 3, 1942

Mr. William A. Hooton,
Republic Mine,
Dragoon, Arizona.

Dear Mr. Hooton:

I have your letter enclosing copy of your
letter of July 30 to Frank Ayer.

We appreciate being kept in touch with your
situation as Bill Broadgate is doing his best to push it
along in Washington, and we certainly hope that it will
be successful, and not delayed too long.

With kindest personal regards, I am

Yours very truly,

CHARLES F. WILLIS, Consultant
Metals Reserve Company

CFW:MH

B86

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Date 4/22/45
 Name of Mine Republic
 Owner or Operator W. J. Adams
 Address 717 1/2 S. 1st St.
 Mine Location Johnson But

Filing Information

File System.....
 File No.....
 This chart to be used for gallons of gasoline required per month.

PRESENT OPERATIONS: (check X)

Production ☒; Development.....; Financing.....; Sale of mine.....;
 Experimental (sampling).....; Owner's occasional trip.....;
 Other (specify).....

PRODUCTION: Past and Future.

Tons

Approx. tons last 3 months
 Approx. present rate per 3 months
 Anticipated rate next 3 months
 If in distant future check (X) here

EQUIPMENT OPERATED:

| Type | Quantity or Horse Power | Miles or Hours Per Month | Gallons Required Per Month |
|--------------------------|-------------------------|--------------------------|----------------------------|
| Personal Cars | | | |
| Light or Service Trucks | | | |
| Ore Hauling Trucks | | | |
| Compressors | | | |
| Other Mine or Mill Eqpt. | | | |

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

252 gal/mo

REMARKS:

This problem is recommended for
more study

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By W. J. Adams

B.

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Filing Information

Date..... February 7, 1945
 Name of Mine..... ~~Coronado Copper & Zinc Co.~~ Republic Mine
 Owner or Operator..... Coronado Copper & Zinc Co.
 Address..... Dragoon, Arizona
 Mine Location..... Johnson Camp

File System.....

File No.....

This chart to be used for gallons of gasoline required per month.

PRESENT OPERATIONS: (check X)

Production.....; Development ☒.....; Financing.....; Sale of mine.....;

Experimental (sampling).....; Owner's occasional trip.....;

Other (specify).....

PRODUCTION: ☒ During Development ☐ Past and Future.

Tons

Approx. tons last 3 months..... 1014

Approx. present rate per 3 months.....

Anticipated rate next 3 months.....

If in distant future check (X) here..... 150 tons per day after mill starts - anticipated
 starting date Mar. 15, 1945

EQUIPMENT OPERATED:

| Type | Quantity or Horse Power | Miles or Hours Per Month | Gallons Required Per Month |
|--------------------------|-------------------------|--------------------------|----------------------------|
| Personal Cars | 1 | 1300 miles | 75 |
| Light or Service Trucks | 2 | 3500 " | 230 |
| Ore Hauling Trucks | 1 | 4000 " | 300 |
| Compressors | 1 - 40 HP | 312 Hours | 546 |
| Other Mine or Mill Eqpt. | 5 eng's - 75 HP total | 1780 " | 1944 |

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

COPPER & ZINC

REMARKS:

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By.....

George A. Ballou

BL50

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Filing Information

File System.....

File No.....

This chart to be used for gallons of gasoline required per month.

Date Jan 18 - 1945

Name of Mine Republic Mine

Owner or Operator Coronado Copper & Zinc Co.

Address Dragoon Ariz.

Mine Location Dragoon

PRESENT OPERATIONS: (check X)

Production.....; Development ☒; Financing.....; Sale of mine.....;

Experimental (sampling).....; Owner's occasional trip.....;

Other (specify).....

PRODUCTION: Past and Future.

Approx. tons last 3 months

Approx. present rate per 3 months

Anticipated rate next 3 months

If in distant future check (X) here

was building a mill which will be running about Mar. 1st of this year. Capacity of first unit of the mill will be 150 Tons Copper Zinc ore per day.

EQUIPMENT OPERATED:

| Type | Quantity or Horse Power | Miles or Hours Per Month | Gallons Required Per Month |
|---|-------------------------|--------------------------|----------------------------|
| <input checked="" type="checkbox"/> Personal Cars | | | |
| Light or Service Trucks | | | |
| Ore Hauling Trucks | | | |
| Compressors | | | |
| Other Mine or Mill Eqpt. | | | |

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

Copper, Zinc;

REMARKS:

The applicant is a Foreman of Construction, and is in charge of the building of ore & waste bins, underground and on the surface. The mine is isolated, and we do not have houses for families except members of the staff.

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By.....

B/49

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Filing Information

File System.....

File No.....

This chart to be used for gallons of gasoline required per month.

Date..... 12-14-44 ✓

Name of Mine..... Rough Run Copper

Owner or Operator..... E. V. Brown

Address..... Superior

Mine Location..... Johnson Butte

PRESENT OPERATIONS: (check X)

Production.....; Development.....; Financing.....; Sale of mine.....;

Experimental (sampling).....; Owner's occasional trip.....;

Other (specify)..... Special

PRODUCTION: Past and Future.

Tons

Approx. tons last 3 months.....

Approx. present rate per 3 months.....

Anticipated rate next 3 months.....

If in distant future check (X) here.....

EQUIPMENT OPERATED:

Type

Quantity or
Horse Power

Miles or Hours
Per Month

Gallons Required
Per Month

Personal Cars

Light or Service Trucks

Ore Hauling Trucks

Compressors

Other Mine or Mill Eqpt.

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

REMARKS:

Mr. Brown has been taking samples of this mill. He has just had the mill tested and will make arrangements to the mill for further work.

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By.....

B148

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Renew Bond

Filing Information

Date 12-14-44
Name of Mine Copper
Owner or Operator E. V. Gibson
Address Dragoon Ave
Mine Location Johnson Camp

File System

File No

This chart to be used for gallons of gasoline required per month.

PRESENT OPERATIONS: (check X)

Production.....; Development ☒; Financing.....; Sale of mine.....;

Experimental (sampling).....; Owner's occasional trip.....;

Other (specify).....

PRODUCTION: Past and Future.

Tons

Approx. tons last 3 months

Approx. present rate per 3 months

Anticipated rate next 3 months

If in distant future check (X) here

EQUIPMENT OPERATED:

Type

Quantity or
Horse Power

Miles or Hours
Per Month

Gallons Required
Per Month

Personal Cars

39 1/2 months

150

10

Light or Service Trucks

Ore Hauling Trucks

Compressors

Other Mine or Mill Eqpt.

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

Copper ore

REMARKS:

The mine is well equipped for this
company. There is now under construction

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By

George A. Gibson

B147

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Date ~~October~~ November 1, 1944
 Name of Mine Republic Mine
 Owner or Operator Coronado Copper & Zinc Co.
 Address Johnson Camp Unit - Dragoon, Arizona
 Mine Location Johnson Camp

Filing Information

File System.....
 File No.....
 This chart to be used for gallons of gasoline required per month.

PRESENT OPERATIONS: (check X)

Production.....; Development ☒; Financing.....; Sale of mine.....;
 Experimental (sampling).....; Owner's occasional trip.....;
 Other (specify).....

PRODUCTION: Past and Future.

Tons

Approx. tons last 3 months
 Approx. present rate per 3 months
 Anticipated rate next 3 months
 If in distant future check (X) here

EQUIPMENT OPERATED:

| Type | Quantity or Horse Power | Miles or Hours Per Month | Gallons Required Per Month |
|--------------------------|-------------------------|--------------------------|----------------------------|
| Personal Cars | | | |
| Light or Service Trucks | | | |
| Ore Hauling Trucks | | | |
| Compressors | | | |
| Other Mine or Mill Eqpt. | | | |

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

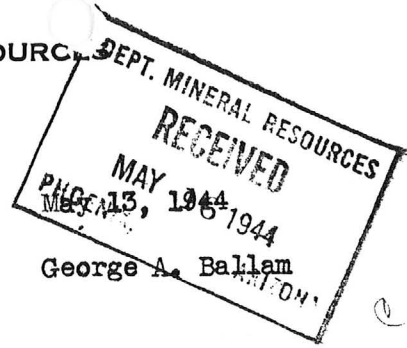
REMARKS:

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By.....

B146

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT



✓
Mine Republic
District Johnson
Subject: Mill

Date

Engineer

George A. Ballam

Moyer, engineer in charge of construction at Coronado Copper Zinc Co., property, informed me that company is going ahead with construction of 150-ton flotation mill. Foundations being made when I visited. Steel, timber, and milling equipment on ground. Big crew working. Well is to be sunk near dry lake east of Willcox, and $5\frac{1}{2}$ mile pipe line installed.

Development work is proceeding meanwhile at Republic, Copper Chief and other properties of Wilson lease now purchased by Coronado.

REPUBLIC, Cochise County, W. A. Hooton, Lessee, Tucson, Arizona.

The Harvey Mudd Group has recently arranged a working agreement with the lessee on this property. The lessee had been shipping copper-zinc ore at the rate of 1000 tons per month to the Shattuck-Denn mill at Bisbee, these shipments assaying 3.14 to 4.84% copper and 4.84 to 5.47 zinc.

There is sufficient tonnage above the 700 foot level to justify a mill on the property and reliable reports are indicative of a much larger tonnage between the 700 and 1350 foot levels, now under water.

The ore is apparently amenable to heavy media separation, giving a 2 to 1 ratio, followed by selective flotation. A flowsheet along these lines would allow a 250 ton flotation mill to produce approximately 840,000 pounds of copper and 1,200,000 pounds of zinc. The ore likewise carries appreciable amounts of recoverable molybdenite and tungsten.

The operating plans of the Mudd group have not been made public, but from our sources of information we feel that immediate production is, unfortunately, not anticipated.

Report by Earl F. Hastings, October 9, 1942, to Copper Branch, War Production Board.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

PRODUCTION POSSI-
BILITIES

Mine REPUBLIC MINE

Date September 29, 1942

District Johnston District, near Dagoon,
Cochise County, Arizona.

Engineer Earl F. Hastings

Subject:

1. Extent of property:
Includes all of the productive mines in the area including the Republic, Mammoth, Copper Chief, Peabody, etc.
2. Nature of deposit:
Replacement in limestone of the same type as that in Bisbee. Series of beds 600 feet thick and 5,000 feet long show 8 favorable outcrops, of which only 2 have been explored. Stopping area is approximately 1500 feet long x 12 feet wide x ? depth.
3. Past production:
From Arizona Bureau of Mines Bulletin No. 140 - 27,200,000 pounds copper and \$235,000 silver. Total \$5,960,000 without zinc credit up to 1928. In 1942 operator has shipped 7,000 tons of ore (2,000 to smelter and 5,000 to custom mills) with a net operating profit of ?
4. Values (as per 1942 mill settlement sheets): Copper, 3.14% to 4.84%; Zinc, 4.84% to 5.47%.

Note: 2 feet of ore nearest footwall from miscellaneous assays show 4-6% molybdenite which is equivalent to 0.3 to 0.5% on entire width. Silver credit is about 2% of net copper - zinc credit before premium payment. 0.2% scheelite disseminated over entire width.

5. Ore reserves (Republic only):

| | |
|---|--------------|
| 750 level to surface | |
| Blocked 4 sides and immediately available | 83,000 tons |
| On Dump (higher zinc | |
| lower copper) immediately available | 40,000 tons |
| Assured | 123,000 tons |
| Probable (showing 1 or more sides) | 100,000 |
| Total | 223,000 tons |
| | |
| 800 to 750 levels | |
| Probable (900 ft. length exposed on 900 ft. | |
| level and 1500 feet on 750 foot level) | 200,000 tons |
| | |
| 1350 to 800 levels | |
| Possible (200 ft. of stope near shaft but | |
| no further drifting) | 450,000 tons |
| | |
| Ore available from Republic Mine | 873,000 tons |

Note: J. B. Tenney estimates 3,000,000 to 6,000,000 tons possible and this confirmed by C. W. Botsford.

6. Metallurgy: Copper-zinc separation is clean and Shattuck-Denn making 92% copper and 90% zinc recovery on shipments.

E. H. Crabtree (Bureau of Mines) makes 50% recovery by soap cell on scheelite.

Lee Tucker (American Cyanamid Co.) in rough flotation test states molybdenite easily recovered from copper concentrate. Tucker also states that heavy media separation appears most promising for a 2 or 2½ to 1 ration at approximately 25 cents per ton and will conduct tests at no cost if desired.

7. Water:

Republic and Copper Chief shafts make approximately 75 g.p.m. each. Additional unlimited supply available from underground lake 4 miles distant.

8. Power:

Power line 8 miles distant. Present power, steam and gasoline.

9. Equipment:

Republic and Mammoth equipped with steam or gasoline hoists of ample size. Steam compressors with boilers, 2 dynamos (less power) for camp. Sinking and station pumps.

10. Costs (present):

| | |
|--|-------------|
| Mining costs (50 T/Day) including overhead | \$1.90 |
| Milling costs (Shattuck-Denn) | 4.50 |
| Hauling and Freight (to Bisbee) | <u>1.50</u> |
| | \$7.90 |

11. Information available:

Report by J. B. Tenney, Bisbee, Arizona, July 15, 1926.

Report by C. W. Botsford, Inspiration, Arizona, October 22, 1926.

Location and assay of ore blocks above the 750 foot level by Peru Mining Co., January, 1942.

Daily Progress reports, including assays, during sinking and drifting in Republic Mine.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Republic ✓

Date September 25, 1942

District Johnson - Cochise

Engineer George A. Ballam

Subject: Production Possibilities Survey

Supplementing previous reports on this property; the Mudd-Wiseman interests will officially take over management Oct. 1, and Bill Hooton informed me yesterday that publicity may be released.

There is a feeling, without mentioning names, that the new operating company may stress development rather than production. No conclusions can be reached for some time, but it might be well to urge immediate production in the event the rumors are founded.

In view of the fact that many conservative estimates show nearly 100,000 tons of ore immediately available above the 700 level, with an additional 40,000 tons of good mill ore already on the dump, even proposed mill operation on the property should be pushed to capacity. In view of the large reserves of partially developed ore, no development program can be justified at the expense of capacity production, within the next six months.

Attached is copy of Hooton's report which was used in application for WPB mill.

Geo. A. Ballam

A. Reports by J. B. Tenney and Chas. Botsford both state 200,000 tons available above 700 level. These reports made in 1924.

Report for Peru Mining Co. April 1942 states approximately 87,000 tons immediately available above 700 level.

Copies of these reports will be furnished later.

B. Produce copper and zinc.

C. Lime replacement deposit.

D. Assay plan made by Peru Mining Co. will be furnished later.

(e) Ore reserves are backs of old stopes, pillars and large unmined sections open on all four sides, above 700 level.

(f) There is a drift on the 900 level approximately 900 feet long with two small stopes on each end the balance of the block being unmined. Water now stands at the 800 level therefore this block of ground is not open for sampling, however, the maps show this drift to be on the same bed as was mined above to the surface. Reports from men now working at the property and who formerly worked on this level as well as daily mine reports and assays when this drift was being driven all tend to show this level is all in ore. Assuming this block to be ore, there is a length of 900 ft a height of 200 ft. to the 700, and an average width of 12 ft making a tonnage of approximately 200,000. Under this 900 drift down to the bottom or 1350 level there are no long drifts, however, stopes extend out for a distance of approximately 200 ft, the sides of which are apparently all in ore according to assay plans. Assuming the block from the 900 to the 1,350 level to be probable ore there is a tonnage of about 450,000. Tenney's report shows his method of computing this probable and possible ore.

E. Peru Mining Co has these assay samples

F. The ore body is a replacement in Paleozoic limestone and lies within a broad zone of garnetite from 500 to 600 feet in width. The unusual regularity of the productive bed is indicated by a stope length of about 1,500 feet. This is one continuous stope on the same bed, averaging from 10 to forty feet in thickness.

G. (1) Recent production 50 tons per day since mining was started in November 1941. With more stope preparation 200 tons per day can easily be produced.

(2) Open stope and pillar method of mining as no timber is needed.

(3) Workings are dry above 700 level. Below 700 the mine makes about 75 gals per minute.

(4) As all pumping equipment is in good shape it is planned to unwater the 900 level so that stoping can be started there. It is planned to install air and water lines to within about 150 feet from the surface and by using slushers break and draw off both pillars and blocks of unmined ground all the way down to the 700 level, taking it all out from the haulage way on the 700 to the shaft. In this manner all of the large pillars can be

mined safely.

- (5) There are two compressors steam driven of 1,000 ft capacity and one Diesel driven compressor of 565 ft capacity as well as several smaller ones. Two gasoline driven hoists are in good condition and are being used daily on the Republic and Mammoth shafts. Portable gas driven compressors are rented and are now in use as fuel is too expensive to use in the boilers. Bunk houses for thirty men are in fair shape as is the boarding house and numerous other houses and shacks, all of which are in use.
- (6) This property comprises all of the productive mines in the district, - Republic, Mammoth, Copper Chief, Peabody etc. The total production from these mines in copper and silver has been over \$20,000,000, with copper accounting for practically all of the amount. Up to last November, when mining was resumed, no zinc has ever been paid for.

H. (a) Product is now being shipped to Custom Mill.

- (2) (a) Ore is shipped to the Shattuck Denn mill at Bisbee and copies of mill returns are attached. Formerly ore was shipped to the Peru Mining Co's mill at Deming, N. M. Settlement sheets from this mill are also attached. Previously ore was shipped to the smelter of the International Smelting & Refining Co at Miami, Arizona but of course, only the copper content was paid for. These copies of settlements are also attached.
- (3) (a) Selective flotation.
(b) Flow sheet of Shattuck Denn mill is planned to be used as this mill is now treating the ore, separating the copper and zinc into concentrates and making a recovery of 90%. It is planned to construct a 200 ton plant.
(d) The mill site is within 200 feet from the collar of the Republic shaft and has a slope which would be ideal for mill.
(e) There is ample room and grade for tailings disposal on this property without running onto other ground.
(f) There are no streams or lakes which would be polluted.
(g) There is a complete mill of about 150 tons capacity and which is nearly new with power plant for sale near Yuma, Arizona for \$40,000 complete with buildings etc and it is planned to move this mill and install it on the property. The approximate cost of moving and constructing would cost approximately \$30,000 to \$35,000.

J. (1) The water supply would come from the Republic and Copper Chief shafts, each making approximately 75 gals per minute or 150 gals total, which would be sufficient for a 200 ton plant, using a portion of the water over again.

- K.
- (1) Power required would approximate 450 HP
 - (2) Distance to nearest power line is 8 miles.
 - (3) Power costs for this HP are .175 and the cost of extending line to the property would be about \$12,500.
 - (4) No electric power in district.
 - (5) If electric power were available no other kind would be used.

- L. (1) There are no unemployment conditions in the district at present as most of the Mexican labor is working at this property.
(2) Experienced miners, mill men and operators are available due to the closing of gold and silver mines and mills thruout the State.
(3) About fifty more men would be required to produce 200 tons and mill same.
(4) Current wages paid are \$5.00 for mechanics; \$4.50 and \$5.00 for mines and machine men and \$.00 for muckers.
(5) About 30 to 40 men can be accomodated with the present facilities now on the property.
- M. The main line of the Southern Pacific railroad runs within six miles of the property and a good level graveled road connects with the mine.
- N. The Republic has produced approximately 500,000 tons of ore and esimates vary from a potential production of three million to ten million tons.
 - (a) Mining costs at present, producing about 50 tons per day, are \$1.90 overall including overhead.
 - (b) \$19.00 per ton of copper and \$19.00 per ton of zinc.
 - (c) Figures available from Shattuck Denn Mining Corp.

Pink - Reading
Alpha - "S"
✓ Subject - Cyprus Johnson
Copper Report
Copy - GM

April 26, 1977

Mr. J.O. Surakoski
Resident Manager
Cyprus Johnson Copper Company
Post Office Drawer R
Benson, Arizona 85602

Dear Mr. Surakoski:

The Department of Mineral Resources is compiling data for its annual report on the copper industry, A PROFILE OF ARIZONA'S PRIMARY COPPER INDUSTRY FOR 1976, VOLUME I. We would appreciate having your 1976 production figures for: (1) tons of ore mined and (2) pounds of copper cathodes produced. Please insert the Data in the space provided on the attached tabulation sheet.

Similar requests are being sent to all Arizona copper producers and a copy of the completed 1976 tabulations will be returned to you.

Thank you very much.

Sincerely,

Glenn A. Miller
Mineral Resources Specialist

Enclosures

GAM/ap

LEAD-ZINC QUESTIONNAIRE

October 1957.

*Edward Johnson
(active)*
Do you approve of the Emergency Lead-Zinc Committee's seeking relief for the lead-zinc industry and has it your authorization to speak for you?

What Arizona Mines and Mills in the lead-zinc class do you control?

(1) ~~Jensen Camp Unit near Dragoon, Arizona~~

(2)

Which ones are operating? (1) Not Operating (2)

If not operating, when shut down? (1) Aug. 15, 57 (2)

Number employed, prior to shut-down, in mine, mill or sections thereof producing lead or zinc ores? (1) 135 (2)

Number so employed on January 1, 1957? (1) 147 (2)

Number so employed on October 1, 1957? (1) none (2)

Remarks Now have 14 men on exploration work only

Coronado Copper & Zinc Company

Company

By:

Ed Johnson
Signature

Mine Mgr.

Please fill in NOW, tear off, and mail to:

Arizona Department of Mineral Resources
Mineral Building, Fairgrounds
Phoenix, Arizona

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Cyprus Mines Leaching Project Date October 6, 1964 & March 10, 1965
District Cochise (Johnson) District, Cochise Co. Engineer Axel L. Johnson
Subject: Mine Visit and information from Peter N. Thomas, Metallurgist.

Location: Sections 25 & 26 - T. 15 S. - R. 22 E. - near the Republic shaft.

Owners: Cyprus Mines Corporation, 523 W. 6th Street, Los Angeles 14, Calif.
Local address: - P.O. Box 7187, Tucson, Ariz.

Principal Minerals: Copper ores.

Present Mining Activity: Leaching experiments on oxidized copper ores. 3 men working.

Review of Operations: Heap leaching experiments are made as follows:

A batch of ore of about 325 tons to be leached, is placed in the form of a truncated pyramid or cone on top of a concrete pad 40' x 40', the concrete pad sloping down towards a tank. This tank is 32' x 20' x 4' in depth, 15,000 gal. capacity, and has concrete bottom and plywood sides lined with polyethelene.

75 gal. per minute of water is circulated by means of a pump and a series of hoses over the ore pyramid, a 4' x 4' box being placed on top of the pyramid, from which box 24 - 3/8" hoses with holes extend downward around the periphery of the pyramid down to the base of same.

The water after circulating through the ore in the pyramid then runs by gravity into the tank. At the tank, acid is added to the required P/H.

Water is circulated on each batch of ore for a period of 4 to 7 months. Tests of the amount of copper in solution is made periodically. Some precipitation tests with iron cans are also made.

Exploration: One diamond drill by Joy Manufacturing Co. Drilling Division is working one shift in the area near the old Republic shaft.

Active April 1967 - Exploration

of its assets to fulfill its obligation under the guarantee.

5. EQUITY IN NET LOSS OF NPL

The Company had a 28.5% interest in NPL at June 30, 1999 and 1998. Summary financial data for the operations of NPL is as follows:

<TABLE>

<CAPTION>

| | Three Months Ended June 30, | | |
|-------------------------------------|--------------------------------|----------|-----|
| | 1999 | 1998 | |
| | (In Thousands) | | |
| <S> | <C> | <C> | <C> |
| Sales | \$ 2,704 | \$ 3,392 | \$ |
| Cost and expenses | (3,878) | (3,426) | |
| Interest and other income | 22 | 53 | |
| Interest and debt issuance costs | (58) | (59) | |
| Foreign currency forward exchange | | | |
| Contract gains (losses) | 746 | (985) | |
| Foreign currency transaction losses | (88) | 70 | |
| Net Loss | \$ (552) | \$ (955) | \$ |

</TABLE>

<PAGE>

6. INVESTMENT IN NORD COPPER CORPORATION

In June 1999, Nord Copper Corporation acquired a copper mining facility ("Johnson Camp Mine") in Cochise County, Arizona, from Arimetco, Inc. At the time of the acquisition, Summo USA Corporation had a purchase agreement to acquire the Johnson Camp Mine and related assets from Arimetco. The total consideration paid by Nord Resources Corporation and Nord Copper Corporation included (a) \$310,000 in cash, (b) the issuance to Summo of 1,600,000 unregistered shares of Nord Resources Corporation's common stock \$0.01par value and (c) a promissory note ("Promissory Note") from Nord Copper Corporation in the amount of \$1,550,000, payable in three principal payments of \$500,000, \$500,000 and \$550,000, due on June 8, 2000, June 8, 2001 and June 8, 2002, respectively, together with interest at the rate of 8% per annum payable quarterly. In addition to the purchase price, Nord Copper Corporation assumed the obligation to pay up to \$1,000,000 to Arimetco out of revenues from the Johnson Camp Mine, at a rate of \$0.02 per pound of copper sold, except that no payment is due where the price is less than \$1.00 per pound. All monies used for the cash portion of the purchase price were from Nord Resources Corporation's own funds. The payment of the

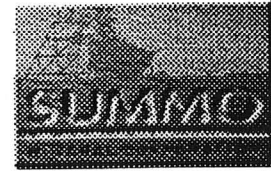
<!--StartFragment-->6. INVESTMENT IN NORD COPPER CORPORATION

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10

<!--EndFragment-->

PRESS RELEASE



June 9, 1999

#99-10
TSE:SMA

Corporate Office:

900 Denver Center Building, 1776 Lincoln Street, Denver, CO 80203, USA
Tel: (303) 861-5400 Fax: (303) 863-1736 Toll Free: (877) 370-5400

Assignment of Interest in Johnson Camp Mine Acquisition

Summo Minerals Corporation is pleased to announce that its wholly-owned subsidiary, Summo USA Corporation ("Summo"), has transferred all of its proprietary data, rights and obligations in the acquisition of the Johnson Camp Mine, an active heap leach SX-EW copper operation in Cochise County, Arizona, to Nord Resources Corporation ("Nord") (NRD:NYSE) in exchange for 1.6 million shares of common stock in Nord Resources Corporation. Upon completion of the above transaction Nord Resources Corporation completed the purchase of the Johnson Camp Mine from Arimetco, Inc.

Summo recently completed a third-party Full Feasibility Study on the Johnson Camp Mine which demonstrates initial cash costs of less than \$0.55/lb. at full annual production capacity of 18.9 million pounds of cathode copper for the first six years of operation. Initial capital required to bring the mine back into full production is calculated at \$15.3 million including acquisition costs and working capital requirements. Proven and probable reserves on the property allow for operation at full capacity for a minimum of 10 years. Several oxide exploration targets remain to be drilled which could expand the current reserve base significantly. Additionally, the property contains the potential for discovery of a porphyry copper sulfide system adjacent to or beneath the Burro pit, based upon strong alteration zoning patterns identified by geological mapping and airborne magnetic data.

The Company is diligently working on documentation for closing a financing arrangement with Resource Capital Fund L.P. and St. Mary which will allow the Company to retain 100% ownership of the Lisbon Valley copper project in San Juan County, Utah, and to expand its search for quality heap leach SX-EW copper opportunities throughout the Americas. The Lisbon Valley copper project is designed to produce 40 million pounds of cathode copper annually at a cash cost of \$0.47/lb. Financing for resumption of construction at Lisbon Valley will be subject to improvements in the copper price.

On behalf of the Board of Directors,

"Gregory A. Hahn"

Gregory A. Hahn
President, C.E.O.

**The Toronto Stock Exchange has not reviewed and does not accept
responsibility for the adequacy or accuracy of this press release**

Johnson Mine file
(Cgdlise)

TUCSON, Ariz. -(Dow Jones)- Arimetco International Inc., a Toronto-based mining company, said its Arimetco Inc. unit has filed for reorganization under Chapter 11 of the U.S. Bankruptcy Code.

The company said its U.S. unit has experienced "serious production problems" for the past six months at its Yerington Mine in Lyon County, Nevada, that resulted in lower output and higher operating costs.

Arimetco owns and operates two copper mines in the western U.S.

The company said the Chapter 11 filing will allow Arimetco Inc. the time required to solve its production problems and to reorganize its financial affairs. The U.S. unit will continue to operate its business as debtor in possession.

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Transmitted: 1/3/97 2:34 PM (L100PGtE)

SENA



85902700

Office of State Mine Inspector

705 West Wing, Capitol Building
Phoenix, Arizona 85007
602-255-5971

STATE MINE INSPECTOR

AUG 15 1985

NOTICE TO ARIZONA STATE MINE INSPECTOR

In compliance with Arizona Revised Statute Section 27-303*, we are submitting this written notice to the Arizona State Mine Inspector (705 West Wing, Capitol Building, Phoenix, Arizona 85007) of our intent to start/stop (please circle one) a mining operation.

COMPANY NAME Longyear Company

CHIEF OFFICER Russell Beddow

COMPANY ADDRESS 308 E. Pima St., Phoenix, Az. 85004

COMPANY TELEPHONE NUMBER (602) 258-6543

MINE OR PLANT NAME Johnson Camp

MINE OR PLANT LOCATION (including county and nearest town, as well as directions for locating by vehicle)

Dragoon, Arizona

TYPE OF OPERATION Exploration PRINCIPAL PRODUCT Unknown

STARTING DATE 8-14-85 CLOSING DATE Unknown

DURATION OF OPERATION Unknown

PERSON SENDING THIS NOTICE Russell Beddow

TITLE OF PERSON SENDING THIS NOTICE Manager, Southwestern Zone

DATE NOTICE SENT TO STATE MINE INSPECTOR 8-14-85

*A.R.S. Section 27-303 NOTIFICATION TO INSPECTOR OF BEGINNING OR SUSPENDING OPERATIONS: When mining operations are commenced in any mine or when operations therein are permanently suspended, the operator shall give written notice to the inspector at his office prior to commencement or suspension of operations.

RECEIVED

SEP 16 1985

Revised 7/84

DEPT. OF MINES & MINERAL RESOURCES

2023

ARIZONA DEPARTMENT OF MINERAL RESOURCES

Mineral Building, Fairground

Phoenix, Arizona

1. Information from: Mr. Richard Aros, Plant Superintendent
Address: Cyprus Johnson Copper Co., P.O. Drawer "R", Benson, Az 85602
2. Mine: Johnson 3. No. of Claims - Patented _____
Unpatented _____
4. Location: Cochise Co. (see previous reports or active mine file)
5. Sec _____ Tp _____ Range _____ 6. Mining District _____
7. Owner: Cyprus Johnson Copper Co.
8. Address: _____
9. Operating Co.: _____
10. Address: _____
11. President: _____ 12. Gen. Mgr.: _____
13. Principal Metals: _____ 14. No. Employed: _____
15. Mill, Type & Capacity: _____
16. Present Operations: (a) Down ☐ (b) Assessment work ☐ (c) Exploration ☐
(d) Production ☒ (e) Rate ~ 29,000 lbs #pd. Cathode Copper
17. New Work Planned: _____

18. Misc. Notes: General productive capacity is about 33,000 lbs cathode copper per day. Acid consumption is about 9 lbs per 1 lb copper. Beneficiation (not mining) costs are about 33¢ per pound of copper produced. Acid is trucked in from the Phelps Dodge operation at Morenci.

✓ The unpatented claims of the Keystone mine area were purchased by the company from Norman M. Rehg (and associates?) of El Dorado, Kansas. This property is westerly and adjacent to the Johnson mine area and is needed for waste disposal. The company has been negotiating with the BLM for some time

Date: 6-27-79

Michael N. Greeley
(Signature) (Field Engineer)

B 202

Cyprus Johnson (co.)

to use the Keystone area for dumping of waste. The BLM however has delayed action; it is apparently worried about surface damage to cactus, the old jail, etc.

ARIZONA DEPARTMENT OF MINERAL RESOURCES
Mineral Building, Fairgrounds
Phoenix, Arizona

1. Information from: Wm. Stoffers
Address: Box 25, Dragoon, Arizona 85609
2. Mine: Moore Shaft 3. No. of Claims - Patented ?
Unpatented _____
4. Location: Johnson Camp
5. Sec 23 Tp 15S Range 22E 6. Mining District Johnson
7. Owner: Cyprus Mining Co.
8. Address: _____
9. Operating Co.: Wm. Stoffers leasee
10. Address: above
11. President: _____ 12. Gen. Mgr.: _____
13. Principal Metals: Zinc, Copper 14. No. Employed: None
15. Mill, Type & Capacity: none
16. Present Operations: (a) Down ☒ (b) Assessment work ☐ (c) Exploration ☐
(d) Production ☐ (e) Rate _____ tpd.
17. New Work Planned: _____

18. Miscl. Notes: A mill is needed to handle the ore.

Date: Feb. 6, 1969

G. W. Irvin
(Signature)

G. W. Irvin
(Field Engineer)

882

ARIZONA DEPARTMENT OF MINERAL RESOURCES
Mineral Building, Fairgrounds
Phoenix, Arizona

1. Information from: Holstman
Address: _____
2. Mine: More Shaft
(Leake) 3. No. of Claims - Patented _____
Unpatented _____
4. Location: Johnson Camp Cochise Co.
5. Sec. 23 Tp. 19 S Range 22 E 6. Mining District _____
7. Owner: Cypress Corp.
8. Address: _____
9. Operating Co.: Bill Stoffers
10. Address: _____
11. President: _____ 12. Gen. Mgr.: _____
13. Principal Metals: _____ 14. No. Employed: 7
15. Mill, Type & Capacity: 100 TPD Flotation at Mandyke
16. Present Operations: (a) Down ☐ (b) Assessment work ☐ (c) Exploration ☐
(d) Production ☒ (e) Rate 35 tpd.
17. New Work Planned: _____
18. Miscl. Notes: Operating 5 days per week

Date: 1-9-68

J. H. Smith
(Signature)

(Field Engineer)

BQ19

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Ownership: This is part of the Cyprus Mines Corp. holdings at Johnson Camp.

Operator: G. H. (Bill) Stoffers, Box 105, Pomerene, under a lease arrangement from Cyprus.

Most of the production is from the 500 level. 4 men are employed at the mine. Production is approximately 35 tpd. The ore is trucked to the Klondyke mill of the American Zinc Company. (Under lease to Stoffers, and taken over on April 6, 1967). Distance to the mill is 82 miles by road. 3 men are employed at the mill.

The ore runs approximately 2.7% Cu, 6.5% Zn and contains a little silver.

B 918

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Republic & Moore Mine & Mill Date Jan. 16, 1963
District Cochise (Johnson) - Cochise County Engineer Axel L. Johnson
Subject: Present Status. Information from G. H. Stoffers, Mine Foreman
Wm. Stoffers, Box 25, Dragoon (1966)

References: Report of August 30, 1962 and previous reports.

Present Status: Mine is closing down today.
Mill will close down in 2 or 3 days.
Reason - Depletion of ore reserves.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Republic & Moore Mine & Mill

Date August 30, 1962

District Cochise (Johnson) District, Cochise Co.

Engineer Axel L. Johnson

Subject: Present Status. Information from W. D. Nelson.

References: Report of September 15, 1961 and previous reports.

Present Activity: Mining ore from the Moore shaft and milling same at the mill at the Republic. 54 men working, 38 in the mine, 16 in the mill. The mine is being worked 1 shift, 6 days and the mill 3 shifts, 6 days per week. The average production is about 220 TPD. The ore hauling from the mine to the mill is done under contract by Norton & Smick. This company also hauls the concentrates to Dragoon for shipment to the smelter.

Ore Values: Ore is reported as averaging about 2.0% copper and 6.0% zinc.

Marketing: The copper concentrates are now shipped to A.S. & R. smelter at El Paso, Texas. The zinc concentrates are shipped to the National ~~Lead~~ ^{Zinc} Company smelter at Bartlesville, Okla.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Republic & Moore Mine & Mill Date Sept. 14, 1961
District Cochise (Johnson) District, Cochise Co. Engineer Axel L. Johnson
Subject: Present Status. Information from G. H. Stoffers, Mine Foreman.

References: Reports of May 11, 1961 and Feb. 7, 1961.

Present Activity: Mining ore from the Moore shaft and milling same in the mill at the Republic. 53 men working - 37 in the mine and 16 in the mill. The mine is being worked 1 shift, 6 days per week, and the mill 3 shifts, 6 days per week. The average production is about 210 tons per day. The ore hauling from the mine to the mill is done under contract to Norton and Smick, Dragoon, Ariz. This company also hauls the concentrate to Dragoon for shipment to the smelter.

Ore Values: Ore is reported as averaging about 2.0% copper and 6.5% zinc.

Active February 1962

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Republic & Moore Mine and Mill Date May 11, 1961
District Cochise (Johnson) District, Cochise Co. Engineer Axel L. Johnson
Subject: Present Status. Information from G. H. Stoffers, Mine Foreman.

References Report of Feb. 7, 1961

Present Activity Same as Feb. 7 report.

Ore Values Same as Feb. 7, report.

Mining Operations Same as Feb. 7 report.

Marketing The copper concentrates are shipped to the International smelter at Miami, Ariz.

The zinc concentrates are shipped to the National Lead Co. smelter at Bartlesville, Oklahoma.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Republic & Moore Mine and Mill

Date Feb. 7, 1961

District Cochise (Johnson) District, Cochise Co. Engineer Axel L. Johnson

Subject: Present Status/ Information from G. H. Stoffers, Mine Foreman.

References Report of June 15, 1960 and previous reports.

Present Activity Mining ore from the Moore shaft and milling same in the mill at the Republic shaft. 53 men working -- 37 men in the mine and 16 in the mill. The mine is being worked 1 shift, 5 days per week, and the mill 3 shifts, 5 days per week. The 5 days per week operation started Jan. 23 (previously 6 day week) Average production about 230 tons per day. The ore hauling from the mine to the mill is done under contract to Norton and Smick, Dragoon, Ariz. The same company also hauls the concentrates to Dragoon for shipment.

Ore Values Ore is reported to average about 2.5 % copper and 6.5 % zinc.

Mining Operations Same as shown on report of June 15, 1960, except that 12 stopes are now reported as being worked.

Marketing The copper concentrates are shipped to the A. S. & R. smelter at Hayden. The zinc concentrates are shipped to the Naticanl Lead Co. smelter at Bartlesville, Oklahoma.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Republic & Moore Mine and Mill

Date June 15, 1960

District Cochise (Johnson) District, Cochise Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from G. H. Stoffer's assistant.

References: Report of March 3, 1960 and previous reports.

Location: At Johnson Camp.

Owners: Coronado Copper and Zinc Co., 1206 Pacific Mutual Bldg., Los Angeles, Calif.

Lessees & Operators: McFarland & Hullinger, Box 238, Tooele, Utah. Local address: Box 44, Dragoon & Box 811, Tucson. W. D. Nelson, Supt. -- G. H. Stoffers, Mine Foreman -- E. L. Erickson, Mill Supt.

Principal Minerals: Zinc and Copper - all sulphides of zinc and copper. No lead.

Present Activity: Mining ore from the Moore shaft and milling same in the mill at the Republic shaft. 55 men working -- 38 men at the mine and 17 men in the mill. Mine is working 1 shift, 6 days per week, and the mill is working 3 shifts. Average production about 220 tons per day.

Ore Values: See report of March 3, 1960.

Mining Operations: The ore is stoped from stopes between the 400 ft. level and the 500 ft. level of the Moore shaft. One large stope and about 8 smaller stopes are worked at the present time. All the ore is dropped to the 600 ft. level, from where it is hoisted up the Moore shaft. A contract for hauling the ore from the Moore shaft to the mill has been let to Norton and Smick, Dragoon, Arizona. This company will also haul the concentrates from the mill to Dragoon for shipment to the smelter.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Republic & Moore

Date Mar. 3, 1960

District Cochise (Johnson) District, Cochise Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from G. H. Stoffers and K. L. Erickson.

References Report of Jan. 27, 1960 and previous reports.

Location At Johnson Camp.

Owners Coronado Copper and Zinc Co., 1206 Pacific Mutual Bldg., Los Angeles, Calif.

Lessees & Operators McFarland & Hullinger, Box 238, Tooele, Utah (local address --
Box 811, Tucson. W. D. Nelson, Supt. -- G. H. Stoffers, Mine Foreman -- K. L. Erickson,
Mill Supt.

Principal Minerals Zinc and Copper - all sulphides of zinc and copper. No lead.

Present Activity Mining ore from the Moore Mine and milling same in the mill at the Republic Mine. 50 men working, 1 shift, 6 days per week. 33 of these men are working in the mine, and 17 in the mill. Production about 175 tons per day, or about 4,500 tons per month.

Ore Values Ore is reported to average about 2.6 % copper and about 6.9 % Zinc.

Milling & Marketing The repairs on the Republic mill has now been completed, and the mill started operating today. The repair work consisted of the rebuilding of 8 flotation units, the installation of 2 new pumps, and the replacement of 2 reagent feeders.

The Sahuarita mill will close in about 10 days, or as soon as the ore now in transit has been milled.

Mining Operations The ore is mined from one large stope, extending from the 400 ft. level to the 500 ft. level. All the ore is dropped down to the 600 ft. level, from where it is hoisted up the Moore shaft. It is then trucked to the Republic mill for milling.

BQM

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Republic & Moore

Date Jan. 27, 1960

District Cochise (Johnson) Mining District
Cochise County

Engineer Axel L. Johnson

Subject: Present Status. Information from K.L. Erickson

References: Report of Sept. 17, 1959.

Present Mining Activity: Mining ore from the Moore Mine and shipping same to the Sahuarita Mill for milling. 41 men working, 1 shift, 6 days per week. 36 of these men are working in the mine, and 5 are doing repair work in the mill at the Republic Mine. Production about 175 tons per day, or about 4,500 tons per month.

The ore is mined from one large stope, extending from the 400 ft. level to the 500 ft. level, and dropped down to the 600 ft. level from where it is hoisted up the Moore shaft. It is then trucked to Dragoon, a distance of 8 miles, for shipment by rail to the Sahuarita Mill.

Ore Values: Ore is reported to average 2.6% copper and 6.9% zinc.

Milling & Marketing: The ore, at present is milled at the Sahuarita Mill. As soon as the mill repairs are completed at the Republic Mill the ore will be milled there. This is expected to start about March 1st. Worn out sections of the milling equipment, including one flotation circuit, are being replaced. 5 men are working on mill repairs.

B 209

6

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Republic & Moore Date November 5, 1959

District Cochise (Johnson) Mining District, Engineer Axel L. Johnson
 Cochise County

Subject: Field Engineers Report. Information from G. H. Stoffers, Mine Foreman

References: Report of Sept. 17, 1959.

Location: At Johnson Camp.

Owners: See report of Sept. 17, 1959.

Lessee & Operator " " " " " "

Principal Minerals: " " " " " "

Present Mining Activity: Mining ore from the Moore shaft, and shipping same to the Sahuarita mill for milling. 38 men working 1 shift, 6 days per week. Production about 3 carloads of ore per day (about 180 tons). Ore is stoped from between the 400 ft. and the 500 ft. levels of the mine. 10 stopes are being worked, some of the stopes being worked steady and others only periodically.

Milling & Marketing Facilities: The ore is hoisted up the Moore shaft, and trucked to Dragoon, a distance of 8 miles, for shipment by rail to the Sahuarita mill.

It was decided not to use the old Republic & Moore mill for this operation, as it is badly in need of general repairs, and it was thought that the limited amount of ore blocked out in the mine might not be enough to warrant the expenditure of repairing the mill. Consequently, the ore is being shipped to the company's mill at Sahuarita.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine ✓ Republic & Moore Date September 17, 1959
District Cochise (Johnson) Mining District, Engineer Axel L. Johnson
Cochise County
Subject: Field Engineers Report -- Information from Forest F. Baker and Personal Visit.

Location: At Johnson Camp

Owner: ✓ Coronado Copper and Zinc Co., 1206 Pacific Mutual Bldg., Los Angeles, Calif.

Lessee & Operator: ✓ McFarland & Hullinger, Box 238, Tooele, Utah (local address Box 811,
Tucson, W. D. Nelson, Supt.)

✓ G.H. Stoffers, Mine Foreman

Principal Minerals: ✓ Zinc and copper - all sulphides of zinc and copper with no lead.

Present Mining Activity: Mining ore from the Moore Mine and shipping same to the Sahuarita Mill for milling. 30 men working 1 shift, 6 days per week. Production variable, about 75 tons per day, with maximum of 125 tons. All the ore is produced from the 500 ft. level of the Moore shaft. The ore is hoisted up the Moore shaft and trucked to Dragoon, a distance of 8 miles, for shipment by rail to the Sahuarita Mill.

B107

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Republic and Moore

Date July 3, 1957

District Cochise (Johnson) District, Cochise Co. Engineer Axel L. Johnson

Subject: Present Status. Personal visit & information from Chas. K. Platt & Dick Bergman.

Location At Johnson Camp.

Owners Coronado Copper and Zinc Co., 1206 Pacific Mutual Bldg., Los Angeles 14, Calif.
& Oper. Mine Manager ---- Fred E. Gray, Box 44, Dragoon, Ariz.
Mining Engineer ---- Chas. K. Platt.
Geologist ---- R. E. (Dick) Bergman.

Principal Minerals Zinc and Copper. All sulphides of zinc and copper, with no lead.

Present Mining Activity In the process of closing down operations. Will be completely closed down about July 15 (tentative dates from July 12 to July 17). The men, now employed, about 135 men of which 92 are working underground, will be layed off.

Geology and Mineralization See report of Feb. 15, 1952.

Ore Values No information has been released regarding the grade of the ore mined. Mr. Bergman and Mr. Platt state that the ratio has been about 2 1/2 Zinc to 1 Copper. On Feb. 1953, Mr. Fred Gray informed me that the ratio of the ore was 2.51 Zinc to 1 Copper, and the ratio of the concentrates produced was 2.11 Zinc to 1 Copper. It was stated that the recovery is much less on the Zinc than it is on the Copper.

Milling and Marketing Facilities Mill at the property has a capacity of 200 tons per day. Mill has been working practically at capacity until recently, when the ~~company~~ company began curtailing production on account of the low price of zinc and copper.

Mining Operations The Republic Mine, served with a 45 deg. incline shaft, 1700 ft. deep was closed down in the fall of 1952, and has not operated since that time. The Moore Mine, with a vertical shaft about 800 ft. deep, has been operated since I made my first visit there on Feb. 15, 1952. Two shifts, with about 46 to 48 men on each shift have been employed for the underground mining operations.

Proposed Plans As soon as the muck piles underground are exhausted (company quit breaking ore on June 30th), the mine will be closed down. This is estimated at about July 15th (July 12 to 17). Company will leave a caretaker to watch the mine, and will keep the water pumped out of ~~the~~ both the Republic and the Moore Mines. The two company wells at the junction of highways 86 and 666, which has supplied water for domestic use and additional water for milling operations, will be shut down. Any domestic water needed will be obtained from the Republic shaft.

B205

2c 7788

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

~~FIELD ENGINEERS REPORT~~

NEWS ITEM

Mine Republic and Moore

Date Feb. 15, 1952.

District Cochise (Johnson) Dist., Cochise Co.

Engineer Axel L. Johnson

Subject: News Item--- Source of Information--- Fred E. Gray.

Location at Johnson Camp

Owners Coronado Copper and Zinc Co.

Operators Same as above.

Officials Fred E. Gray, Superintendent.

metals Mined Zinc and Copper.

men Employed 144 men, of which 96 men are working underground.

Production Rate Milling about 6,000 tons of ore per month--- 200 tons per day.

Milling Facilities Has a mill of 200 tons per day capacity. Mill is working up to capacity at the present time. Zinc and Copper minerals are separated in the mill by means of flotation. Ores are sulphides.

Geology and Mineralization Ore occurs as replacement deposits in limestone rock. These replacement deposits are irregular lens like bodies of ore, and the grade of the ore varies within wide limits, and all of the ore mined is sent through the mill.

Ore values No information available on the average grade of the ore mined and milled. Supt. Gray, however, states that the ratio of the zinc and the copper is approximately 2 parts of zinc to 1 part of copper. In the old early workings, a lot of carbonate ores were mined. Now, however, all the ore mined is sulphide ore. Practically all the ore is zinc and copper, there being no lead. No statement was made in regard to any possible gold and silver values contained in the ore.

Old Workings The mine was first worked a number of years ago.

Past Production Mine has had a big past production.

Present Operations The Republic Mine is operated 1 shift per day. It is served by an inclined shaft (incline ~~at~~ 45 deg.) 1700 ft. deep measured on the incline. The lowest working level is the 1600 ft. level.

The Moore Mine is operated 2 shifts per day. It is a vertical shaft 592 ft. deep. The bottom level is the 545 ft. level. This shaft will be sunk an additional 200 ft. in depth, the shaft sinking operations to begin in a couple of weeks.

Marketing The Zinc concentrates run about 55 %, and are shipped to the National Zinc Co., of Bartlesville, Okla.

The Copper concentrates run from 30 to 31 per cent, and are shipped to the International Smelter at Miami, Ariz.

B204

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Cyprus Mines Leaching Project Date October 6, 1964 & March 10, 1965
District Cochise (Johnson) District, Cochise Co. Engineer Axel L. Johnson
Subject: Mine Visit and information from Peter N. Thomas, Metallurgist.

Location: Sections 25 & 26 - T. 15 S. - R. 22 E. - near the Republic shaft.

Owners: Cyprus Mines Corporation, 523 W. 6th Street, Los Angeles 14, Calif.
Local address: - P.O. Box 7187, Tucson, Ariz.

Principal Minerals: Copper ores.

Present Mining Activity: Leaching experiments on oxidized copper ores. 3 men working.

Review of Operations: Heap leaching experiments are made as follows:

A batch of ore of about 325 tons to be leached, is placed in the form of a truncated pyramid or cone on top of a concrete pad 40' x 40', the concrete pad sloping down towards a tank. This tank is 32' x 20' x 4' in depth, 15,000 gal. capacity, and has concrete bottom and plywood sides lined with polyethelene.

75 gal. per minute of water is circulated by means of a pump and a series of hoses over the ore pyramid, a 4' x 4' box being placed on top of the pyramid, from which box 24 - 3/8" hoses with holes extend downward around the periphery of the pyramid down to the base of same.

The water after circulating through the ore in the pyramid then runs by gravity into the tank. At the tank, acid is added to the required P/H.

Water is circulated on each batch of ore for a period of 4 to 7 months. Tests of the amount of copper in solution is made periodically. Some precipitation tests with iron cans are also made.

Exploration: One diamond drill by Joy Manufacturing Co. Drilling Division is working one shift in the area near the old Republic shaft.

August 31, 1942

Mr. Frank A. Ayer
Chief of Production
Copper Branch
War Production Board
Washington, D. C.

Dear Mr. Ayer:

Subject: Republic Mine
W. A. Hooton

At Mr. Hooton's request we are sending you a
photostatic copy of the block assay plan compiled by
the Peru Mining Company.

Yours very truly,

Earl F. Hastings, Assistant Director
and Projects Engineer

EFH:LP
Enc.

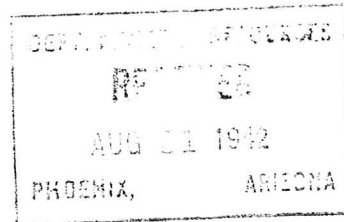
CC: Mr. W. A. Hooton

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA
Dragoon, Arizona,
August 29th, 1942.

Mr. J. S. Coupal,
Phoenix,
Arizona.



Dear Mr. Coupal,

Enclosed you will find a copy of a letter from Frank Ayer in which he states he has not seen the block assay plan of Herndon and Harrison Schmitt. If you have sent this plan to him and he has not received it, would you please send him another. I gave the photostat to Harvey Mudd and I only have my original, which I do not like to send but I remember you wrote me you had two copies made.

I thought I would go right on thru with the Defense Fund Loan even tho Harvey Mudd told me he would not wish to use any Government money. I would like to see if it is possible to get the loan and there would be no obligation on Mudd's part to use it if he did not wish to. Bruce told me he and Harvey held a long phone conversation with Frank Ayer and discussed the matter of the taking over of the property so obviously Frank Ayer knows that Mudd is going to go ahead with it yet I would like to see what his attitude is relative to the loan.

Thanking you for mailing this assay plan to Mr. Ayer and with kind regards, I am,

Very truly yours,

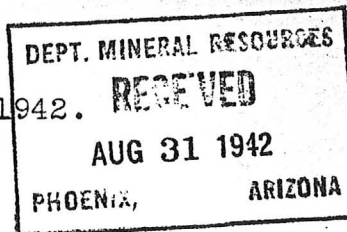
W. A. Hooton
WILLIAM A. HOOTON.

WAH:SMC

88

C O P Y .

August 27th, 1942.



Mr. W. A. Hooton,
Dragoon, Arizona.

Dear Mr. Hooton,

This is in reply to your letter of August 23rd
relative to the Republic Mine.

We note that Mrs. Libbey does not have the old assay
plans of the mine and that you do not know where they may be
found.

A copy of the block assay plan made for the Peru
Mining Company has not been received by us. You say that you
have a list of assays made by Mr. Herndon and Harrison Schmitt
which you could show on a plan map. We cannot say whether
this would serve our purpose. We are interested in receiving a
substantiation of sufficient ore reserves to assure a sub-
stantial production. However, mine maps of any description
with or without assays, are of interest. It might be well for
you to send us a copy from your old negative of the bottom
levels.

We hope that you will make every possible attempt
to arrive at some plan whereby this property can be brought into
production on a larger scale as soon as possible.

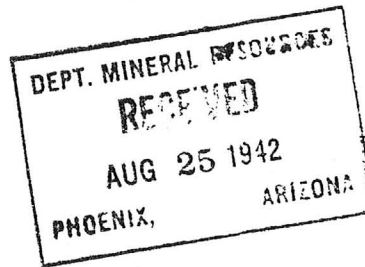
Very truly yours,

Frank A. Ayer,
Chief of Production,
Copper Branch.

BUA

REPUBLIC MINE

W. A. HOOTON



TUCSON, ARIZONA
Dragoon, Arizona.
August 23rd, 1942.

Mr. J. S. Coupal,
Phoenix,
Arizona.

Dear Mr. Coupal,

Your letter together with the enclosure was here when I returned from Los Angeles and I wish to thank you for it, however, I made arrangements with Harvey Mudd whereby I gave him an option on the property, in exchange for certain concessions, until October 1st during which time he will examine the mine and go into the preliminaries for mill construction. His representative, Mr. J. L. Bruce is at the mine now and is getting an idea of the general conditions etc and I have given him the information relative to the mill at Yuma. It seems that Mr. Mudd has quite an amount of machinery available at different points and perhaps they will be able to get a suitable mill together, that is, if they like the mine. I have not much doubt as to this phase of the matter and I think they have already made up their minds to go thru with the deal. Mr. Philip Wiseman, who was formerly interested in the mine, has given Mr. Mudd all of his data and the latter was quite familiar with it when I met him in Los Angeles.

If your friends come to see me, I shall give them this information and show them the property, if they care to see it, as there is always the chance that something may happen. In the meantime I am going ahead with Mr. Ayer and the M. R. C. in Washington and Shattuck Denn. I expect to go to Douglas and see the latter company this week and explain the situation to them.

In a letter from Mr. Ayer, which was also here when I returned yesterday, I note that he inquires where the block assay map of Herndon is and I judge from his letter he has not seen it. If this is the case, I would appreciate it if you will mail it to him as well as the other data, which I sent you. Upon investigation I find that Mrs. Libbey has no assay plan left to her by her husband therefore if there was one, it must be in some others hands and I am writing Mr. Ayer to that effect.

Thanking you for your interest, I remain,

Very truly yours,

W. A. Hooton
WILLIAM A. HOOTON.

P.S. I have paid my obligations to Peru and am free from them at last.

B118

C O P Y O F L E T T E R F R O M Mr. Frank Ayer.

Air Mail;

Mr. W. A. Hooton,
Republic Mine,
Dragoon,, Arizona.

Dear Mr. Hooton;-

This is in reply to your letter of August 12th relative to the Republic Mine.

We are glad to hear that there is an old assay plan of the Republic Mine in existence and that you are making efforts to obtain it. It seems that the holder should ~~be~~ contribute them as an act of patriotism and not try to collect money from you for their use.

We note that you say; " The block assay plan of Herndon would not be acceptable." We do not understand what this means and would be glad to hear from you regarding it.

It would be advisable for you to give us complete information as outlined in the questionnaire included with our letter of July 24th, as soon as possible.

We have not yet received the maps and reports mentioned in our letter of August 4th., If we had this data we could be working on it while waiting for your assay maps,

Very truly yours,

FRANK A. AYER,
Chief of Production,
Copper Branch.

*I sent you
this data
W.A.H.*

INTERNATIONAL MINING CORPORATION
630 FIFTH AVENUE
NEW YORK, N. Y.

NEW JERSEY OFFICE
15 EXCHANGE PLACE
JERSEY CITY, N. J.

CABLE ADDRESS
"MININGCOR" NEW YORK

Alvarado Hotel
Albuquerque, New Mexico
August 21, 1942

Mr. Earl F. Hastings
Associate Director & Project Engineer
Department of Mineral Resources
413 Home Builders Bldg.
Phoenix, Ariz.

Dear Mr. Hastings:

I have your letter of August 19 and its enclosures with reference to the properties in the Johnston district, Cochise County, Arizona. This same information has also been forwarded to me from the New York office.

I have read your letter with considerable interest and feel that we will be glad to investigate the property at least to the extent of studying in some detail the information which you say is available in Tucson and perhaps I will be able to make a short visit to the property.

I expect to be sent to California in the near future on an examination of some importance and as soon as I can definitely establish my schedule I will try to arrange to stop in Tucson, either on my way to California or on my return. I will keep you in touch with my movements and I suggest that you advise the owner that we will at least be willing to go over the available information with the idea of interesting ourselves in the property if we are sufficiently impressed with what we find.

Please accept my thanks for calling this situation to our attention and, coming from you, we will be very glad to investigate it as I have indicated above.

Please remember me to Mrs. Hastings, and with kindest personal regards, I am

Very truly yours,

W/b

James S. Wright

RECEIVED
AUG 22 1942
PHOENIX, ARIZONA

August 19, 1942

Mr. W. A. Hooton
Dragoon, Arizona

Dear Mr. Hooton:

You have not met Mr. Earl F. Hastings who has been made Assistant Director and Projects Engineer for the department. We have discussed in detail your plans and the work on the Republic Mine and feel as you do that something should be done and should be done quickly.

Hastings made a brief analysis of the high lights of the property and was so intrigued by the possibilities that he asked my permission to submit his analysis to one of the mining companies for whom he had done a lot of consulting work. He mailed this letter on Monday, August 17, and I am enclosing a copy of it to you. This letter was sent to New York. It was received at the company's headquarters and this morning Mr. James S. Wrouth, who is one of the most active members of the International Mining Corporation of 630 Fifth Avenue, New York, called Mr. Hastings on the phone from Albuquerque, New Mexico. Mr. Wrouth stated that Hastings' letter had been received in New York and that the New York office, due to the keen interest in Hastings analysis, had wired Mr. Wrouth in Albuquerque telling him to contact Hastings. Mr. Wrouth will be in Phoenix to see Hastings within a week and is intensely interested in the property.

If you have not definitely closed with other people I hope you will consider having Mr. Wrouth, representing the International Mining Corporation, meeting with you, looking over the property and discussing details for a possible deal. In this connection would it be possible for you to mail us a copy of your lease and an outline of a deal such as you would like to make on the property in order to have the International Mining Corporation install a mill, provide all working capital and really make a big producer of the Republic and other properties under your control.

I do know that the International have extreme confidence in Mr. Hastings judgment on mines and evidently do not want to pass up a good bet. I would like very much to hear from you as early as possible and if you can hold other deals in abeyance, would suggest that you do so in order to have Mr. Wrouth discuss this situation in detail with you.

With best wishes and kindest regards, I am

Yours very truly,

J. S. Coupal, Director

JSC:LP
CC: Pioneer Hotel, Tucson

B1K

185-11111
August 14, 1942

Mr. Brent N. Rickard,
American Smelting and Refining Company
Box 2229,
Tucson, Arizona.

Dear Brent:

Many thanks for yours of the 13th commenting upon the
assaying of the shipments of Mr. Hooton to the Peru Mining Company.

We will take these facts into consideration in making our
analysis and I appreciate the warning relative to that which might be
caused by assay discrepancies.

Thanking you and with kindest personal regards, I am

Yours very truly,

CHARLES F. WILLIS, Consultant
Metals Reserve Company

CFW:EH

Hdt

AMERICAN SMELTING AND REFINING COMPANY
SOUTHWESTERN ORE PURCHASING DEPARTMENT

810 VALLEY BANK BUILDING
P. O. BOX 2229
TUCSON, ARIZONA

BRENT N. RICKARD
MANAGER

August 13, 1942

Mr. Charles F. Willis
Metals Reserve Company
512 Title & Trust Building
Phoenix, Arizona

REPUBLIC-MAMMOTH MINE
W.A. HOOTON, LESSEE

Dear Mr. Willis:

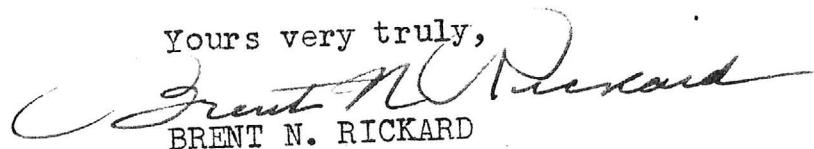
At our meeting in Phoenix on Tuesday we discussed briefly the difficulties Mr. Hooton has encountered in his dealings with Peru Mining Company. I believe one of his complaints is that Peru has not accounted for all of the copper contained in his shipments to their mill at Deming, or at least that the copper accounted for is much less than he believes it should be.

Our engineer Mr. F. M. Stephens recently visited the Republic Mine and looked over the outcome on all shipments made by Mr. Hooton to the Peru mill. In a great many of these shipments Peru reports nearly twice as much copper as is reported by Jacobs, Tucson assayer, and Critchett of El Paso. For example, on Lot 24 Peru assay on copper is 6.12%, zinc 3.5%. E.A. Jacobs reports: copper 3.32%, zinc 5.8%. Critchett reports 3.11% Cu.

There are a good many cars on which Peru apparently is too high on copper and too low on zinc. On the last cars they apparently found out what was wrong with their copper assays and checked more closely with Jacobs and Critchett.

If you are making an investigation of the situation, I suggest that you compare the assays made for Mr. Hooton by Jacobs and Critchett with those reported by Peru Mining Company. It appears that Peru had trouble with assaying and reported larger amounts of copper than the ore contained. Under these circumstances their production of copper concentrates would, of course, indicate very low recoveries.

Yours very truly,


BRENT N. RICKARD

BW

August 14, 1942

Mr. W. A. Hooton
Dragoon, Arizona

Dear Mr. Hooton:

Many thanks for your letter of August 12 and I am sorry that Mr. Shanklin and Mr. Mowinkle were not prepared for immediate action. I still hope that their report to their associates in Texas will let them get quick action.

I would greatly appreciate hearing from you as soon as you reach a decision with the Mudd-Wiseman interests, and if they are not prepared to act quickly, I am inclined to recommend the application for a "C" loan to unwater, sample, prepare proper assay maps and make a complete new set up for the application as originally planned. This should all be done without any immediate out-of-pocket expense by you. Meanwhile you could continue to ship steadily to Shattuck-Denn and 30 days' time ought to suffice to put the application for a mill in acceptable form.

With best wishes, I am

Yours very truly,

J. S. Coupal, Director

JSC:LP

B(12)

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA

Dragoon, Arizona.
August 12th, 1942.

Mr. J. S. Coupal,
Phoenix,
Arizona.

Dear Mr. Coupal,

After meeting your friend, Mr. Shanklin, yesterday, I do not believe he and his backers would be able to act quickly enough on the Republic, however, I took him over the surface yesterday and he said he might be back, after getting in touch with San Antonio and learning from them if they would be interested. I enjoyed meeting him and I put all the cards face up on the table and told him of the deals I have pending and that all are exactly the same, in other words, that I am not attempting to play one against the other.

Enclosed is a letter to Mr. Ayer, which is self explanatory. I do not believe Mrs. Libbey would dispose of these assay plans without some money and I am not prepared to spend any in this direction without definite assurance that the W. P. B. would act favorably and as this cannot be foreseen, I suppose the whole thing is off. I shall go on with my negotiations, both with Mudd-Wiseman and Shattuck Denn, however, and later on something may come of it, as they are both interested, irrespective of the Government. Mudd-Wiseman having once had the mine, are particularly interested and I wired them last night I was unable to keep my appointment in Los Angeles and suggested they come to Tucson to talk things over. I believe they will act more quickly than Shattuck Denn as corporations have to go thru certain preliminaries and proceedings, which individuals do not.

Thanking you for your introduction to Mr. Shanklin and with kind regards, I am,

Very truly yours,

William A. Hooton

WILLIAM A. HOOTON.

Dragoon, Arizona.
August 12th, 1942.

Mr. Frank A. Ayer,
Washington,
D. C.

Dear Mr. Ayer,

In answer to your letter of the 4th, I have been attempting to get the old assay plan of the Republic since learning the block assay plan of Herndon would not be acceptable. These old plans are in the possession of the wife of the former manager of the Republic, now dead, and I understand she wants several thousand dollars for them. Obviously I would not think of paying for them and, in fact, I do not think they belong to her but to the owners of the property and thru them, to me, however, I shall speak with her when I go to Tucson again tho I have small hope that she will part with them except at a price.

Thanking you again for your interest and regretting my inability to produce the complete plans, I remain,

Very truly yours,

WILLIAM A. HOOTON.

WAH:SMC

B11C

August 14, 1942

MEMORANDUM

MINE LOAN APPLICATION
REPUBLIC MINE
W. A. HOOTON

TO: W. C. Broadgate

FROM: J. S. Coupal

Hooton is trying to get complete assaying maps of the Republic Mine, but a Mrs. Libby who owns them is asking \$1500 or \$2000 for the blue print. Hooton is not inclined to spend money on this.

He has taken up the question of selling to the Mudd-Wiseman interests in Los Angeles and will sit tight until he hears from them. I have also made a contact for Hooton with Texas interests who are very much interested in considering taking over the mine, installing a mill and having Hooton retain certain interests with them.

If neither one of these deals go I have suggested to Hooton that he make application for a "C" loan to complete sampling and assay map of the lower workings and then set up the whole project in proper shape for application for an "A" loan. I do believe that sufficient information is available if properly set up to justify an "A" loan, but it would take more time than I have available to do this, hence my suggestion of a "C" loan and let Hooton engage an engineer to do the job in the right shape.

B/C

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA

Dragoon, Arizona.
August 9th, 1942.

Mr. J. S. Coupal,
Phoenix,
Arizona.

Dear Mr. Coupal,

Your letter of the 7th has just been received and I note that you have had a photostat copy of the Peru Co and that you have mailed the original and one copy to me in care of the Pioneer Hotel. I shall inquire for it tomorrow. In the future if you will address me either at Dragoon or at P.O.Box 307 in Tucson, I will be sure to receive the mail as I seldom stop at either of the hotels any more.

In the matter of the daily reports for the old operations, there are more than two years of these pages and in- as much as they are original records and also because they do not belong to me, I would rather not send them away. They comprise a mass of information relative to the former operations and as such are very valuable and will doubtless be very useful to any succeeding operator.

I can give you the complete data on the Peru shipments now as I have their final statement and on the June and July shipments to Shattuck Denn, I can give you the tonnage figures and copies of the smelter settlements for the concentrates but the daily assays and tonnages I have not yet received myself and neither are the figures for the settlements available yet for the July concentrates. It usually takes two weeks or more to get the smelter settlement sheets after their receipt of the concentrates. I am still shipping about a car per day to Shattuck Denn but of course, these figures will not be available until the middle of September.

You must have a copy of the Technical data I filled out when Mr. Baalam was here as I enclosed a copy in one of my letters. Altho a loan for \$5,000. might be secured for the purpose of unwatering the 900 level, still it would be a loan and as such would have to be repaid by me. And, I explained in one of my letters to you, I do not feel it incumbent upon me to spend \$5,000. to put more ore in sight when I already have sufficient to last me for a long time to come. My position is, if the Government wants to increase the production, I have gone far enough at my own expense and it is their turn to spend some money now if they want the increased production. To borrow money for a mill is an altogether different matter; that would increase production and also increase my profits but this loan to give them further information at my expense, when I have already spent

B162

Mr. J. S. Coupal, Page 2.

\$40,000. or \$50,000. in the mine and when I do not need the ore for my operations, is going into debt for nothing. I believe you must see my point. Even if this were done, they would demand something else or something would not be to their liking and so I say, the hell with them. I spent \$20.00 yesterday in a long distance call to try and get the old assay plans of the different levels and I may perhaps succeed in obtaining them, in which event I shall send them to you, after having a copy made. I will know about this by the middle of the week.

If the gentleman whom you mention in your letter calls at the mine or in Tucson, and he can always reach me in care of E. J. Ewing, 316 East 3rd Street, - I shall be happy to go into any matter in which he may be interested.

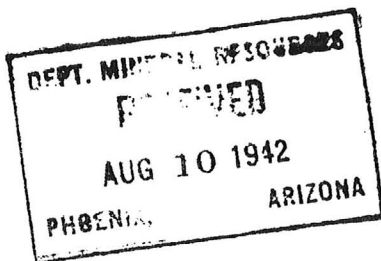
Thanking you once again for your helpfulness and your interest and trusting that I may be able to secure the assay plans without their costing me \$5,000. I am, with kind regards to you and Mr. Willis,

Very truly yours,

A handwritten signature in cursive script, reading "W. A. Hooton".

WILLIAM A. HOOTON.

WAH:SMC



Washington, D.C.
Aug. 8, 1942

SUBJECT: Mine Loan Application (A)
Republic Mine
W. A. Hooton

I should certainly like to be informed just what is going on in this case.

The Copper Branch, WPB, inform me that they hear from Hooton that he has a deal on to sell the mine to Shattuck Denn and that he implies he has other opportunities to sell.

Also that he has gone over to see the Penn mill for them.

Also that there is some talk of moving the Shattuck mill to the Republic property.

In view of your comment that he will apply for a C loan to get figures from which to calculate his ore reserves, I can't quite get the picture.

It also occurs to me that the figures from which Peru figured the block values on the so-called Peru Map should be available and that if they would not give them to Hooton, we might have the WPB ask for them.

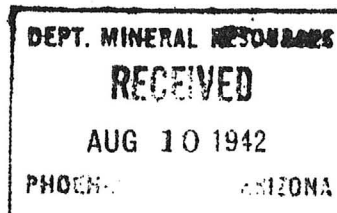
With this material in hand, and if he will answer the technical questions about costs, flow sheet, etc., asked by the Copper Branch in the questionnaire I mentioned, there seems no reason why we could not file the applications in duplicate as I have already mentioned, and I believe we could get reasonably quick action.

However, if he has a deal with Shattuck to take over the whole deal that is a different story.

Bill
Bill Broadgate

WASHINGTON, D.C.
Aug. 7, 1942

SUBJECT: Mine Loan Application,
Republic Mine
W. A. Hooton



As per your wire, I returned the Republic Map.

I am still holding the RFC applications for the A loan.

As you know, the A or General Loan is a pet of the RFC, which has had good experience with them because of the complete security of the element of satisfactory ore reserves.

I should judge from your memo that there is not enough ore exposed above the water to show sufficient security for the \$100,000 asked for if the profits on operating are applied to amortizing over a reasonable time, the investment.

When you see Hooton, ask him to show you the WPB questionnaires... especially the one which he received second, and note the inquiries regarding the milling situation. They are quite similar, but not precisely, to the one on zinc I sent you for the custom mill setup. I am going to get a copy for you, as I believe this questionnaire of the copper branch is better laid out than that of the zinc section.

It is too bad that Hooton is not prepared to supply proper information as with it in hand, I believe I could get pretty good action on this loan.

But failing this, I guess the Class C is the best foundation. I am interested in how this will work out, as although it is using the C loan for a very sensible purpose as a foundation for an A loan, the usual basis is for a B loan.

Bill
Bill Broadgate

Cochise

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1992

ARIMETCO INTERNATIONAL INC.

6245 E. Broadway, Suite 350, Tucson, AZ 85711, Phone 745-8882.

President H. Roy Shipes

Vice President John Bracale

Johnson Mine T15S R22E Sec. 26

Phone 586-2241. Employees: 46 - Open pit copper mine - Heap and dump leaching - Solvent extraction electrowinning plant - Capacity 30,000 lb. copper per day.

Van Dyke T1N R15E Sec. 5

P.O. Box 747, Miami, AZ 85539, Phone 473-2421. In-situ leach-solvent extraction electrowinning feasibility studies underway.

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1991

ARIMETCO INTERNATIONAL INC.

8835 E. Speedway Blvd. #A, Tucson, AZ 85710, Phone 290-9200

PresidentH.

Roy Shipes

Vice President John

Bracale

Johnson Mine T15S R22E Sec. 26

Employees: 46 - Open pit copper mine - Heap and dump leaching - Solvent
extraction electrowinning plant - Capacity 30,000 lb. copper per day.

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1990

ARIMETCO INTERNATIONAL INC.

8835 E. Speedway Blvd. #A, Tucson, AZ 85710, Phone 290-9200

PresidentH. Roy Shipes

Vice President John Bracalek

Johnson Mine T15S R22E Sec. 26

Employees: 46 - Open pit copper mine - Heap and dump leaching - Solvent
extraction electrowinning plant - Capacity 30,000 lb. copper per day.

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1989

BARIMETCO INC.

8835 E. Speedway Blvd. #A, Tucson, 85710, Phone - 290-9200

PresidentH. Roy Shipes
Vice President John Bracale

Johnson Mine

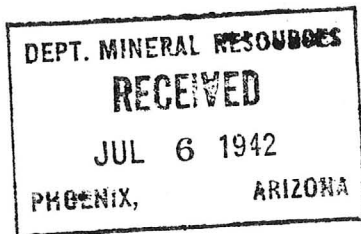
T15S R22E Sec. 26

Open pit copper mine - Heap and dump leaching - Solvent extraction
electrowinning plant under construction - Capacity 25,000 lb. copper per
day - Anticipated employment 46 - mine start up scheduled for March 1990.

| | | | | | |
|---|--|--|----------------|------------|--|
| * Cyprus Johnson Copper Co. (subsidiary of Amoco Minerals Co. of Standard Oil Co., Indiana) | Johnson Mine near Benson, AZ | Shut down open-pit stripping operations; 14 out of 75 employees laid off. | Jan. 15 | Indefinite | <i>Minerals & Materials</i> |
| Phelps Dodge, Inc. | Tyrone Operations, NM | 50 laid off. | December | Indefinite | Yearend employment at Tyrone was 112, down from around 800 early in 1982. |
| Quintana Minerals Corp. | Copper Flat Mine, NM | 28 laid off. | December | Indefinite | Yearend employment was 20, down from a peak of 227 at midyear following the Feb./March startup. |
| IRON ORE and STEEL | | | | | |
| Armco, Inc. | Houston, TX and Kansas City, MO | Shut down 300,000 tpy of steelmaking capacity; 2,200 laid off. | January | Permanent | |
| Bethlehem Steel Corp. | Lackawanna, NY and Johnstown, PA | Announced planned closing of most steel-making operations in Lackawanna and a reorganization of operations in Johnstown; 9,600-10,000 jobs will be eliminated. | By end of 1983 | Permanent | With this closure, the announced September shutdown of its Los Angeles plant, and the sale of its Seattle plant, Bethlehem's overall capacity will be reduced from 22 to 18 million tpy. |
| " | Los Angeles, CA | Shut down steel production. | December | Permanent | Peak employment was 1,500. |
| Cleveland-Cliffs Iron Co. | Empire Mine, MI | Reduced production to 40% of capacity; 480 laid off. | Jan. 15 | Indefinite | Production resumed in late November at 75% of capacity after shutdown of 6 months. |
| Hanna Mining Co. | Groveland Mine and pelletizing plant, MI | Shut down. | December | Permanent | Facilities had been idle since January 1981; permanent closing reduces U.S. pellet capacity by 2 million tons of pellets per year to 87 million tpy. |
| Hibbing Taconite Co. | Hibbing, MN | Shut down; 900 laid off. | Jan. 29 | 11 weeks | A major factor in the shutdown was the decision by Bethlehem Steel Co., which owns 62% of the Hibbing plant, to close its Lackawanna plant. |
| Pea Ridge Iron Ore Co. | Pea Ridge mine and plant, MO | Reduced operations; 220 laid off. | December | Indefinite | At the request of Granite City Steel Co., the only current buyer of the mine's pellets, shipments were temporarily stopped. The mine will produce only enough ore to feed the concentrator, and the plant will continue to produce only heavy media magnetite. |
| LEAD and ZINC | | | | | |
| Ozark Lead Co. | Milliken Mine and Mill, MO | Reduced production; 85 laid off. | January | Indefinite | Ozark's recently completed expansion at the facility included 2 new shafts and increased capacity of the concentrator to 40,000 tons of ore on a 6-day basis. |

REPUBLIC MINE

W. A. HOOTON



TUCSON, ARIZONA

Dragoon, Arizona.

July 2nd, 1942.

Mr. J. S. Coupal, Director,
Phoenix,
Arizona.

Dear Mr. Coupal;-

Permit me to thank you for your recent letter and the one advising me that Mr. Willis will be in Tucson at the Pioneer Hotel. I shall make every attempt to meet Mr. Willis tomorrow at the appointed time.

The proposal for me to build a mill at the Republic is quite in accord with my wishes but I do not see how a way can be found to do this. As you know, my resources are very limited and have been further limited by the failure of the Metals Reserve to pay me the premiums on the ore I have shipped to the Peru Mining Co., therefore it would seem to be beyond my ability to construct a mill.

The Peru Mining Company have not designated their willingness to build a mill under the provisions of my agreement with them and a counter offer I recently submitted to them has been rejected, so I am endeavoring to secure their acquiescence to a cancellation of this agreement after which, I shall be in a position to make an arrangement with a major copper company for such an installation. Obviously I would much prefer to install a mill myself but I cannot see where the funds would be forthcoming. On the other hand, I feel that a mill on the property would increase the production to a marked degree and in the light of the demand for copper by the Defense Program, I believe it would be a patriotic move.

I shall be happy to go into all these matters with Mr. Willis when he is in Tucson and if a way can be found to relieve me by the payment of my past due premiums and also if a way can be found to finance the construction of a mill, I trust we can find the solution.

Thanking you once again for your interest, I am,

Very truly yours,

W. A. Hooton
WILLIAM A. HOOTON.

WAH:SMC

B35

To: Geo. A. Ballam

Phoenix, Arizona
July 6, 1942

OFFICE MEMO: SUBJECT - REPUBLIC MINE

We are taking up the question of straightening out Mr. Hooten on the Republic Mine, and also sounding out Washington regarding a defense plant project for getting a mill in for Hooten.

I will write you later in the week regarding this, but believe that I will assign you the job of getting the full details for Hooten in order to assist in setting up this project. Will advise you definitely later on this project, but wanted to get this advance word to you.

J. S. Coupal,
Director

C O P Y

Dragoon, Arizona.
July 3rd, 1942.

DeWitt C. Smith,
Metals Reserve Co.,
Washington,
D. C.

Dear Mr. Smith:-

After a long conversation with Mr. Chas Willis, this morning, I am writing you in the hope that you will be able to give me some information relative to the premium payments on ore I shipped to the Peru Mining Co's mill in Deming N. M.

In April and May I shipped a total of fifty one cars of ore to the Peru Mining Co. This ore was a copper-zinc ore and to date I have received from the Peru Mining Co. a statement purporting to show eighteen cars were milled in April and twenty five in May. The balance of eight cars perhaps were milled in June, - I have not been advised.

I have learned from Mr. Willis that premium payments are going forward without delay, yet I have received no premium for the April shipments, nor have I signed any affidavits whatsoever for zinc shipments. I have signed affidavits for two cars of copper concentrates shipped by the Peru Mining Co. to the A. S. & R. at El Paso and the A. S. & R. records in the Tucson office of Mr. Brent C. Rickard show a total of four cars of copper concentrates shipped to the El Paso plant by the Peru Mining Co. Inasmuch as the Peru Mining Co. milled no copper ore for any one but me it would seem that these cars of concentrates were mined, yet I have signed no affidavits for them and I would appreciate advice from you whether these affidavits should come from the Peru Mining Co. or the smelter. The A. S. & R. records show they were shipped in the name of the Peru Mining Co., therefore, I would assume this company should send the affidavits to me for my signature.

The zinc concentrates were shipped to the Dumas, Texas, smelter of the American Zinc Company, of Illinois, and a telegram to them asking for information brought the reply that the necessary papers have been received by them and that they would remit their check upon the receipt of the money from the Metals Reserve. This exchange of telegrams occurred approximately two weeks ago and I am wondering if the Metals Reserve check were sent to the Peru Mining Company, or whether it has not yet been remitted, at least, I have not yet received any premium payments whatsoever.

B33

Mr. DeWitt C. Smith

-2-

July 3rd, 1942

I am sure you are aware of the fact that small operations, like mine, are dependent upon the premium payments for the continuance of their operations and I feel reasonably sure that the April and May premiums have been paid by the Metals Reserve, but inasmuch as I have not received them my current bills are unpaid and last month I was forced to lay off a portion of my crew because I could not meet the payroll without these premium payments.

The Peru Mining Co. notified me in the latter part of May that they could take no more of my ore; apparently their mill, which they have installed for the prime purpose of treating this ore, was inadequate and as a result I have been forced to ship to the Shattuck Denn mill, in Bisbee, which, unfortunately, has not the capacity to take more than ten or twelve hundred tons of my ore per month. This has materially reduced my output and of course badly needed production of copper for the defense program.

In conclusion, I shall greatly appreciate it if you will advise me as promptly as you can whether or not these April and May premiums on my ore have been paid and if not, what steps I should take to clear up the situation so that I shall not have to further curtail my operations because of a lack of operating capital.

Thanking you, I beg to remain

Yours very truly,

WILLIAM A. HOOTON

WAH:SMC

B32

C O P Y

R

Dragoon, Arizona
July 3, 1942

Mr. Frank C. Ayer
War Production Board
Copper Branch
Washington, D. C.

Dear Mr. Ayer:

In a conversation this morning with Mr. Charles Willis, who has recently been in Washington, I gathered there might be a possibility of interesting the R.F.C. in the construction of a mill on the Republic property.

I had an agreement with the Peru Mining Company for the construction of a mill, but after having signed this agreement apparently they were unwilling to go through with the deal without concessions on my part. They made me an offer which was so obviously absurd from my point of view that I could not consider it, therefore I made them a counter-offer which they have recently rejected. So, it would seem that they have no further interest in a mill building project. I have recently written them to this effect and have asked them for an expression of their ideas relative to the cancellation of my agreement with them inasmuch as I, as an individual, have not the financial resources for the construction of such a mill and inasmuch as they are not interested in its construction under our agreement it would seem on a basis of patriotism alone that the agreement should be cancelled and arrangements made for the installation of a mill either through Government aid or through some major copper company.

In May, after shipping 51 cars of ore, the Peru Mining Company notified me not to ship any more to them. Obviously, their mill, or the portion of it which they had designed for the prime purpose of treating my ore, was inadequately equipped to make even a fair recovery of the values, therefore during June I have been shipping to the Shattuck Denn mill, in Bisbee. However, this latter mill is not of large capacity and they are able to treat only 1,000 to 1,200 tons of my ore per month. Inasmuch as I am able to produce 100 tons per day and with a minimum of stope preparation, 200 tons per day, it would seem that a way might be found to take advantage of all the production from the property, hence this letter of inquiry relative to the possibility of the R.F.C. financing a mill.

All of the ore I have shipped has shown a profit and all of this profit I have put back into the mine. In the 8 or 9 months during which I have been producing, approximately \$50,000 has gone into the rehabilitation of the property and above the 700 ft. level a production of 100 tons per day can easily be maintained over a

B31

July 3, 1942

period of approximately three years. My pumping equipment is overhauled and in good working order and with the 900 ft. level prepared for stoping, an additional three years' supply can be had. Although I realize fully the hazard of relying on conditions under water, nevertheless I have the daily reports for over three years of former operations both above and below the present water level and contrary to usual results, I have found these reports extremely accurate. Therefore, I believe I am warranted in thinking that conditions on the 900 level, as well as those to the 1350 or bottom level, are substantially the same as shown in the old daily mine reports. But, there is sufficient measurable ore above the 700 ft. level, where I am now mining, to insure a minimum of 100 tons per day of profitable commercial ore at the price of 17¢ for copper and 11¢ for zinc. Although the Peru Mining Company apparently made a very low extraction, the Shattuck Denn mill, on the contrary, has found no difficulty in making a 90%, or better, recovery of the values, thus indicating the amenability of the ore to selective flotation.

I have been informed that a practically new mill, complete in every detail including power plant, can be purchased for \$40,000. This mill contains standard flotation and ball mill units, as well as all motors, crushers, piping and other units including a building, all in practically new condition. Realizing the difficulty of securing new equipment, I believe this would be a factor in any decision by the R.F.C. to consider such a proposal. Without having investigated the matter fully, I would assume that this mill could be torn down, moved, and erected at a figure not to exceed \$25,000. The mill is of approximately 200 tons capacity and I feel confident that this tonnage I could supply from the Republic alone, not considering the Mammoth or other adjacent properties. In addition to the purchase of this mill and the expense required to move and reconstruct it on the Republic, I should have an operating fund of about \$25,000, or a total of slightly over \$100,000. In the meantime, while the mill was being constructed, I could continue my shipments to the Shattuck Denn as long as they were in a position to receive them, thus partially at least accumulating a profit which would go into operating capital.

I should perhaps advise you that the ore so far shipped to Shattuck Denn has averaged approximately 4.5% copper and 5.5% zinc. Freight, treatment and hauling charges amount to \$6.00 per ton, mining and overhead \$2.50 per ton, therefore you can readily see the saving which could be made on a 200 ton per day operation over the present one of 30 or 40 tons per day.

Providing the R.F.C. would construct this 200 ton plant on a lend-lease basis, giving me the right to purchase same and also making a loan to me for operating capital, in the event I should require same at the time of the completion of the mill, I believe the R.F.C. would be perfectly safe in securing the return of the investment,

B30

Mr. Frank C. Ayer


-3-

July 3, 1942

from the ore presently in sight above the 700 ft. level. The return of the money to the R.F.C. could be amortized under usual procedure in such cases and in the event the war should end more quickly than is now anticipated, or before the total amount has been amortized, an option could be given me for the purchase of the mill for the balance of the amount.

Thanking you for any consideration you may see fit to give this matter, I am, with kind regards,

Very truly yours,


WILLIAM A. HOOTON

WAH:SMC

B29

June 17, 1942

MEMO TO CHARLIE

REPUBLIC-MAMMOTH

FROM SAM

I am enclosing a memo from Geo. A. Ballam on the interview he had with
Mr. Hooton.

628

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA

Dragoon, Arizona.
June 15th, 1942.

Mr. Chas F. Willis,
Washington,
D. C.

Dear Mr. Willis,

In accordance with our telephone conversation of today I am hereby giving you the pertinent facts relative to premiums, which have not as yet been paid by the Metals Reserve Corporation, for ore which was milled in April by the Peru Mining Co. It is obvious that these premiums should have been paid by this date and it is also obvious that small operators depend upon these premiums for their operating funds and their profit. Failure to receive these payments has necessitated my laying off of about 20 men today and if they are not received by the end of the month, I shall be forced to lay off the balance of the crew. From the middle of April until the 26th of May, or about five weeks, I shipped a total of 51 cars of ore. The settlement sheets of the Peru Mining Company, where this ore was milled, show over 160,000 pounds of copper and 220,000 of zinc with eight cars still to be accounted for. In the present emergency and with the demand for copper this production is well worth while, especially as I can continue this rate or increase it, and it would seem that some means could be devised whereby the production could be continued. Above the 700 level in the mine, the Peru Mining Company's engineers figured about 90,000 tons of ore immediately available and in addition to this there are approximately 100,000 tons in old pillars and the backs of old stopes that can easily be made available. Between the 700 and 800 is the water level and from reports of the old company and reports from men who have worked in the mine below the 700, it seems probable that several hundred thousand tons are measurable and in sight. Altho I realize it is hazardous to rely on such reports, in this case the old company reports have been accurate in every detail in the upper workings therefore I believe the chances are excellent that they will also be found to be accurate in the portion of the mine which is under water.

I have made preparations to unwater the mine down to the 900 but altho everything is in readiness to do so, I have been unable to start this work owing to my lack of funds. All of the money I have have received from my shipments has gone into the mine for the purpose of opening up old stopes and preparing them for production and in rehabilitating the old machinery, pumps etc., and considering the few months I have been operating the mine, it has produced considerable ore and the present showing is very favorable.

Due to the fact that the equipment in the Peru mill is not adequate to treat the ore, I am now shipping to Shattuck Denn in Bisbee at

B27

Mr. Chas F. Willis, Page 2.

the rate of one car per day but inasmuch as the capacity of the Shattuck Denn mill is limited, I shall only be able to ship about 1,000 tons to them this month, however, this tonnage will be milled before the end of the month and I am hoping the premium will be paid in August. I am hoping they will be able to take at least 1,500 tons next month but in the event they are not, I shall have to ship to a smelter, as I formerly did, and thus lose all the zinc values and this is regrettable as the Government needs the metal and I need the additional payment for the zinc content in the ore.

I shall appreciate whatever you are able to do to hasten the premium payments as I do not wish to shut down the operation and await the payment before starting again. As you know, I would lose the best men in my crew if I were to shut down completely and I have already lost some good men among those I laid off today. Thanking you in advance for your efforts in my behalf, I am,

Very truly yours,



WILLIAM A. HOOTON.

P.S. I understand the Peru Company shipped my copper concentrates to the A. S. & R. plant at El Paso and the zinc concentrates to the American Zinc Company at Dumas, Texas.

WAH:SMC

B 26

June 15, 1942

MEMORANDUM

REPUBLIC-MAMMOTH

TO: J.S.Coupal
From: George A. Ballam

DEPT. MINERAL RESOURCES

RECEIVED

JUN 17 1942

Saw Bill Hooton this AM. He is hopping mad and is laying off 15 men today. Claims to have \$18,000 tied up in premium payments, and refuses to apply to bank for further loans. Has still six months to go with Peru, and cannot get release. Peru examined property re. ~~western~~ building mill, 300 tons, finding 90,000 tons of milling ore positively blocked out, and 150,000 tons in sight.

He is addressing letter to War Production Board defining in detail his reason for shutting down until July 1st or later. If this information will aid Mr. Willis in clearing up this situation, he has authorized me to present it.

George A. Ballam

BAS

XXXXXXXXXXXXXXXXXXXXXXX

112 Home Builders Bldg.

June 1, 1942

Mr. George H. Bott
Box 428
Wilcox, Arizona

Dear George:

Many thanks for your letter of May 27 and I am forwarding a copy of my letter to our engineer, George A. Ballam, who covers the Dragoon district, and asking him to make inquiries regarding the Peru Mining and Milling Company of Deming, New Mexico regarding the erection of a custom mill at the Republic Mine being operated by William A. Hooton.

It would be a fine thing for the district if we could get such a mill and we will see how we can be of assistance in furthering such a plan.

With best wishes, I am

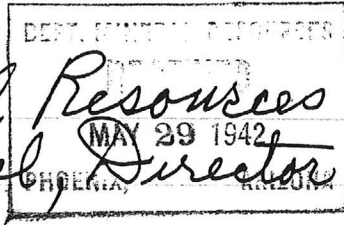
Yours very truly,

J. S. Coupal, Director

JSC:LP

B24

Dept of Mineral Resources
Mr. Sam Coupal, Director



B 2 428
Willcox, Ariz
May 27, 1942

Hello:

Have you heard anything about the ~~Peru~~ Peru Mining & Milling of Dressing New Mexico putting up a mill at Dagoon or the Johnson Mining Dist.?

See attached letter to Mr. Willis. Don't you believe you may be able to get a slant on it. I want more information while I am waiting also a cue as to which way to shoot to get the best results.

You have been over the state and know how much depends on if there is a profit margin when the freight is paid.

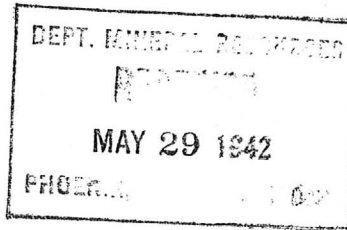
Think it over and drop me a line. Thanks

How is it with you now?

Yours truly,

George H. Both B23

Copy



Box 428
Willcox, Ariz
May 25, 1942.

Mr. Charles Willis, Sec. A.S.M.O.A.
Phoenix, Ariz.

Dear Sir:

Thanks for the two books, "Financing Mines" and Galbreith's
Arizona Mining Laws"

I am interested in a problem pretty big from one
angle. Stated it is this:

William A Hooton, Dragoon Ariz. (Johnson Mining Dist.) mines
a R.R. carload of copperzinc ore daily, ships to Peru Milling
and Mining Co. 600 ton copper, silver, zinc (no lead) concentrator
at Deming, N. Mexico. Mr Hooton informs me that the Peru Co. has
geologists & engineers at his camp to check the feasibility of
erecting a mill. He also states that the U.S.W.P.B. favors the
establishment of the mill. (So are about 1000 members of A.S.M.O.
A. all over Arizona and others too, who would like very much
indeed for ~~the~~ it to be a custom mill. Just think of the saving
in freight alone.

Just now these Peru people are waiting while Mr. Hooton
pumps out the lower levels of his mine.

What procedure would you advise to get after this mill
from all angles and try our darndest to get it as a custom
mill. I'll put time and money into it if there is any hope of
getting it.

Yours sincerely,

George H. Roth
B72

Copy of letter from Peru Mining Co. to W. A. Hooton

PERU MINING COMPANY

Deming, N.M.

May 29, 1942

Mr. W. A. Hooton,
Dragoon, Arizona.

Dear Mr. Hooton:

Mr. Johnson made up a statement of your account, including the ore received last week. This account includes final settlement on Lots 1 to 18 inclusive, and preliminary settlements on Lots 19 to 39 inclusive. Also, an estimated credit on eight cars placed on stockpile and on which we have but preliminary samples. There still remain to be accounted for, four cars received this week, making a total of 51 cars altogether. We will account for the four cars next week and are enclosing our check for \$916.77.

There are two items of demurrage, one of \$10.00 and one of \$60.50 which were incurred due to your shipping the ore early. In addition, we have demurrage bill for May which is quite large but is not for your account as this was due to our holding some of the cars in storage here.

I have assumed that on the 18 cars which we treated, you should receive a premium of \$1,015.05 from copper and a premium of \$1,815.00 on the zinc. Based on this, and considering that we have now treated 25 cars this month which is of a slightly different grade, I estimate that you will receive for zinc a premium of \$2,200.00 and for copper a premium of \$2,500.00. I trust this information will be sufficient. However, immediately after the first of the month we will know the amount of zinc concentrates and copper concentrates shipped and produced from your ore, at which time we will advise you the number of pounds of contained and payable zinc and copper.

With kindest personal regards, I am

Very truly yours,

PERU MINING CO.,

(signed) Jos. H. Taylor
Vice-President

JHT/w
Encls.

COPY

B21

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA

Dragoon, Arizona.
July 15th, 1942.

Mr. Chas. F. Willis,
Phoenix,
Arizona.

Dear Mr. Willis;-

Several months ago, when I was attempting to negotiate a loan with the Southern Arizona Bank & Trust Co in Tucson, I remember showing Mr. d'Autremont two affidavits. While I do not remember what these represented, I have thought that one of them might be for the zinc premium of \$1,815.00 which was recently paid. Altho Mr. d'Autremont did not lend me the money on these affidavits, he kept them and that is the reason I have no copy in my office at the mine. I thought of this circumstance a few days ago, since Mr. Baalam has been here and mentioned the fact to him. The next time I go to Tucson, I shall ask d'Autremont to let me have these affidavits and if one of them is for the April zinc production, I shall advise you immediately. When the copper affidavits were mailed to me, there was always an extra copy for my files and when I told you I had no copies of zinc affidavits, it was because I had repeatedly looked thru the files and had not found any, however, the circumstance of the bank referred to above, might clear up the fact of the one zinc affidavit but I am positive I have no others and have not signed any others for zinc.

Very truly yours,

William A. Hooton
WILLIAM A. HOOTON.

B20

May 26, 1942

MEMORANDUM

REPUBLIC MINE

On April 29 JSC and CFW, while in Tucson, called on Maurice d'Autremont to talk over plans for Tucson Council. While discussing general mining matters Mr. ^{Hooten}~~Hutton~~, operating the Republic Mine, called and told of his having some \$20,000 operating capital tied up due to the delay in receiving the premium payments due. He desired a loan to carry him over. We called on Hubert d'Autremont, Southern Arizona Bank Building, and explained in detail what the premium payments were, how they were to be paid by the government and causes for the present delay. After a lengthy discussion Mr. Hubert d'Autremont advised Mr. Hutton to call the next day to arrange for loan

PHILIP WISEMAN
1206 PACIFIC MUTUAL BLDG.
LOS ANGELES

June 7, 1941

Department of Mineral Resources
Capitol Building
Phoenix, Arizona

Gentlemen:

Your circular letters to the Potential
Copper Producers of Arizona, addressed to the Republic
Mine, c/o Philip Wiseman, 1206 Pacific Mutual Building,
Los Angeles, California, have been received.

As I am no longer interested in this property,
the communications have been forwarded to Mr. Roy B.
Wilson, Young, Arizona, who is president of the Arizona
United Development Company which company is the owner
of the Republic Mine and no doubt he will reply to your
questionnaire in due course.

Yours very truly,

PHILIP WISEMAN

PW:RC

cc - Roy B. Wilson

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Republic

Date Sept. 25, 1942

District Johnson - Cochise

Engineer George A. Ballam

Subject: Production Possibilities Survey.

Supplementing previous reports on this property; the Mudd-Wiseman interests will officially take over management Oct. 1, and Bill Hooton informed me yesterday that publicity may be released.

There is a feeling, without mentioning names, that the new operating company may stress development rather than production. No conclusions can be reached for some time, but it might be well to urge immediate production in the event the rumors are founded.

In view of the fact that many conservative estimates show nearly 100,000 tons of ore immediately available above the 700 level, with an additional 40,000 tons of good mill ore already on the dump, even proposed mill operation on the property should be pushed to capacity. In view of the large reserves of partially developed ore, no development program can be justified at the expense of capacity production. Within the next six months.

Attached is copy of Hooton's report which was used in application for WPB mill.

George A. Ballam

- A. Reports by J. B. Tenney and Chas. Botsford both state 200,000 tons available above 700 level. These reports made in 1924.

Report for Peru Mining Co. April 1942 states approximately 87,000 tons immediately available above 700 level.

Copies of these reports will be furnished later.

- B. Produce copper and zinc.

- C. Lime replacement deposit.

- D. Assay plan made by Peru Mining Co will be furnished later.

(e) Ore reserves are backs of old stopes, pillars and large unmined sections open on all four sides, above 700 level.

(f) There is a drift on the 900 level approximately 900 feet long with two small stopes on each end the balance of the block being unmined. Water now stands at the 800 level therefore this block of ground is not open for sampling, however, the maps show this drift to be on the same bed as was mined above to the surface. Reports from men now working at the property and who formerly worked on this level as well as daily mine reports and assays when this drift was being driven all tend to show this level is all in ore. Assuming this block to be ore, there is a length of 900 ft a height of 200 ft, to the 700, and an average width of 12 ft making a tonnage of approximately 200,000. Under this 900 drift down to the bottom or 1350 level there are no long drifts, however, stopes extend out for a distance of approximately 200 ft, the sides of which are apparently all in ore according to assay plans. Assuming the block from the 900 to the 1,350 level to be probable ore there is a tonnage of about 450,000. Tenney's report shows his method of computing this probable and possible ore.

- E. Peru Mining Co has these assay samples.

- F. The ore body is a replacement in Paleozoic limestone and lies within a broad zone of garnetite from 500 to 600 feet in width. The unusual regularity of the productive bed is indicated by a stope length of about 1,500 feet. This is one continuous stope on the same bed, averaging from 10 to forty feet in thickness.

- G. (1) Recent production 50 tons per day since mining was started in November 1941. With more stope preparation 200 tons per day can easily be produced.
(2) Open stope and pillar method of mining as no timber is needed.
(3) Workings are dry above 700 level. Below 700 the mine takes about 75 gals per minute.
(4) As all pumping equipment is in good shape it is planned to unwater the 900 level so that stoping can be started there. It is planned to install air and water lines to within about 150 feet from the surface and by using slushers break and draw off both pillars and blocks of unmined ground all the way down to the 700 level, taking it all out from the haulage way on the 700 to the shaft. In this manner all of the

large pillars can be mined safely.

- (5) There are two compressors steam driven of 1,000 ft capacity and one Diesel driven compressor of 565 ft capacity as well as several smaller ones. Two gasoline driven hoists are in good condition and are being used daily on the Republic and Mammoth shafts. Portable gas driven compressors are rented and are now in use as fuel is too expensive to use in the boilers. Bunk houses for thirty men are in fair shape as is the boarding house and numerous other houses and shacks, all of which are in use.
- (6) This property comprises all of the productive mines in the district, - Republic, Mammoth, Copper Chief, Peabody etc. The total production from these mines in copper and silver has been over \$20,000,000. with copper accounting for practically all of the amount. Up to last November, when mining was resumed, no zinc has ever been paid for.

H. (a) Product is now being shipped to Custom Mill.

- (2) (a) Ore is shipped to the Shattuck Denn mill at Bisbee and copies of mill returns are attached. Formerly ore was shipped to the Fern Mining Co's mill at Denning, N/M. Settlement sheets from this mill are also attached. Previously ore was shipped to the smelter of the International Smelting & Refining Co at Miami, Arizona but of course, only the copper content was paid for. These copies of settlements are also attached.

(3) (a) Selective Flotation .

(b) Flow sheet of Shattuck Denn mill is planned to be used as this mill is now treating the ore, separating the copper and zinc into concentrates and making a recovery of 90%. It is planned to construct a 200 ton plant.

(d) The mill site is within 200 feet from the collar of the Republic shaft and has a slope which would be ideal for mill.

(e) There is ample room and grade for tailings disposal on this property without running onto other ground.

(f) There are no streams or lakes which would be polluted.

(g) There is a complete mill of about 150 tons capacity and which is nearly new with power plant for sale near Yuma, Arizona for \$40,000 complete with buildings etc and it is planned to move this mill and install it on the property. The approximate cost of moving and constructing would cost approximately \$30,000 to \$35,000.

J. (1) The water supply would come from the Republic and Copper Chief shafts, each making approximately 75 gals per minute or 150 gals total, which would be sufficient for a 200 ton plant, using a portion of the water over again.

- K. (1) Power required would approximate 450 HP
- (2) Distance to nearest power line is 8 miles.
- (3) Power costs for this HP are .175 and the cost of extending line to the property would be about \$12,500.
- (4) No electric power in district.
- (5) If electric power were available no other kind would be used.

- L. (1) There are no unemployment conditions in the district at present as most of the Mexican labor is working at this property.
(2) Experienced miners, mill men and operators are available due to the closing of gold and silver mines and mills thruout the State.
(3) About fifty more men would be required to produce 200 tons and mill same.
(4) Current wages paid are \$5.00 for mechanics; \$4.50 and \$5.00 for miners and machine men and \$.00 for muckers.
(5) About 30 to 40 men can be accomodated with the present facilities now on the property.
- M. The main line of the Southern Pacific railroad runs within six miles of the property and a good level graveled road connects with the mine.
- N. The Republic has produced approximately 500,000 tons of ore and estimates vary from a potential production of three million to ten million tons.
(a) Mining costs at present, producing about 50 tons per day, are \$1.90 overall including overhead.
(b) \$19.00 per ton of copper and \$19.00 per ton of zinc.
(c) Figures available from Shattuck Denn Mining Corp.

Coronado Copper and Zinc Co
- Harvey Mudd Interests
Republic mine unit.

The Republic mine is located 6 miles north Dragoon - Arizona. This property has been a good producer of copper ore. It has a record of several hundred thousand dollars.

There at one time was a smelter and quite a good sized town. On the property now there is a dozen buildings.

Metals being developed now are copper and zinc. The ore carry $2\frac{1}{2}\%$ - $4\frac{1}{2}\%$ copper and $5\frac{1}{2}\%$ - $10\frac{1}{2}\%$ zinc.

The property is developed by means of a shaft 700ft deep, then 500ft + cut and then 600ft shaft below the + cut level.

Prospecting is now being done by diamond drilling. Two drills are working on the surface, and two drills working underground. Results are very satisfactory and are locating large lenses of ore.

Formation is a garnitized limestone.

Plans are being made for expansion of mine. 22 men are employed.

(over)

Mr George Nicholson is anxious that
of operations.
I learned from Mr Nicholson that
the German unit at Cameron Canyon
is doing an extensive sampling & testing
pit on their other outcrops there.
The work consists mostly of dry drilling
and blasting with powder.
The Coronado Company is a private
business of large amounts of other work
done.

TECHNICAL DATA REQUIRED BY METAL BRANCHES.
MATERIALS DIVISION, W.P.B. FOR STUDY OF MINING PROJECTS IN
REFERENCE TO REQUEST FOR GOVERNMENTAL AID.

The data required should be supplied in detail on separate sheets of paper attached at end of this Exhibit. Data should be lettered and numbered to correspond with respective paragraphs below.

- A. REPORTS: Furnish any reports available that apply to this application.
- B. METAL OR MINERAL: State metal or mineral to be produced. Applicant must present evidence of definite metal markets for products which will be produced during the life of the loan, with location and capacity of each market and sales prices.
- C. GEOLOGY AND TOPOGRAPHY: Submit all available information and maps.
- D. ORE OR MINERAL RESERVES:
 - (a) Submit maps showing location of each ore body or mineral deposit in the mine. If mine has more than one working level, submit a composite map and a map of each level separately.
 - (b) Show on the level plans the location, width represented, and analysis of each sample taken. Number each sample to correspond with certificate of analysis.
 - (c) Submit section along plane of ore body or mineral deposit showing blocked out reserves, probable reserves, stoped areas, and any old workings; designate inaccessible areas.
 - (d) Show on section maps the location, width represented, and analysis of each sample taken from raises, shafts, drifts, stopes, winzes, and drill holes. Number each sample to correspond with certificate of analysis.
 - (e) Give detailed estimates of developed tonnage and method and analyses used in estimating same. If more than one ore body or mineral deposit, list each separately.
 - (f) Give detailed estimates of probable reserves and supporting data.
 - (g) Explain method of taking samples in detail, whether channel, drill hole, etc.
- E. ANALYSES: Submit certificates giving analysis of each sample used in figuring reserves. Number each sample to correspond with sample number on above maps.
- F. TYPE OF MINE: Describe in detail.
- G. PRODUCTION, MINING METHODS, PROPOSED DEVELOPMENT, ETC:
 - 1. State recent monthly and annual production in tons per day and estimated production if loan is granted.
 - 2. Describe in detail mining method to be used.
 - 3. State whether workings are dry or wet; if latter, amount of water that has to be pumped, gallons per minute, to keep water down.
 - 4. Describe in detail proposed plan of development, if any.
 - 5. List and describe condition of all equipment and buildings on the property.
 - 6. State any known production of neighboring proportions with dates and names, and references to source of information.
- H. MILLING:
 - 1. If product is treated in applicant's mill or a leased mill:
 - (a) State capacity, percentage of extraction, ratio of concentration, and submit flow sheet of mill.

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- (b) Describe mill building, condition of same, etc.
 - (c) Describe equipment in mill building, such as crushers, jigs, ball mills, table, flotation units, stamps, etc. Give kind, make, size, capacity, age, and number of each, and state whether in good usable condition.
 - (d) State rental cost if leased mill.
 - (e) State whether there is ample room for disposal of tailings.
 - (f) State whether tailings pollute any streams, lakes, or other sources of water supply.
 - (g) Submit tables showing complete total tonnage treated, tonnage of concentrates made, and analyses of heads, concentrates, and tailings, for the last year of operation.
2. If product is sold to a custom mill:
- (a) Submit table showing complete total tonnage shipped, including settlement sheets for last year of operation. Give name and location of mill purchasing product.
 - (b) Submit copies of all contracts with the mill covering purchase of ores or minerals.
3. If applicant proposes to build a mill:
- (a) Describe proposed milling operation.
 - (b) Submit a flow sheet of the proposed mill, and state capacity.
 - (c) Submit copies of all metallurgical or other tests.
 - (d) Describe mill site showing location of mill with respect to mine.
 - (e) State whether there is ample room for disposal of tailings.
 - (f) State whether tailings may pollute any streams, lakes, or other sources of water supply.
 - (g) Submit detailed cost of proposed mill.
 - (h) Submit, if available, plans and specifications of proposed mill.

I. SMELTING:

- 1. If reduced in applicant's smelter give all essential data.
- 2. If concentrates or ore are sold to a custom smelter:
 - (a) Submit tables showing tonnage of ore or concentrates shipped to smelter, including settlement sheets, for last year of operation. Give name and location of smelter purchasing same.
 - (b) Submit copies of all contracts with the smelter covering purchase of ores or concentrates.
- 3. If applicant proposed to build a smelter:
 - (a) Describe proposed smelter operation.
 - (b) Submit copies of all tests which determined the design of the smelter.
 - (c) Describe smelter site and activities in surrounding district.
 - (d) Submit plans and specifications if available, and detailed costs of proposed smelter.

J. WATER SUPPLY:

- 1. State whether water supply for all operations is sufficient for all seasons of year. State amount in gallons per minute, minor's inches or second-foot, also seasonal maximum and minimum.
- 2. State source of supply, whether from well, flowing stream, mine, lake, reservoir, etc., and nature of water rights.
- 3. State amount of additional water that could be acquired or developed, plan of development, and cost thereof.

K. POWER:

- 1. Give detailed estimate of total power requirements.
- 2. Give distance to nearest electric power line.
- 3. Give cost of electric power at nearest point available for purchase and cost of extending line.

4. Give cost of electric power used on nearby properties.
5. State kind and cost of any other power to be used.

L. LABOR:

1. Make brief statement as to unemployment conditions in the district.
2. Are experienced workmen, such as miners, millmen, smeltermen, etc. available in district?
3. State number of additional men who will receive employment because of loan.
4. Make brief statement as to current wage scales.
5. What facilities does applicant have for housing workmen?

M. TRANSPORTATION: Give complete information concerning method and cost of transportation.

N. COSTS:

1. Give past (if mine has been in operation) and estimated future;
 - (a) Detailed mining cost per ton of ore.
 - (b) Detailed mining cost per ton of product.
 - (c) Detailed milling cost per ton treated.
 - (d) Detailed smelting cost per ton of ore or concentrates treated.
 - (e) Cost of finished product or products per pound, or ton.

O. ORE RESERVES:

| | Estimated Tons | Gross Value Per Ton | Recover- able Val. Per Ton | Estimated Cost Prod. Per Ton | Estimated Profit Per Ton | Total Estimated Profit |
|------------------------|-------------------|---------------------------|----------------------------------|------------------------------------|--------------------------------|------------------------------|
| DEVELOPED RESERVES: | 200,000 | \$ 15.60 | \$ 14.04 | \$ 7.00 | \$ 7.04 | \$ 1,400,000 |
| PROBABLE RESERVES: | 3,000,000 | \$ 15.60 | \$ 14.00 | \$ 7.00 | \$ 7.00 | \$ 21,000,000 |

P. IMPROVEMENTS, MACHINERY & EQUIPMENT:

| Brief Description | Date acquired Unknown | Original Cost Unknown | Depreciation | Present Not Back Value | Insurance Carried |
|--|--------------------------|-----------------------------|--------------|---------------------------|----------------------|
| BUILDINGS, MILLS, SMELTERS, ETC: | Unknown | \$ Unknown | | \$ 55,000 | \$ 22,500 |
| MACHINERY, EQUIP- MENT, FURNITURE & FIXTURES, OR OTHER CHATELS: | Unknown | \$ Unknown | | \$ 75,000 | \$ 26,000 |

OTHER IMPROVEMENTS, EQUIPMENT, ETC: Approximately \$25,000 in various pieces of miscellaneous machinery, pipe, and various equipment.

- A. Reports by J. B. Tenney and Chas. Botsford both state 200,000 tons available above 700 level. These reports made in 1924.

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- (c) Figures available from Shattuck Denn Mining Corp.

SURVEY OF OPERATING MINES

DEPT. MINERAL RESOURCES

RECEIVED

JUN 5 1942

PHOENIX,

ARIZONA

June 3, 1942

REPUBLIC-MAMMOTH

This property is being operated under bond and lease by W.A. Hooton, Box 44, Dagoon, Ariz. It includes the Republic, Mammoth, ~~Kaystone~~, and smaller mines formerly known as the Johnson Mining District, with camp ~~two~~ miles north of the Dagoon station on the Southern Pacific. A good road leads to the property. Only the Republic and Mammoth are being worked about the same amount of ore coming from each.

During the period 1903-1928 over 24 million pounds of copper was produced by the Mammoth-Republic, together with an additional $4\frac{1}{2}$ million pounds of copper and one million pounds of lead from the smaller mines of the group. At that time the zinc content was ignored.

In September 1941, Mr. Hooton renewed operations after a preliminary examination when he was assured the district was worked out. He entered into a contract with the Peru Mining Co., of Silver City, N. Mex., and plans were made for a 300-ton mill for the separation of copper and zinc, the principal values. After shipping some 50 cars during the fall and winter, unsatisfactory relations with Peru led to his obtaining permission to ship to International, and subsequently to Shattuck Denn at Bisbee. The production to date has been over 150 cars. He is endeavoring to step production up to 100 tons per day, but has been impeded by lack of transportation, labor shortage, and unsatisfactory milling operation. The Peru company promised a 90% extraction but due to what he terms inefficient mill operation, he was paid for only 64% recovery. In addition, the mill operated only spasmodically, causing delays in which he incurred heavy demurrage charges on both ends of the line. His relations with the Bisbee plant are satisfactory, but he can no longer obtain a contract with them, and he is apprehensive lest they cannot handle his ore.

Although I was unable to see any returns, I was informed that the values are running about 5% copper and somewhat higher in zinc. The Republic is being worked on the 700' level, while the ore from the Mammoth, of somewhat higher grade, comes from the 300' level. Yesterday, there were 32 men on the payroll. A few men were available when the Dos Cabezas mine shut down, but the labor shortage is an ever-present problem. The ore is hauled to the loading dock by James Giacomo, but yesterday only one truck was on the road, which meant that only one car could be loaded. The ore bins, pockets, and drifts were all full of ore and operations were at a standstill.

Prior to shipping to Bisbee, the ore had been crushed in a mill on the property, but this treatment has been discontinued. The old steam plant is in operation, using oil fuel, with an auxiliary gas hoist on the Republic. All workings below the 700' level are under water. There is a winze from 1250' to 1350' level.

I had an interview with Mr. Hooton at the Santa Rita this morning. He corroborated the information I have included here. Due to his unfortunate experience with Peru he is running short of capital and desired information on the "A" loan. He applied for the forms and wishes to have the aid of the department in expediting action on the loan. So far he has used his own money in the operation, and has made very little profit due to losses incurred in the original contract. He is interested in getting a mill on the property for selective treatment of his ore, which Shattuck Denn informed him is exceptionally easy to treat. He would like to see you when you are here, and will come in to Tucson on appointment.

George A. Ballam

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Monthly
April 1942. Statement of Republic Mine, Cu-Zn ore. Peru Mining Co.

| S.P. | Car No. | Shipped | Dry tons | % Zn | Amt. Zn. | % Cu | Amt Cu. | (Amt. columns based on 1000# Use factor of 2 on totals) |
|------|---------|---------|----------|------|----------|------|---------|---|
| | 46683 | 3-21-42 | 54.22 | 5.65 | 3.063 | 3.71 | 2.012 | |
| | 91746 | 3-22-42 | 53.93 | 5.0 | 2.697 | 4.64 | 2.502 | |
| | 92589 | 3-24-42 | 56.01 | 4.9 | 2.744 | 3.08 | 1.725 | |
| | 92317 | 3-25-42 | 54.57 | 5.5 | 3.001 | 2.48 | 1.353 | |
| | 46193 | 3-26-42 | 54.82 | 4.6 | 2.522 | 2.97 | 1.628 | |
| | 92426 | 3-27-42 | 53.27 | 5.5 | 2.930 | 3.82 | 2.035 | |
| | 93340 | 3-28-42 | 46.82 | 6.7 | 3.137 | 3.46 | 1.620 | |
| | 46305 | 4-5-42 | 47.56 | 6.5 | 3.091 | 3.57 | 1.698 | |
| | 92611 | 4-7-42 | 47.34 | 6.3 | 2.982 | 3.11 | 1.472 | |
| | 44305 | 3-30-42 | 47.06 | 5.4 | 2.541 | 3.33 | 1.567 | |
| | 92691 | 4-1-42 | 45.34 | 5.8 | 2.630 | 2.55 | 1.156 | |
| | 93038 | 4-9-42 | 44.72 | 6.1 | 2.728 | 3.58 | 1.601 | |
| | 46291 | 4-11-42 | 44.46 | 5.2 | 2.312 | 2.60 | 1.156 | |
| | 92154 | 4-14-42 | 46.07 | 5.3 | 2.442 | 2.16 | .995 | |
| | 91669 | 4-12-42 | 46.27 | 6.1 | 2.822 | 2.37 | 1.097 | |
| | 92161 | 4-15-42 | 50.94 | 5.2 | 2.649 | 2.55 | 1.299 | |
| | 44323 | 4-16-42 | 50.74 | 5.3 | 2.689 | 3.02 | 1.532 | |
| | 91812 | 4-21-42 | 47.80 | 3.7 | 1.769 | 3.28 | 1.568 | |

891.94 5.47 48.749 3.14 28.016

891.94 x 5.47 x 2000 equals 97,578 # Zn @ 90% paid is 87820#

$\frac{87,820 \times .032422}{891.94}$ is at the rate of \$3.19 per ton

891.94 x 3.14 x 2000 equals 56,032 # Cu @ 90% paid is 50,429#

$\frac{50,429 \times .085175}{891.94}$ is at the rate of \$4.82 per ton

34.633 tons concentrate @ 1.9 oz. Ag.

Less milling \$8.01
 \$2.50

 \$5.51

891.94 tons @ \$5.51 \$4914.55
 Plus Ag content 45.37

Less freight \$4959.92
 2087.37

Value \$2892.55

(The above is a copy of the April statement rendered Republic Mine by the Peru Mining Co. From the fact that the silver content added represented one car of copper concentrates, it is assumed that one car of zinc concentrates was also shipped. Hooton was paid \$1015 this AM from AS&R and he believes this represents the premium on April copper shipments on the basis of 34.633 tons of 24% Cu. The check for \$1845 received July 1 from the American Zinc Co, likewise

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probably covered zinc premiums for the same period since the voucher bore the statement "Amount received by American Zinc Co., of Illinois from Reconstruction Finance Corp., in payment of Metals Reserve Co., premium on excess production of zinc concentrates during April 1942"

This AM, July 14, Hooton received a check from AS & R for \$2298 which apparently represents copper premiums on two cars of May copper concentrates, and on July 10 he signed an affidavit for \$1345.15 for copper premiums which he believes represents the long overdue eight cars shipped in March and April and which are not included in Peru's April statement on the preceding page or the May statement on following page. He states positively that he has signed no affidavits for May zinc or for the eight cars not shown in the statements. I have gone through the bills of lading and am listing these eight cars together with shipping dates.

| Car No. | Shipped | Car No. | Shipped |
|----------|---------|----------|---------|
| SP 92660 | 3-10-42 | SP 93803 | 4-18-42 |
| 93872 | 3-17-42 | 92021 | 4-19-42 |
| 92127 | 3-20-42 | 93807 | 4-22-42 |
| 46320 | 4-18-42 | 46395 | 4-25-42 |

Thus it appears that affidavits have been signed for all copper shipped to Peru, and that premium payment checks have been received for all copper with the exception of the eight cars for which affidavit was signed.

It seems further that only the April zinc has been accounted for by the check for \$1815, and that no affidavits have been signed for May zinc or for the eight cars not included in the statements.

Following is the May 1942 Statement of Republic Mine from Peru. It is a copy of all relevant columns with the exception of the shipping dates which I inserted from the bills of lading. In the last column I have inserted the balances due taken from ore settlement sheets attached. It is apparent that the two statements do not correspond for identical cars, and this system of double bookkeeping enables them to pay the lower figure. They didn't even do that in this instance for Hooton received a check for \$268 instead of \$553 as indicated in Balance (over) It looks as though their bookkeeping is as sloppy as their mill operation, and sampling seems to be on a par.

| Car No. | (Shipped) | Dry tons | %Zn | Amt. Zn. | %Cu | Amt Cu | Ore (settlement balance) |
|----------|-----------|----------|------|----------|------|--------|--------------------------|
| SP 92388 | 4-24-42 | 47.73 | 5.2 | 2.482 | 4.48 | 2.138 | \$ 228.51 |
| 46561 | 4-26-42 | 50.16 | 5.5 | 2.759 | 5.83 | 2.924 | 340.45 |
| 46683 | 4-27-42 | 51.77 | 3.8 | 1.967 | 6.62 | 3.427 | 364.34 |
| 93340 | 4-29-42 | 51.68 | 4.7 | 2.429 | 6.37 | 3.292 | 368.36 |
| 46305 | 4-30-42 | 53.65 | 3.0 | 1.609 | 5.57 | 2.988 | 272.95 |
| 92691 | 5-2-42 | 52.12 | 3.5 | 1.824 | 6.12 | 3.190 | 321.97 |
| 92317 | 5-3-42 | 45.44 | 2.5 | 1.136 | 5.73 | 2.604 | 228.36 |
| 92589 | 5-4-42 | 52.57 | 3.0 | 1.577 | 5.28 | 2.775 | 245.38 |
| 91669 | 5-5-42 | 53.16 | 5.0 | 2.658 | 5.03 | 2.674 | 291.18 |
| 44323 | 5-6-42 | 49.57 | 5.6 | 2.776 | 4.07 | 2.017 | 219.47 |
| 92426 | 5-13-42 | 59.70 | 4.6 | 2.746 | 3.60 | 2.149 | 188.49 |
| 46291 | 5-11-42 | 51.52 | 5.3 | 2.731 | 4.12 | 2.123 | 222.96 |
| 92611 | 5-9-42 | 59.99 | 4.6 | 2.759 | 2.80 | 1.680 | 179.82 |
| 92161 | 5-10-42 | 53.36 | 5.9 | 3.148 | 3.32 | 1.772 | 187.69 |
| 92154 | 5-7-42 | 46.18 | 5.3 | 2.447 | 3.78 | 1.746 | 176.75 |
| SF173411 | 5-20-42 | 49.39 | 6.1 | 3.013 | 3.38 | 1.669 | 193.99 |
| 70492 | 5-19-42 | 51.98 | 6.1 | 3.171 | 3.62 | 1.882 | 222.48 |
| 172787 | 5-18-42 | 48.36 | 5.2 | 2.515 | 3.68 | 1.780 | 185.68 |
| 84204 | 5-17-42 | 40.88 | 3.9 | 1.594 | 4.28 | 1.750 | 161.86 |
| 172047 | 5-15-42 | 47.64 | 5.4 | 2.2572 | 3.82 | 1.820 | 198.17 |
| 172973 | 5-14-42 | 52.79 | 5.0 | 2.640 | 3.47 | 1.832 | 180.54 |
| SP 92861 | 5-22-42 | 53.31 | 6.1 | 3.252 | 2.43 | 1.295 | 135.92 |
| 92646 | 5-23-42 | 52.09 | 4.7 | 2.408 | 2.03 | 1.057 | 59.88 |
| 46320 | 5-24-42 | 46.46 | 6.4 | 2.973 | 1.70 | .790 | 78.07 |
| 93803 | 5-26-42 | 50.81 | 4.7 | 2.388 | 2.18 | 1.108 | 69.60 |
| | | 1272.31 | 4.84 | 61.614 | 4.12 | 52.482 | 5322.89 |

$$1272.31 \times 4.84 \times 1000 = 123,159 \text{ }^{\#}\text{Zn. @ } 90\% = 110,843$$

$$\frac{110,843 \times .032422}{1272.31} = \$ 2.82 \text{ per ton Zn.}$$

$$1272.31 \times 4.12 \times 1000 = 104,838 \text{ }^{\#}\text{Cu @ } 90\% = 94,354$$

$$\frac{94,354 \times .085373}{1272.31} = 6.32 \text{ per ton Cu}$$

$$9.15 \text{ ton total Cu + Zn}$$

$$\text{Less milling } 2.50$$

$$6.65$$

$$1272.31 \text{ @ } 6.65 = \$ 8460.86$$

$$\text{Plus Ag Lots 1, 2, 3 } 151.86$$

$$8612.71$$

$$\text{Less frt } 2748.03$$

$$5864.68$$

$$\text{Less prelim settle. } 5311.67$$

$$\text{Balance } 553.01$$

$$5322.89$$

$$\text{Ag } 151.86$$

$$5474.75$$

$$\text{Sett. } 5311.67$$

$$\text{Bal. } 163.08$$

Compared to - 63

There is an apparent discrepancy in the price of copper on ore settlement sheet (.08058) and that appearing on the monthly statement (.085373)

From the foregoing April statement (page 1) it would appear that the premium copper paid for July 14 amounting to 20302# was recovered from ore the copper content of which was 56032#. This represents mill and smelter recovery of only 36% and most of the loss of course is in milling in this case. Although no complete data are yet available for May, it seems that the recovery is far below that for the June shipments to Shattuck Denn. In fact, the latter people advised Hooton to await smelter returns rather than accept the new average recovery percentages schedule, since by waiting he will realize about 75% of the copper content. Further, he is shipping a lower grade copper ore to Denn, yet the Peru Assays were consistently lower than the June average of 4.35% Cu furnished by Denn yesterday. This is undoubtedly a result of the type of sampling indicated by the attached statement.

In summarizing it appears that no zinc affidavits have been received for 25 cars shipped in May, and 8 cars shipped in March and April; that all copper affidavits have been signed, and all but the last check corresponding to them have been received; that the Peru Co. has violated its contract with Hooton which expressly provides for settlement the week following receipt of the ore; that the mill recovery of copper from Republic ore is so low that Hooton was compelled to ship elsewhere; that Peru's sampling methods are not in accordance with accepted practice;

This has been a complicated job since there is very little complete data to work on, but I trust it will give you the information necessary to follow up the question of zinc payments. In the compilation of data re the proposed mill the last three factors will be referred to.

George A. Ballam

July 20, 1942

Mr. William A. Hooton
Republic Mine
Dragoon, Arizona.

Dear Mr. Hooton:

I have yours of the 17th enclosing copy of reply to Frank A. Ayers. We are attaching this to the material which we have on hand and will augment the report.

Apparently, your affidavit and premium situation is getting straightened out, although it certainly looks as there was a heck of a lot of zinc and copper on which you are not getting premiums.

I cannot find out about your report on the Republic and the Peru map from Mr. Gohring as he has gone back to Washington. Sam was to have made inquiry regarding it but I do not know whether he did or not.

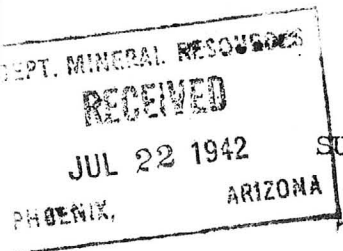
We will send this material through as fast as we can.

Yours very truly,

CHARLES F. WILLIS, Chairman
Board of Governors

CFW:MH

B62



Washington, D.C.
July 20, 1942

Premium Payments
SUBJECT: Republic Mine
W. A. Hooton,
Dragoon, Ariz.

Whitney Mee is very much interested in our checkup of the condition at the Republic, as he will appreciate a neutral set of data.

He asked me, the moment I have the tabulation of what has been and what has not been paid for, to take the data right over and go over the matter with him.

I am glad to know that all the checks for copper are in. It shows that the AS&R are working fairly well, although the lag in March and April to July 10th on which date the affidavit was presented to be signed is terrible and he will probably not be paid for this recent one for some time. I will take this up with Mee.

I am very anxious to get the specific information on the % copper paid for and the possible reasons for the payments being so small a part of the total copper. However, before taking this to Metals Reserve it would be a good idea to get an explanation from the AS&R which, if not satisfactory, could be presented at the same time as the data from our office.

The tabulation on the zinc situation will be of great help, and I believe if we can get it fairly straight, I can take it to Mee and get action right away. The zinc Hooton was paid for evidently was on an affidavit paid through the American Zinc Company and which Hooton signed 5/16/42.

Bill
Bill Broadgate

-B61

C O P Y T O M R . W I L L I S .

Dragoon, Arizona.
July 18th, 1942.

Mr. Frank A. Ayer,
War Production Board,
Washington, D. C.

Dear Mr. Ayer,

Permit me to thank you for your letter of the 15th relative to a mill on the Republic, financed by the Government.

Since writing you, I have seen Mr. Willis and he has given me an application blank to be filled out with the more pertinent information. This I have done and mailed it to Mr. Willis, I presume for transmission to you. The data is not complete, however, as I am awaiting return of Tenny's report and the map of the Peru Company. The former estimates 200,000 tons of measurable ore above the 700 level, while the Peru Company's engineers figured some 85,000 tons immediately available above the 700. Chas. Botsford made a report of which I have all but the last page, however, he agrees with Tenny's estimate and recommends the construction of a 125 ton mill as the first unit of a 400 to 500 ton plant. Both these reports were dated 1924.

Relative to my present shipments to Shattuck Denn, the June figures have been prepared and they show a 92% recovery of the copper and 90% of the zinc, a very creditable performance in any league. Mr. Hendricks, the mill superintendent told me yesterday he expected to do a little better on the July lot, tho I don't think there is much room for improvement. But it shows the amenability of the ore to successful treatment.

From my shipments to both smelters and mills, I believe the copper content to be from 1 to 5% lower than the zinc content and when I wrote that I could produce 150 or 200 tons per day, you will understand I can not do this without preparing the upper levels with air and water lines and obtaining slushers etc for some of the flat stopes etc. I am producing about 50 tons per day now with 15 men but this production is about the limit with a crew of this size and considering the ground I have ready to stope. The real production should come from below the 700 level and as I wrote you, even tho I have not seen these levels, I am reasonably certain that there are several hundred thousand tons of unstoped, commercial ore to be mined.

As soon as I receive the report above referred to and the late Peru Company assay plan, I shall mail them to Mr. Willis for

B60

Mr. Frank A. Ayer,
Page 2.

transmission to you.

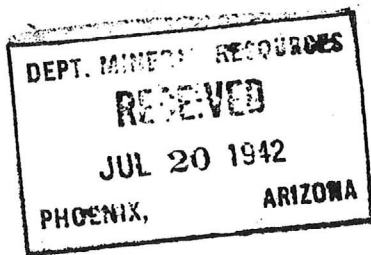
Thanking you for your interest, I am,

Very truly yours,

WILLIAM A. HOOTON.

WAH:SMC

B59



Washington, D.C.

July 18, 1942

SUBJECT: Republic Mine
W. A. Hooton,
R.F.C. Plant Loan

Mr. Elsing informs me today that he has written Hooton and Willis on this matter.

I have an idea that the information which will finally have to be submitted will closely parallel the form I sent Coupal from the Zinc Branch on how to make a WPB set-up and should be studied with that in view.

The Copper Branch, unfortunately, has no established procedure and ~~there~~ thus correspondence and engineering work on the project tends to be badly dragged out.

I have suggested that they get out such a questionnaire as the zinc branch has, to guide those applying through the Copper Branch.

Otherwise, after the ore reserves are substantiated, which is the important matter, other questions will crop up between the WPB, MRC and RFC on the same project.

Bill

Bill Broadgate

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA

Dragoon, Arizona
July 17, 1942

Mr. Charles F. Willis
Arizona Mining Journal
Phoenix, Arizona

Dear Mr. Willis:

Enclosed you will find the application which Mr. Bellam gave me, filled out, as well as I could do it. The two reports and map I shall send you immediately upon my receipt of them from Washington, and I expect this will be within the next two or three days.

Apparently the A.S.&R. are very much interested in the Republic. I spent at least two hours this morning going over the situation with Mr. Lorenpeble (?) if that is the way to spell his name. Stevens is going out to the mine to make a more careful and detailed investigation than he did the last time he visited me. I believe Harrison Schmitt has told some of the big shots some of his reactions to the property, with the result that the A.S.&R. is now very much concerned about the cancellation of my agreement with the Peru Mining Company, after which he indicated he would be ready to talk business. Also, he felt that it might be unethical to ask Schmitt for any further information until the contract had been cancelled.

Thanking you most kindly for all your efforts in my behalf, and trusting that the government will look with favor on the project, or if not that the A.S.&R. will, I am, with kind regards,

Very truly yours,

William A. Hooton
WILLIAM A. HOOTON

WAH:SMC

B57

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA

Dragoon, Arizona.
July 17th, 1942.

Mr. Chas. F. Willis,
Phoenix,
Arizona.

Dear Mr. Willis;-

You must have my letter by this time relative to the missing zinc affidavit, which I told you I had not signed but which, it later turns out, I did sign. I feel particularly badly about this and my only excuse is that I did not have any copies of zinc affidavits in my files and I did not remember that Mr. d'Autremont had kept it in the bank, when I was trying to negotiate a loan with him. In fact, I did not negotiate a loan on the premiums and therefore he should properly have not kept them. However, please believe it was faulty memory on my part and was not done with the slightest intention of misleading anyone.

I am enclosing copies of two letters which have a bearing on the zinc situation and as Mr. Baalam has probably written you, the May zinc affidavit from the Peru Company, came after he had written you. The copy of the letter from the American Zinc Co is in answer to one of mine, asking for information on zinc shipments in May and June. Perhaps when the American Zinc Co wired the Peru Co for the information, the latter company had forgotten they had sent me no affidavits for the May production and therefore they immediately filled them out and mailed them. But the situation seems to be clearing up anyway and when I receive the statement from Peru, I shall arrange to pay them off and cancel the agreement.

Again thanking you for your interest and trusting that your efforts will bring results, I am,

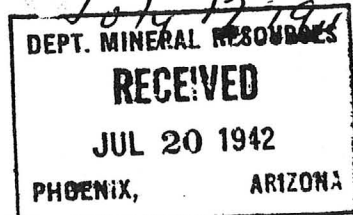
Very truly yours,

No 56

William A. Hooton
WILLIAM A. HOOTON.

P.S. Does Mr. Gohring still have my report on the Republic and the Peru Map or has he sent them to Washington. I did not receive them in this day's mail as I expected.

B56



Memorandum

Republic Mine
(W.R.B. mill)

To - Director, Dept Mineral Resources
From - George A. Ballam

The report on Republic Mine re mill being forwarded to C.F.W. this P.M. Maps and supporting reports by Botsford Tenney, and others will follow later, when Peru returns.

Hooton talked to AS&R relative to W.R.B. mill and they countered with proposal to put in their own mill. He also talked to Willcox and Cochran of Shattuck Denn who are considering the proposal.

C.F.W. advised taking first offer & Hooton is agreeable. Think he would like to unload entirely to enter army and if AS&R makes such offer believe he will accept. He hates mining almost as much as he hates the Japs and is anxious to get away provided someone makes a mine of the property. He was told it couldn't be done and that is what has kept him there, so far.

Next move seems to be up to AS&R or Denn.

Trust this is satisfactory

Geo A. Ballam

BSE

Washington, D.C.
July 16, 1942

SUBJECT:
Premium Payments
Republic mine
W. H. Hooton

DEPT. MINERAL RESOURCES

RECEIVED

JUL 17 1942

PHOENIX,

ARIZONA

On receiving Charlie Willis' further letter to Mr. Mee regarding this matter, stating that Willis and Coupal personally talked to Hooton and that he reiterated the statements about not having ~~signed~~ any affidavits, I immediately went to see Mr. Mee. This would have completely and flatly contradicted my memo of July 10th, written following my ~~talks~~ talks with Mr. Mee.

I am glad to note that after you both talked to Hooton you came to the conclusion that he is not a "crackpot", as the letters and wires scattered all over the capital have certainly given this impression, from the RFC building to the WPB and over to Capitol Hill. He has done himself a great deal of damage.

Now it boiled down to one of two things.... either the MRC was not telling the truth or Hooton was definately misrepresenting the case. He sounds like a man who got himself out on a limb and didn't know how to stop sawing.

NOW I PERSONALLY SAW THE AFFIDAVITS SIGNED BY HOOTON, in the accounting department of the MRC. If you will reread my memo of July 10, you will note that I called attention to Hooton's inconsistent statements. Lets have no more out of him about not signing affidavits unless he thinks I am a liar too.

I am beginning to wonder if he informed you correctly about not getting paid as the balance of the checks should be in his account some days ago.

The March and May affidavits are among those I saw.

There is only one other possible explanation and that is that someone is forging his signature, and that I am not gullible enough to believe. The Copper and ~~Lead~~ Zinc Branches of the WPB think very highly of the Peru outfit and, obviously they are a substantial company and subsidiary to a substantial company.

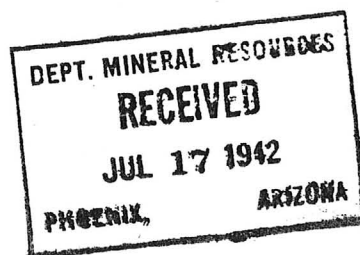
There is only one point to all of this, and that is that definately something should be done to speed up premium payments. This I believe Mr. Mee will make every effort to do.

Bill
Bill Broadgate

B.S.

Republic

Box 495 Tucson
July 16, 1942



J D Cougal
Director Dept Min Resources
Home Builders Bldg
Phoenix, Ariz

Sam - Just after mailing the
Hooton report re Peru, he received
a zinc affidavit for '1934 which
probably takes care of everything
except zinc in the 8 cars, so
it would seem that this
situation is cleared up.

However the rest stands,
so it isn't quite the same
situation as "Excuse me, I just
found the crank"
Geo.

B53

REPUBLIC MINE

July 16

MEMORANDUM

REPUBLIC MINE
(re Peru Mining Co.)

To: Director, Dept. Mineral Resources
From: George A. Ballam

Attached is report of the complaint of W.A.Hooton of Republic Mine against Peru Mining Co.

In order to avoid confusion I have attached supporting letters to the page on which the reference is made. Kindly return them to Hooton when you are finished with them.

George A. Ballam

COPY.

American Smelting & Refining Co.
El Paso Smelting Works.

July 15th, 1942.

American Zinc Co.,
Dumas, Texas.

Gentlemen;-

Mr. William A. Hooton advises us that shipments made by him to the Peru Mining Company were milled, and a portion of these shipments were forwarded to your plant.

In prior months this company submitted affidavits of producer covering Mr. Hooton's shipments, direct to the proper authorities for payment without first arranging for the necessary consolidation of affidavits covering shipments to other plants. In line with this thought, we would appreciate it therefore, if you would secure the necessary affidavits of producer from Mr. Hooton covering the payable metal contents of shipments made to you during the month of June 1942, certify the contents thereon and pass them on to us in order that we may effect a consolidation.

Yours very truly,

N. A. Ferguson.

cc Mr. W. A. Hooton.

B51

C O P Y .

American Zinc Company of Illinois.
St. Louis, Missouri.

July 14th, 1942.

AIR MAIL.

Mr. William A. Hooton,
c/o Republic Mine,
Dragoon, Arizona.

Dear Mr. Hooton,

Have for acknowledgement your letter of the 13th concerning premium payments on May and June excess zinc production at the Republic Mine, and have to advise that we do not have any information at this office indicating what your production amounts to as our contract arrangements and settlements are all with the Peru Mining Company, so that it is necessary they advise us of the tonnage of your ore included in their shipments to us. However, in order to expedite matters, we have telegraphed the Peru Mining Company at Deming advising them of your letter and asking they prepare the necessary papers. Just as soon as the affidavits and other documents come to hand, we will be very glad to transmit them immediately to Metals Reserve in Washington.

Very truly yours,

A. E. Stanton,
Vice President.

B50

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA
Dragoon, Arizona.
July 14th, 1942.

Mr. Chas. F. Willis,
Phoenix,
Arizona.

Dear Mr. Willis;-

As a matter of interest to you and also as a matter of vital interest to me, the following procedure was observed by me when I visited the mill of the Peru Mining Company at Deming, New Mexico last April to watch the sampling of one of my cars of ore.

The ore from the railroad cars was dumped in a hopper under the railroad track and from there it was fed into a fine crusher, which took it down to about quarter inch. It then was elevated by a belt conveyor to bins.

At the discharge end of this belt over the bins was a Mexican with a common wash basin. He would run this basin thru the ore stream and empty it into a wash basin. I stood and watched this procedure for at least fifteen minutes and during that time he took two samples but not at regular intervals. Perhaps he had other duties, but at any rate, the samples he took were spaced several minutes apart. I asked one of the mill operators how often this man was supposed to take his samples and I was informed every three minutes. Upon asking another operator later on, he told me every ten or fifteen minutes. I then asked how large a sample was taken from each car of fifty or fifty five tons; the answer was "about 40 pounds." As there is no reason to believe this sampling operation was conducted differently when I was not there, it means that at irregular intervals a sample was taken and that approximately 40 pounds was taken to represent a fifty ton car. It is not necessary to point out that opportunities for taking a sample, containing a large portion of waste or low grade rock, are easy inasmuch as differences in the grade are apparent and can be seen on the belt. While I do not know this to be the case, I wish to point out that such a procedure is quite possible.

It is obvious that a 40 pound sample is not representative of a fifty ton car and if advantage is taken of the condition as described above, it would account for the low samples given me in the pulps. In further substantiation of this, I wish to mention that my mine foreman, who has worked in this ore and shipped many cars, at my request, estimated the percentage of copper in a majority of the cars shipped and not once did his estimate come within 1% of the Peru assays and pulps. In my

B 49

Mr. Chas. F. Willis.
Page 2.

own case, after having shipped about 2,000 tons and observed the ore and results of the smelter sampling, I feel that I am better than a fair judge of the grade, yet in no case did a car come up to the average I estimated, sometimes being at least 2% under my estimate. Among the 51 cars shipped to the Peru Company, there were many cars of Mammoth ore, which usually averaged between 7 and 8% at the smelter, yet not one car in the fifty one cars shipped assayed 7% and only three cars assayed between 6 and 7%.

I asked the manager of the Peru Company, Mr. Taylor, if he did not have an automatic sampler and was told that there was one around there somewhere and that he would have it installed. It is common practice, as you know, to have an automatic sampler, or several of them and most mills and smelters have elaborate means for obtaining a head sample. There is little use to complain about this Peru method of sampling now. I could not be at Deming and watch the sampling myself and as the ore was milled at irregular times, I could not afford to keep a man there for that purpose. However, I intend to demand a complete record of each day's head and tail samples, when my ore was being run and from the tonnage, I shall be able to arrive at a calculated head, after obtaining the tonnage and values of concentrates shipped.

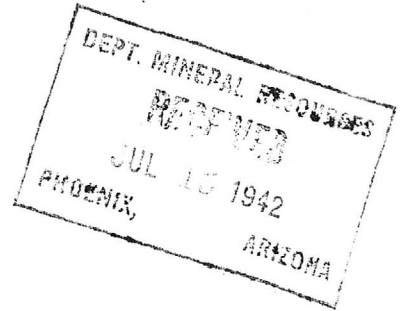
It is because I believe you should be advised as to the sampling methods employed at the Peru mill that I have written you the facts from my own observation.

Yours very truly,

William A. Hooton.
WILLIAM A. HOOTON.

B48

Washington, D.C.
July 13, 1942



SUBJECT: Republic Mine,
William A. Hooton,
R.F.C. ~~mine~~ Plant Loan
Willis letter of July 11.

This matter is getting under way, as per my memo of July 10th which crossed Willis letter en route.

However, regarding the general mine loan, next time you write Nebeker, if you are interested enough, ask him to send you some of the forms from my office. They were printed after we got the Murray amendment to section 5 of the RRC act passed in 1940.

I believe the Hooton loan can be worked out if he is amenable to your persuasion with regards to the first step... the matter of agreeing on a sponsor for the mill as the first step.

When we get that thrashed out, and the question of his responsibility I asked in my July 10th memo, I can go from there.

You did not find the "General Mine Loan" because it does not come under circular 14.

I think we will find that, where a loan such as Hooton's is granted, amortization will be considered for a proper business operating period based on the probable life of the mine rather than the "duration".

Bill
Bill Broadgate

B47

July 11, 1942

Dear Bill:

I have your letter of the 8th relative to the Republic mine and the proposed plan of working this out financially.

You suggest that you feel that this should come on a "general mining loan" which is different from the "A" or "B". I would appreciate your explanation as to what you mean by a general mining loan as we can find no reference to any loan outside of "A", "B" and preliminary development.

It would be well for us to find out just what the approach should be in a case where capital investment for plants or operating capital is necessary but where definitely the capital expenditure for the plant is not justified on other than a normal amortization basis. In other words, the operations could pay normal amortization of say 2 cents a pound on copper but could not possibly amortize the investment during the indefinite period of the duration. It is unfair to regard that as a loan and thus make it a future obligation on the property.

It was my understanding that such a program could be set up in application form to the W.P.B. and approved by them; that is, certified to the R. F. C. to let them have the money. This is very much the way that Phelps Dodge Morenci and Castle Dome loans are being carried out.

We have quite a number of these cases coming up on which we are gathering and preparing the data for presentation and of course we are very anxious to be assured of the policy and routine in such cases.

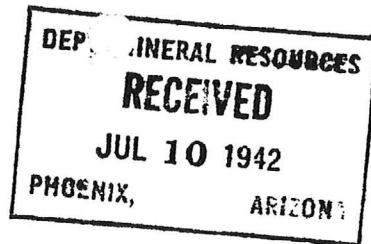
With kindest personal regards, I am

Yours very truly,

CHARLES F. WILLIS, Consultant
Metals Reserve

CFW:MH

B46



W
Washington, D.C.
July 8, 1942

Operating Loan.
SUBJECT: Republic Mine,
William A. Hooton,
Dragoon, Arizona.

I have the correspondence on this matter, the letter addressed by Hooton to Ayers and by Willis to Ayres.

I have an appointment with Ayres Friday to discuss this matter. They are having reorganization staff meetings and cannot get to him sooner.

It seems to me as a horseback opinion that this should be an application for a ~~EX~~ "General Mining Loan" (which has forms different from A and B) from the R.F.C., and that this should be gotten into the works as soon as possible with all supporting data, and that then, the War Production Board should be asked to certify the loan to the R.F.C.

I get the slant on the mill being bought by the government and built, and the Hooton allowed to purchase it later. But after all, the R.F.C. loan would work the same way in the long run.... they are always glad to get out from under and the mill might be settled for at a bargain from them after the war.

However, this is just speculation. Will tell you what Ayers says, or whoever is the man to handle it if Ayres is not.

Bill

Bill Broadgate

B45

Washington, D.C.
July 10, 1942

SUBJECT: Republic Mine,
William A. Hooton
R.F.C. plant loan.

Please note that Mr. Morris Elsing is in sole charge of this matter, and ask Mr. Hooton to restrict future correspondence to him. Mr. Elsing is in the "Ore Production and Refining Section" Copper Branch, Materials Division, War Production Board, Room 1635 Temporary R, Washington, D.C.

I should appreciate it if you will immediately have a personal conversation with Hooton in regard to this matter and feel him out unofficially, getting his reaction to this proposal;

Provided his mine proves adequate in ore reserves for the proposed production of 200 tons per day to feed the mill he wishes to install,

1. Would he be willing to contract with an experienced and substantial operator such as the Peru Mines or the Shattuck Denn to build the mill and operate it for him until such time as it is paid out or other arrangements are made with the WPB or RFC?

You will understand that part of the difficulty with these large jobs is knowing the operator to be possessed with the proper management experience. Another thing is that both of these companies have long experience and facilities to handle the job from the mechanical and metallurgical angles.

You will understand that it would be Hooton's mill, which he would be paying out on some agreed basis. He would make a contract with one of these outfits (or any nearly experienced operating company) to build the mill, thus getting the benefits of their experience and avoiding delays and mistakes. He would also contract with them for the operation of the plant on some agreeable basis, thus getting the benefit of their metallurgical and management experience. When the RRC was paid out, he would own the mill.

Judging from the correspondence he probably has a bias against Peru, but he may not have. After all, they know the business. If you will quietly and promptly get Hooton's personal views on the matter, I will discuss it further with Mr. Elsing and work out plans from there on. This will save a vast amount of delays with correspondence, and will give us a basis to trade on.

Also, if you will, privately give me Hooton's operating dossier, and an opinion of his soundness. He sounds a bit hot-tempered. Personally I think the arrangement would be a good deal for Hooton if properly worked out in detail, and the WPB has ample experience in this sort of arrangement. I also think we will get further with a personal discussion by you than by letters.

Bill Broadgate

B44

Washington, D.C.
July 10, 1942

SUBJECT: Premium Payments,
Republic Mine,
W. H. Hooton

As far as can be determined at this end, all affidavits are in and checks mailed for them, and the total seems to be about as I gave them to you, \$ 5,128.85.

I hope these boys won't go wild and make statements which cannot be verified..... not that I am accusing Hooton of this, but will you tell me where lies the rest of the \$17,000? Maybe that is what he would like to know, too.

But how about letting us have details of the missing shipments, if any, on which he has not been asked to sign affidavits.

I did not see them, but Whitney Mee told me that they had all the affidavits signed and on file, and that doesn't sound the way he (Hooton) evidently told Charlie, and which Charlie quoted in his letter of July 6 to DeWitt Smith, that "out of all that he has shipped he has only signed affidavits for two out of five carloads of copper and none for zinc".

There is some discrepancy here, and I hope it is not with Hooton as Hooton states flatly in his letter of July 3rd in one paragraph that he signed no affidavits, and in the next that Dumas stated "the necessary papers have been received by them". It would be nice if just the flat facts were stated in a coherent fashion.

I do think all this will have a very salutary effect. The slackness and delay at Peru is getting a thorough going over, and it may result in some overhaul of the whole system which will attempt to the payments to the shipper more promptly, according to my conversations with Mee.

Bill Broadgate

B43

Washington, D.C.
July 10, 1942

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Republic Mine,
W. H. Hooton

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Bill
Bill Broadgate

B42

Washington, D.C.
July 10, 1942

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William A. Hooton
R.F.C. plant loan.

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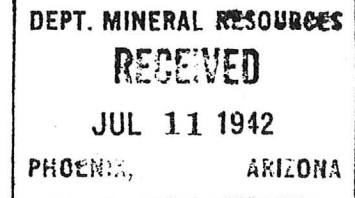
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Bill
Bill Broadgate

341

Washington, D.C.
July 9, 1942

SUBJECT: Premium Payments
Boston Arizona Mines
Peru Mining Company
Deming, N.M.



Discussing this matter further with Whitney P. Mee today, I find that they have been very busy phoning and ~~wire~~ wiring and checking into this.

A check for \$1815.00 has been forwarded to Hooton's account at the Hollywood State Bank, I believe, July 1st. He should have this by now. This was from American Zinc.

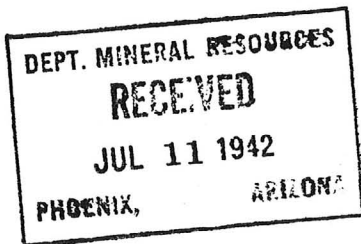
Checks for \$1015.10 and \$2298.75 went from the A.S.&R. N.Y. office on June ~~3rd~~ to El Paso, which I think reached there on the 6th, and should be distributed further by now.

Further investigation of this matter is under way and I will get a report later.

I understand Hooton will have a letter from Mee dated today or tomorrow in answer to his letter of complaint.

The Peru Mining Company will be investigated.

Bill Broadgate



July 9, 1942

Hotel Harrington,
Washington, D.C.

Mr. Whitney P. Mee,
Examining Engineer,
Metals Reserve Company,
Room 812,
Reconstruction Finance Corp. Building,
Washington, D.C.

Dear Mr. Mee,

During the course of our conversation on the Republic Mine and Boston Arizona Mine premium payments from the Peru Mining Company shipments, I mentioned the difficulties encountered by the very small operation which really needs its cash right now to get along with its next shipment. I realize that in some cases, the banks will accomodate the miner, but they are not happy when the notes are not met in a reasonable time after the premium is supposed to be due and the miner soon outwears his welcome.

There is probably no one in the country outside of the OPA who thinks the premium system is satisfactory and the more complicated things are the more they like it. It is hard for us to believe that the Metals Reserve now really thinks well of it.

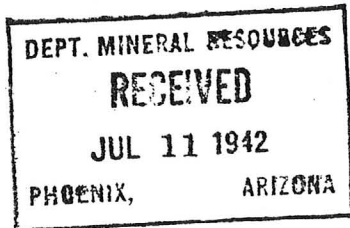
Until steps can be taken to modify or abolish the whole awkward system, everything possible should be done to alleviate the condition of the small operator who lacks working capital. Financing ore from the mine to the smelter has always been a problem for him, and to wait from 4 to 6 weeks in addition for much needed money restricts much needed production.

I hope your conversations tomorrow will result in a plan which will expedite payments to these struggling mines which are trying to do their part in the war program.

Very truly yours,

W. C. Broadgate
Asst. Director

B39



Washington, D.C.
July 9, 1942

SUBJECT: Premium Payments

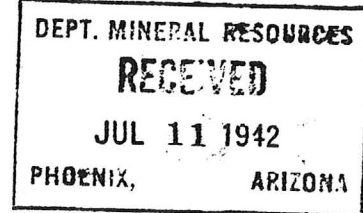
In discussing the matter of the Republic and Boston Arizona affair with the Paru Mining Co, I objected bitterly about the methods of making premium payments, due to these methods causing delays which hold up the small producer.

I pointed out that if Hooten has to restrict his operation because of slow payments, what can be expected of a little fellow who can't last more than a couple of weeks? I stated it as my opinion that much valuable production is being lost because of the system.

I pointed out that under the best circumstances, the method of paying on monthly accumulations means 2 to 4 weeks delay after the shipment hits the smelter. I asked if some way could not be devised to get payments to the little fellow more expeditiously. Mee stated he is conferring with some smelter officials tomorrow and will talk about this.

Bill Broadgate

Washington, D.C.
July 9, 1942



SUBJECT: Premium Payments
Boston Arizona Mines
Peru Mining Company
Deming, N.M.

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Further investigation of this matter is under way and I will get a report later.

I understand Hooton will have a letter from Mee dated today or tomorrow in answer to his letter of complaint.

The Peru Mining Company will be investigated.

Bill
Bill Broadgate

B37

July 8, 1942

Mr. William A. Hooton
Dragoon, Arizona

Dear Mr. Hooton:

I received your letter of July 2 and have heard from Mr. Willis of his talk with you.

We have made certain inquiries in Washington about the procedure necessary to follow on a situation such as you are faced with, and as soon as we have a reply, I am in hopes we can get together and work out a definite plan for a mill installation on your property. I will contact you as soon as we hear.

Yours very truly,

J. S. Coupal, Director

JSC:LP

B36

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA
Dragoon, Arizona.

Mr. Chas. F. Willis,
Phoenix,
Arizona.

Dear Mr. Willis:-

Enclosed is a copy of a letter to Mr. Frank Ayer. With this letter to Mr. Ayer, I am also sending him the data he requested in his last letter and I am sending it to him direct by air mail to save delay but I am also sending copies of all correspondence to you so that you will be kept fully advised of the situation.

I shall continue to do this because of the fact that you and your organization were the originators of the plan and I shall do my best to see that the credit for it is given you, in the event the negotiations are successful.

Thanking you for your past kindness and courtesy and with kind regards, I am,

Very truly yours,



WILLIAM A. HOOTON.

WAH:SMC.

P.O.Box 607

OR
Dragoon, Arizona.

July 30th, 1942.

Mr. Frank A. Ayer,
War Production Board,
Washington, D. C.

Dear Mr. Ayer,

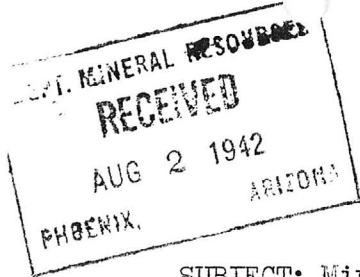
Two days ago I went to Bisbee for the purpose of seeing Mr. Wilcox or Mr. Shattuck relative to the proposed mill on the Republic. Neither of them were in town and would not return until Sunday, however I spoke with the superintendent and one of the other men who are familiar with the negotiations.

Altho it is not official, Mr. Wilcox discussed the removal and reconstruction of the Denn mill on the Republic. As I have had no inkling of this from either Wilcox or Shattuck, I feel it would be premature to plan on anything of this nature. However, the Shattuck Denn mill and mine superintendents were at the Republic early this week and, as they told me, to look over the ground in a preliminary way. It seems that the matter of moving the mill over here has been discussed with both of them. They went underground also and made a cursory examination of the mine. Hendricks, the mill superintendent, had been here before and had taken samples for his test work, before offering to take the ore. I know, from his remarks, that he is much impressed with the property and altho he is a metallurgist, he is an experienced miner also.

While I believe it is quite within the bounds of possibility that the mill might be moved, I thought it best to advise you of this new development, at the same time continuing with the original plan to install some mill, other than the Denn. It would be definitely more advantageous if the Denn mill could be installed as it has a larger capacity and is complete, also it could be built with a view to the handling of copper-zinc ore, whereas now it is primarily constructed to treat lead-zinc ores. The reason for the discussion by Shattuck Denn is due to their mine, which reports say, is practically exhausted. If these reports are true, I thought they might wish to operate the Republic mine in conjunction with the mill, hence my letter to them with that proposal.

Very truly yours,

WILLIAM A. HOOTON.



Washington, D.C.
Aug. 1, 1942

SUBJECT: Mine Loan Application
Republic Mine
Wm. A. Hooton

I have the copy of the map submitted by Hooton for his application.

You probably have noted already that this is not an assay map in any sense whatever, and the statements on average assays for the blocks is unsupported by evidence of any sort.

I can hold this map for another copy to complete the two sets of data required, or I can return it to you if Hooton wishes to present the material through his own channels.

I believe that if Hooton is going to present such a slipshod case that if we file it it will take weeks of letters and additional data to get the matter in such shape that the examiners can consider it, it would be better if we just let him handle his own deal as we will get a black eye with him, due to the delay which he will come to think is ~~our~~ fault, and with the WPB for not doing a real engineering job.

If it were not for the terrible situation regarding metals and the war, I would advise dumping the whole business back in Hooton's lap and letting him file in whatever way he, in ignorance of the situation here, thinks is best.

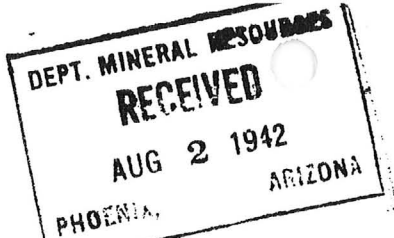
But under the emergency circumstances we should help all we can. The best way we can help is by getting to me the duplicate set of data I asked for, in shipshape order, arranged as though the case was being presented to a hard-boiled group of business men who are being advised by a staff of first-class engineers, and who want all the material so that they can make a decision at a Board meeting. I think you get what I mean.

Sam is clever and experienced at presenting promotional material and I am sure that he would not consider putting up the money to build a 200 ton mill on the presentation that has so far been made in this case. If the presentation had been checked by Ballam and again at the office against the questions asked and with the situation above outlined in mind, I am sure that I should not have been instructed to file. If presented properly the matter can be expedited. If not, and the case once gets into the system, no one can prevent it dragging out until they get piecemeal the data they asked for in the first place.

I will handle this any way you want. If you want me to go ahead as instructed, send the mess back and I will follow instructions. But I will not be responsible for the results. You are the boss, Sam.

Bill
Bill Broadgate

B831



Washington, D.C.
July 31, 1942

SUBJECT: Mine Loan Application
Republic Mine
William A. Hooton

Since writing the attached memo, I have thought the matter over some more and have ~~decided~~ decided it will save time if I return the material tonight.

I am retaining the RFC applications because, although the questions are not fully answered, (as in the milling section where you would think the greatest care would have been used), the attachment to the application of the duplicate data sheets furnished to the WPB Copper Branch will automatically fill the gaps.

I ask that you check the questionnaire carefully with the data furnished.... I am returning EVERYTHING sent except the RFC forms with nothing attached... and see if you consider that the data asked for has been furnished?

This is where applicants lose weeks and weeks of time.

In addition, I feel sure that Hooton has an additional questionnaire from the Copper Branch requiring a great deal of cost data calculations, as I saw a copy of the data sheet at the Copper Branch this morning. I was over there on another matter (Forrester) and dropped in to check on the Republic case. This material should also be attached.

If he will just believe that "more haste less speed", prepare his case with the greatest care and furnish me duplicate sets of data, we will get somewhere.

Furthermore, I unfortunately in a moment of pride told the Copper Branch people that we were advising Hooton on his application and that they could expect a complete and careful exposition of the case. I would be ashamed to present the mess that I am returning to you which may be OK as far as it goes, but is mostly unsupported statement.

THE FIRST STEP OF IMPORTANCE IS THE SUBSTANTIATION OF SUFFICIENT ORE RESERVES TO WARRANT THE INVESTMENT. These examiners have not seen the mine. They want maps, measurements, assays and all data to support the figures.

THE NEXT THING IS COMPLETE COST FIGURES to show that the operation is feasible. And of course these costs cannot be substantiated without metallurgical figures. Other data is incidental to these, but nothing should be slighted. Figure that you are going to invest in a proposition three thousand miles away you have never seen and you will see what I mean.

This may make everyone sore, but if I don't get hard-boiled and get the right material from Arizona, I can't do my job and get you results.

Bill Broadgate

B82

WASHINGTON, D.C.
July 31, 1942

SUBJECT: Mine Loan Application,
Republic Mine
William A. Hooton

I am not surprised at the implication in the memo of July 30 that you sent me the whole file because you didn't know what to do with it. I have an idea that, tomorrow, I shall send it all back to you after I check with WPB.

There is no point whatever in throwing a half-cooked deal into the system as it will just mean lost time and interminable correspondence. If the papers had been checked with the questionnaire at our office, they would not have been sent to me.

There are no maps, no smelter sheets, no adequate support for tonnage statements and I happen to know that a list of detailed questions regarding metallurgy and milling costs are unanswered. The thing seems to be, in the most important places, a collection of unsupported statements.

Considering the speed with which the WPB mailing section acts, and the time it takes to get around to answering letters, it does not pay to file incomplete applications and trust to interminable correspondence to straighten it out. Hooton would still be waiting come Xmas. It is much better to get the whole thing shipshape before filing. As you know, these WPB men in the Copper and Zinc Branches are old-time mining engineers and executives. They know what they want in the line of data, and propose to get it. Personally I think a few ~~more~~ horse-back judgements would accelerate the program, but that's not the way it is and we may as well face it. I can get the projects up for speedy consideration but cannot get them to skip important data. There is no use filing the data piecemeal, either.

This should have been done for the best speed;

1. All data should be prepared in duplicate including maps, smelter sheets and reports.
2. One set should be addressed ~~in~~ with a covering letter, to the WPB Copper Branch, stating that a set had been sent to the RFC.
3. One set should have been attached to the RFC application with a covering letter stating that duplicate data had been sent to WPB for approval of the project.

These should have been sent to me for filing.

MacClintock, Douglas and Wilbur Nelson are in the equipment, allocation and priorities section and have no connection with the Copper Branch. I will have no objection to checking with MacClintock to see if he has any ideas, but I can go as directly to the Copper Branch as he can. Who Bob Nelson in the RFC is, I don't know. I have never heard of him and he is probably some sub-examiner.

RFC
In any case, the application has to go through a certain channel to be processed for the files, and Bob Nelson or anyone else can't alter it. However, I know how to get the application taken up out of sequence if it is properly supported, and get reasonably quick action on it.

I cannot believe that MacClintock would have stated that this could be handled in a week. I wish it were so. The way the data is presented the WPB alone would be weeks getting the thing straightened out by mail, I really believe. This is the sort of thing that agitates men like Hooton.

By furnishing duplicate data to RFC and WPB I may be able to get some of the RFC work done ahead of the WPB final action.

It took me a week to get the Orizaba case out of WPB and that was a simple, well presented case. But even with Gorhing's connection with it and his influence over at Metals Reserve, I doubt if they will get disbursements in a month.

I have not received any authority to act for Hooton. I have not seen any of his correspondence with WPB and theirs with him. I don't know what he may have sent them independently from what I have, and I can't have access to the material without authority.

I could file the RFC application without the data, but don't think it would result in any saving in time.

Either a job like this is to be handled by us, or the applicant had better handle it himself. To deal partly ~~through~~ direct with RFC and WPB and partly through us will only result in confusion.

I will check with WPB tomorrow and decide whether to hold, file, or return so that the data can be properly arranged.

B. B.
Bill Broadgate

July 31, 1942

MEMORANDUM

MINE LOAN APPLICATION
REPUBLIC MINE
WM. A. HOOTON

TO: W. C. Broadgate

FROM: J. S. Coupal

I am enclosing a map to be attached to the application for loan on the Republic Mine and also, for your information, the letter from Mr. Hooton accompanying this map.

Mr. Hooton is still considering that the best plan is to submit this application along the two lines mentioned in his other letter, but I believe I have corrected this in my memo to you yesterday on this subject.

July 31, 1942

Mr. William A. Hooton
Dragoon, Arizona

Dear Mr. Hooton:

Many thanks for your letter of the 29th with
map on the Republic made by the Peru Mining Company.
I have forwarded this to Washington to Mr. Broadgate
with notation that it should be attached to the appli-
cation and other information to Mr. Ayer.

With best wishes, and hoping we can get
quick action, I am

Yours very truly,

J. S. Coupal, Director

JSC:LP

B78

July 30, 1942

MEMO TO W.C.BROADGATE

SUBJECT - MINE LOAN APPLICATION
REPUBLIC MINE
WM. A. HOOTON

FROM J. S. COUPAL

I am sending the Mine Loan Application from Hooton on the Republic Mine together with a report by J. B. Tenney, another from C. W. Batsford and the technical data required by the WPB.

I am also enclosing a letter of July 28th received from Hooton with certain instructions. In this letter, the first line has a reference to Mac which I think is J. D. McClintock.

Hooton gives certain instructions in paragraph #2 which are out of line with the proper procedure; and for that reason I am sending you the entire file, rather than to mail one copy to Bob Nelson and another to Frank Ayer.

The enclosure is the complete information on the Republic and I hope you can see that it gets going through the proper channels.

Signed-

J. S. Coupal,
Director.

B97

July 30, 1942

MEMO TO W.C.BROADGATE

SUBJECT - MINE LOAN APPLICATION
REPUBLIC MINE
WM. A. HOOTON

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Signed-

J. S. Coupal,
Director.

B76

July 30, 1942

Mr. Wm. A. Hooton
Dragoon, Arizona

Copy also sent to Tucson

Dear Mr. Hooton:

Many thanks for your letter of July 28th. I am forwarding a copy of your letter to Mr. Broadgate in Washington and will have him go right at your application to see that it gets into the right hands.

I talked with Mr. Rockford and he states that his position is such that he is unable to mail anything direct to Bob Nelson. By placing this in Broadgate's hands, together with the reports, I know you will get quickest action.

With kindest regards and best wishes, I am,

Very truly yours,

J. S. Coupal,
Director.

B75

July 27, 1942

MEMORANDUM

REPUBLIC MINE
W. A. HOOTON
RFC PLANT LOAN

TO: W. C. Broadgate

FROM: J. S. Coupal

I have just had an interview with W. A. Hooton and as soon as he gets a preliminary agreement with the Shattuck Denn for the erection and operation of a mill he will send in a formal application.

I understand that the New York office of Shattuck Denn have advised Spencer Shattuck that the deal to have them put in the plant at the Republic Mine is definitely on and that it is now a question of terms and conditions before definite action is taken.

Hooton has returned to Tucson today and will see the Shattuck Denn Company and make some preliminary arrangements and then apply for a RFC general mine loan. I am in hopes that this application will be completed in all details this week and that copies of this information together with the letters mentioned in your memo of July 23 on Republic Mine will also be sent.

I am under the impression that this matter will go directly to RFC as a general mining loan rather than WPB and will advise you later just what steps are taken.

July 26, 1942

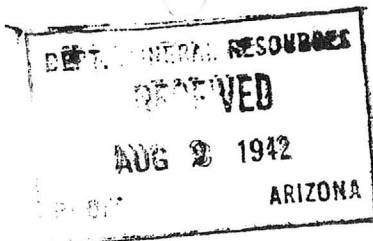
MEMORANDUM

REPUBLIC MILL

To: Director, Dept. Mineral Resources
From: George A. Ballam

On last Wednesday, Spencer Shattuck told W.A. Hooton in Bisbee that he had heard from the New York directors that Hooton's proposal re custom mill had been accepted, but that further details of manner of handling deal were being investigated. Hooton would prefer to deal with Shattuck-Denn, and is awaiting developments, any reasonable plan being satisfactory.

George A. Ballam



Dragoon, Arizona
July 23, 1942

Mr. Charles F. Willis
Phoenix, Arizona

Dear Mr. Willis:

The following information is supplementary to that in the application for government aid in building a mill on the Republic which I recently filled out:

The reference in the application to a power line to the mine was perhaps not sufficiently explicit in that there would be no present necessity for such a power line as the mill which was contemplated to be purchased already has a power plant, but the large compressor which I now have on the Republic and which is steam powered would have to be powered either by Diesel direct or a Diesel plant generating power. This unit would require about 125 H.P. and was included in my estimate of \$20,000 for necessary machinery, etc.

I have shipped, since last October, approximately 7,000 tons of ore, 5,000 tons of which have been shipped to two custom mills, and the remainder to smelters. Due to the fact that my first mill shipments went to a mill which was not adequately equipped to separate the copper and zinc, the recovery was very low. Also, during the period between January 15 and April 15, 1942, only six cars of ore were shipped and these to a smelter. The reason for my shipping only six cars of ore during that period was because of the fact I was waiting for the completion of the above mill during which time my operating expenses were piling up, with no returns. After shipping 2,500 tons from April 15 to May 25, 1942, I was advised that this mill would not receive any further shipments due to the fact that they made such poor extraction. Therefore, I began shipping to Shattuck Denn, in Bisbee, on June 1, 1942. Shattuck Denn's mill makes a very satisfactory recovery of the values, but unfortunately their capacity is limited to only 1,000 or 1,200 tons each month. In addition to treatment rate of \$4.50 per ton, which is excessively high, there is both hauling and freight which amounts to another \$1.50 per ton, making a total of \$6.00 per ton. You will readily see that a mill on the property would thus save at least \$4.00 per ton, besides treating a much larger tonnage.

Shattuck Denn have assured me that I can ship this 1,000 or 1,200 tons per month for several months and inasmuch as my operations show a net operating profit of between \$8.00 and \$9.00 per ton, these shipments could continue to Shattuck Denn while a mill was in the course of construction. In the four or five months necessary for this construction I could accumulate an operating reserve of several thousands dollars.

Trusting the above information will serve to clarify my position in desiring a milling plant on the property, I am

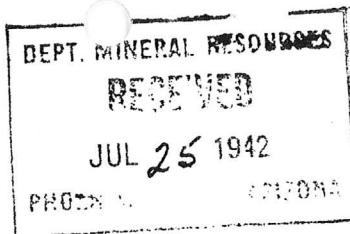
Very truly yours,

William A. Hooton

WILLIAM A. HOOTON

WAH:SMC

672



WASHINGTON, D.C.
July 23, 1942

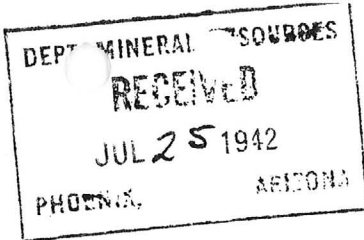
SUBJECT: Republic Mine
W. A. Hooton
R.F.C. Plant loan

In cases of this kind where the negotiations will be pretty extended and a lot of correspondence will go back and forth, I am pretty much in the dark as to when to act unless I have both ends of the situation tied together with copies of correspondence between the WPB and the client. Otherwise I waste time and look foolish pressing some point which may already have been negotiated by letter.

A rule of the WPB prevents copies of any correspondence going to anyone but the person they are specifically dealing with unless an agent is appointed by that person. In spite of the fact that I am an impersonal State official, I have run against this rule. If I am to follow this through the WPB and later, the Metals Reserve, please have Hooton write me a letter with two signed copies as well as the ~~original~~ original requesting me to act as his agent in getting the plant loan and have him send through your office or to me copies of his letters to WPB so we don't get crossed up.

Bill

Bill Broadgate



WASHINGTON, D.C.
July 23, 1942

SUBJECT: Premium Payments
Republic Mine
W. A. Hooton
Dragoon, Ariz.

In discussing the Peru situation with Mee this morning, he stated they are still investigating and carrying on an extensive correspondence to determine the delays.

Most of it appears to be because the Peru mill does not have smelter status and steps are being taken to cure this.

Shattuck has smelter status and delays are thereby cut.

I stated that cutting the red tape to get affidavits signed sooner, combined with a contingent fund, should go a long way to curing the troubles outside of complete abolishing of the premium system.

Bill
Bill Broadgate

W

July 22, 1942

Mr. W. C. Broadgate,
Harrington Hotel,
11th and E Streets
Washington, D. C.

Dear Mr. Broadgate:

Mr. Willis left yesterday for Denver where he will attend the hearings of the Senate Special Committee.

I am quoting a letter just received this morning from Mr. Hooton in order that your file may be complete as to present status of the Republic mine record.

"Yesterday I received producers affidavits from Peru for copper and zinc shipments in July so I presume this is final and that there are no more to come.

"I thought I had better let you know of this so that you need not carry the matter any further."

Yours very truly,

MH

B69

REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA

Dragoon, Arizona.
July 21st, 1942.

Mr. Chas F. Willis,
Phoenix,
Arizona.

Dear Mr. Willis,

Yesterday I received producers affidavits from Peru for copper and zinc shipments in July so I presume this final and that there are no more to come.

I thought I had better let you know of this so that you need not carry the matter any further.

Thanking you again, I am,

Very truly yours,

William A. Hooton
WILLIAM A. HOOTON.

B68

REPUBLIC MINE

W. A. HOOTON

P.O.Box 607
TUCSON, ARIZONA OR
Dragoon, Arizona.

Mr. Chas. F. Willis,
Phoenix,
Arizona.

Dear Mr. Willis;-

Today I visited Bisbee to see Mr. Wilcox or Mr. Shattuck but found them both out of the city. I did learn that there had been some suggestion that Shattuck might move their mill from Bisbee to the Republic and in line with this suggestion, I have written them a letter, outlining my position and submitting to them a proposal to take over my lease and option and operate the mine as well as the mill. Of course, I have no means of knowing how this proposal might be received but I shall keep you advised as to the situation as it develops. The proposal to move their mill to the Republic was not official but came to me quite by accident and I do not know whether or not there may be any foundation for the rumor, however, I have asked them for their reaction to such a proposal and also one for the taking over of my lease and option and the operation of the mine as well.

You will find enclosed a copy of a letter to Mr. Frank Ayer, which is self explanatory, meantime I shall compile the data which he requests and go ahead with the plan as first suggested in order to lose no time.

I find the inventory of the Penn Metals Mill does not include conditioner tanks, classifier, thickeners or sufficient flot machines for a capacity of 150 tons per day, hence I would have to revise my estimate of the cost of the completed mill, if it were to be purchased and removed to the Republic. Inasmuch as Mr. Ayer requests definite figures, it will be necessary for me to secure definite prices and delivery dates for this additional equipment and as soon as I can, I shall attempt to do this. In line with this thought, do you know of a mill at Dripping Springs for sale and if so, what the equipment includes?

With kind regards to both you and Mr. Coupal,
I am,

Yours very truly,

William A. Hooton.
WILLIAM A. HOOTON.

P.O.Box 607

or

Dragoon, Arizona.

Mr. Frank A. Ayer,
War Production Board,
Washington,
D. C.

Dear Mr. Ayer,

Your letter of the 24th inst with request for additional data on the Republic Mine has been received. I shall supply you with the data in the course of the next day or two.

The situation on the contemplated mill building program has been changed during the past few days. In looking over the inventory of the mill, about which I wrote you and which was supposed to be of a 200 ton per day capacity, I find that there are several units which would be required to bring it up to this capacity and altho these additional units might be obtained, the additional cost plus the asking price of the mill, would be materially increased.

I have approached Shattuck Denn with a suggestion that they move their mill from Bisbee to the Republic. This mill would have a capacity of approximately 250 tons per day and my thought was, if this plan could be carried out, they might also be interested in the operation of the mine as well. Accordingly I have written them to the effect that I would assign my lease and option to them under the terms I feel would be equitable to them and to me, i.e. under a flat rate per ton basis. As soon as they give me an expression of their reaction to this proposal, I shall communicate with you further, meantime I shall furnish you with the data you desire as soon as I can assemble it.

Thanking you again for your interest, I am,

Very truly yours,


WILLIAM A. HOOTON.

Rept Copy

July 22, 1942

Mr. W. C. Broadgate,
Harrington Hotel,
11th and E Streets
Washington, D. C.

Dear Mr. Broadgate:

Mr. Willis left yesterday for Denver where he will attend the hearings of the Senate Special Committee.

I am quoting a letter just received this morning from Mr. Hooton in order that your file may be complete as to present status of the Republic mine record.

"Yesterday I received producers affidavits from Peru for copper and zinc shipments in July so I presume this is final and that there are no more to come.

"I thought I had better let you know of this so that you need not carry the matter any further."

Yours very truly,

MH

B6 5

July 20, 1942

Sam:

Here is some data from Hooton on the Republic mine application. This wants to be worked up now for an application and there is nothing in the data that indicates just what he is making an application for.

It should show how much is wanted for a plant, how much for operating capital and how much for development. In fact, the whole should be carefully gone over to make sure that a complete presentation in the light of what is wanted is clearly shown.

Here is something now that is really ready to prepare but, of course, it cannot be sent in until the necessary reports and maps can be attached.

I think that he does not go into it as deeply as he should in regard to recent production and the general situation as to the reasons leading up to this. Of course the recent production can be obtained because of his statement on carloads that have been shipped to Peru which are on another report. In other words, there is much more of the story to be told as I would gather from hastily looking this over. Merely answering the questions that they ask is not sufficient. It certainly is a deficiency not to let them know what you want and just what you plan on doing.

He also does not say whether it is agreeable to Shattuck-Denn to build and operate the mill.

I think you know this whole story and have available all of the data so that you can write up for him a presentation and a request for Federal assistance.

C. F. W.

B64

July 20, 1944

Mr. Phillip Wiseman
Coronado Copper and Zinc Co.
1206 Pacific Mutual Building
Los Angeles, California

Dear Mr. Wiseman:

Mr. J. S. Coupal has turned your wire of today over to the Department of Mineral Resources for our attention and assistance in the matter of obtaining a deferment for Mr. George Reed, order No. 39.

It appears that Mr. Reed will have to report to the nearest Selective Service Board and I believe it is best for him to come to Phoenix for his pre-induction examination.

In the event that he should be found okay physically, the board will then review his case and, no doubt, the deferment will be granted. Of course, if he is not accepted physically he will be thrown out, but the Selective Service Board must determine that before they will review the appeal of Mr. Reed.

Very truly yours

DEPARTMENT OF MINERAL RESOURCES

Andrew Macfarlane

AM:emz

B135

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

(40)

SYMBOLS

DL=Day Letter
NT=Overnight Telegram
LC=Deferred Cable
NLT=Cable Night Letter
Ship Radiogram

A. N. WILLIAMS
PRESIDENT

NEWCOMB CARLTON
CHAIRMAN OF THE BOARD

J. C. WILLEVER
FIRST VICE-PRESIDENT

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

SA 135 DL=LOSANGELES CALIF 20 1110A

DUPAL=

304 HOME BUILDERS BLDG PHNX=

1944 JUL 20 PM 12 43

WE HAVE SENT THE FOLLOWING TELEGRAM TO LOCAL BOARD CEDAR CITY UTAH AND STATE DIRECTORS OF UTAH AND ARIZONA. QUOTE
GEORGE REED ORDER 39 JUST RECEIVED NOTICE FROM CEDAR CITY UTAH BOARD TO REPORT JULY 25 FOR PHYSICAL. REED EMPLOYED AS MINE FOREMAN AT OUR COPPER ZINC MINE DRAGOON ARIZONA. HE IS 30 YEARS OLD AND A KEX MAN IN OUR OPERATIONS. MAY 18 WE APPEALED TO CEDAR CITY BOARD HIS 1A CLASSIFICATION AND REQUESTED TRANSFER TO APPEAL BOARD IN ARIZONA WHERE HE IS EMPLOYED. WE HAVE HAD NO REPLY. CAN YOU ASSIST US OR ADVISE US HOW TO PROCEED IN ATTEMPTING TO RETAIN THIS EMPLOYEE AND EXPLAIN WHY ORDER TO REPORT ISSUED IN VIEW OF PENDING APPEAL.
UNQUOTE=

CORONADO COPPER AND ZINC CO.

39 25 30 18 1A.

R

September 14, 1943

MEMORANDUM

CORONADO COPPER & ZINC CO.

TO: W. C. Broadgate

FROM: George A. Ballam

Coronado Copper and Zinc Co., 1206 Pacific Mutual Building, Los Angeles, a newly organized subsidiary of Mudd-Wiseman, same address, took over W. A. Hooton's lease on the Republic-Mammoth property in Johnson district of Cochise County, Arizona. This deal took place about November, 1942.

They discontinued shipping copper-zinc ore from the 750-foot level. Hooton had shipped some 80 cars to Peru and Shattuck-Denn. The new management undertook to explore the property by means of diamond drilling. This work is nearly complete, four drill crews having been on the job for the past few months. The ore bodies proved up better than was believed in all previous estimates.

Mudd-Wiseman had previously held this property in 1941. At that time Frank N. Wright, their engineer, made a very complete geological reconnaissance of the area, including the Republic-Mammoth, Copper Chief, Peabody and other mines. The Mudd-Wiseman Company was not so optimistic and surrendered their lease. Hooton operated the property for a year, demonstrated the availability of some sizeable ore bodies and Mudd-Wiseman acquired possession as above noted.

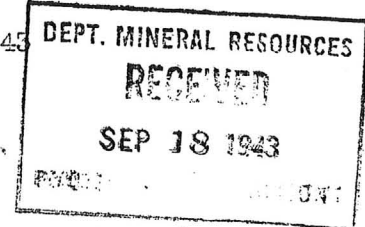
In my contacts with Mr. Wright recently and Mr. Nicholson at present in charge of operations I gather that the company is planning on a large milling operation to treat copper-zinc values. Some molybdenite and scheelite also occurs quite generally throughout this ore and provisions will undoubtedly be made for their recovery.

Of course, you can understand that this company is not revealing much information. They have moved cautiously in the investigation of these properties, but it is obvious that very promising results have been obtained.

During operation of the mines included in this lease from Roy Wilson and associates of Globe some 24,200,000 pounds of copper were produced from Republic-Mammoth from 1905-1928 with minor amounts of silver; the Peabody from 1882-1915 yielded 3,000,000 pounds of copper. Total value - \$6,000,000. Production figures on the other properties of the lease are not available. No attempt was previously made to recover zinc. Some 40,000 tons of 8% zinc ore are at present on dump, sorted from previous operations.

B133

Sept. 16, 1943



SUBJECT: Republic Mine

Thanks for the detailed report on this situation, with comments.

It may be that we can get MPB to "request" a resumption of production, if Shattuck Demm is in a position to take the ore.

Bill Broadgate

B13

VERY CONFIDENTIAL

September 14, 1943

Dear Bill:

There is no question in my mind that this operation was discontinued last fall with no plausible excuse. No development operations, unwatering to bottom, 1350, drilling, or geologizing could conceivably have interfered with production from the 750 level. Water at that time stood between 750 and 900. Hooton had been shipping to Denn at the rate of 1,000 tons per month and Denn was preparing to take more of this ore which is especially amenable to their treatment. Hooton fully expected this production to continue when he took off for the service. He has since returned and is chagrined to find matters as they are. His deal was largely based on production from known 225,000 tons above 750 level.

You will appreciate that a big exploration company like this does business on a long range scale futures. Tenney, Botsford and others had reported 6,000,000 tons of ore reserves and recent exploration may jump this estimate materially. In any event, cessation of production was probably a matter of policy which has been criticized severely, causing as it did no little inconvenience to other parties in addition to lopping off a substantial source of strategic metals.

This is an example of a big mine from which production is halted by a long range development policy, and apparently no attempt is being made at present urgently needed production.

George A. Ballam

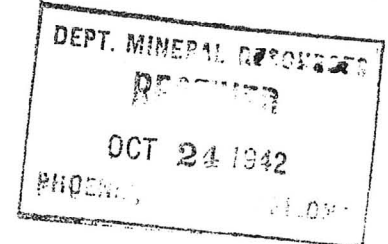
B131

1206 PACIFIC MUTUAL BUILDING
LOS ANGELES

No. 17299

October 23, 1942

Mr. J. S. Coupal, Director
Department of Mineral Resources
State of Arizona
413 Home Builders Building
Phoenix, Arizona



Dear Mr. Coupal:

This will acknowledge receipt of your letter of
October 21, 1942.

We know that there is some molybdenum and some scheelite at the Republic Mine and it is probable that the Bureau of Mines will make some investigation of this. It hardly seems probable, however, that either occurs in sufficient quantity to be commercially important unless the scale of operations at the Republic on copper and zinc develops to something considerably greater than we now have reason to expect.

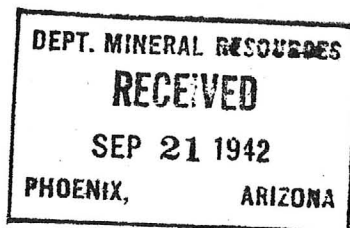
At this stage, we cannot estimate whether we will attempt to make recoveries of molybdenum and tungsten in the first mill unit, if and when this is built for treatment of the Johnson Camp ores. In any event, it would not now be possible to say whether the type of treatment which is necessary for Johnson Camp ores would permit us to purchase custom ores, which may require an entirely different plan of treatment.

If at a later date we are able to give a better picture of the possibilities, we will be happy to cooperate with you.

Yours very truly,

JLB:BB

B130



WAR PRODUCTION BOARD

WASHINGTON, D. C.

September 16, 1942

IN REPLY REFER TO:

4H - MJE

Mr. J. S. Coupal
Director, Dept. of Mineral Resources
State of Arizona
413 Home Builders Bldg.
Phoenix, Arizona

Dear Mr. Coupal:

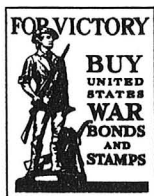
This is in reply to your letter of September 9 relative to the Republic Mine.

We thank you for the copies of the reports of C. W. Botsford and J. B. Tenney and the settlement sheets of the Peru Mining Company.

We are sending a copy of this letter to Mr. W. A. Hooton so that he will know that we have received this data.

Very truly yours,

Frank A. Ayer
Frank A. Ayer
Chief of Production
Copper Branch



B14

MEMORANDUM

SEPTEMBER 9, 1942

SUBJECT: Class "A" Loan
Republic Mine
W. A. Hooton

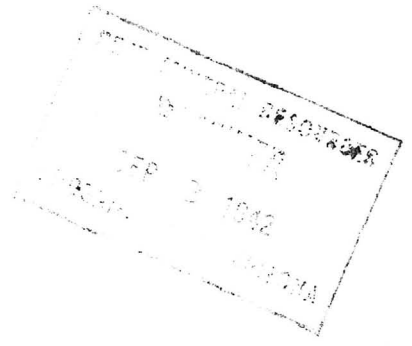
Two weeks ago in conference with Hooton he stated that a definite deal had been made with the Harvey-Mudd (formerly the Cypress Mine operations) to take over the Republic operations. Hooton was to continue operating until he fulfilled the tonnage agreed upon by contract with the Shattuck-Denn which should be completed by October 1. To all intents and purposes as far as I could determine then Hooton was all fixed up. He decided that he would not apply for a Class "C" loan.

I have received a letter dated September 7th from Hooton part of which I quote: "Please send reports as well as map to Mr. Ayer as I am going ahead with the negotiations for a loan even though Mr. Mudd advised me he was in no way interested in using government funds for the Republic."

I am complying with Mr. Hooton's request, but it is beyong me why he is taking such steps.

J. S. Coupal

Washington, D.C.
Sept. 1, 1942



SUBJECT: Class A Loan
Republic Mine
W. A. Hooton

There is evidently something doing on this since the memo Sam sent me last on the status of this project.

Morris Elsing called me this morning and asked me if I had copies of the two reports which I at one time had but returned to Sam.

Elsing evidently had a letter from Hooton, but as he did not advance any information I did not like to ask him the contents.

Did Hooton's Class C loan for unwatering and sampling go through yet?

Bill
Bill Broadgate

B 27

September 9, 1942

Mr. Frank A. Ayer
Chief of Production
Copper Branch
War Production Board
Washington, D. C.

Dear Mr. Ayer:

At the request of William A. Hooten, Dragoon,
Arizona, I am sending the Tenney and Botsfords reports
on the Republic Mine and I am also sending the Peru
Mining Company's settlement sheets on lots 19 - 43
inclusive.

With best wishes and kindest regards, I am

Very truly yours,

J. S. Coupal,
Director

JSC:hml

B176

September 9, 1942

Mr. William A. Hooton
Dracon, Arizona

Dear Mr. Hooton:

Many thanks for your letter of September 7, and we have already sent the photostatics of the Peru mining block map to Mr. Frank Ayer. We are today mailing the copies of the Tenney and the Botsfords reports to Mr. Ayer together with Peru Mining Company settlement sheets - lots 19 - 43 inclusive.

I will be very much interested in hearing of your progress on the Mudd deal and would also like to be advised of the progress on your mine loan application if you make one.

With best wishes and kindest regards, I am

Very truly yours,

J. S. Coupal,
Director

JSC:hal

B125



REPUBLIC MINE

W. A. HOOTON

TUCSON, ARIZONA
Dragoon, Arizona.
September 7th, 1942.

Mr. J. S. Coupal,
Phoenix,
Arizona.

Dear Mr. Coupal,

Enclosed is a copy of another letter from Mr. Ayer, relative to the data I compiled and sent you, and I shall appreciate it if you will send the reports as well as the map, (the latter, I believe you wrote me was being forwarded by Mr. Gohring's office,) to Mr. Ayer as I am going ahead with the negotiations for a loan even tho Mr. Mudd advised me he was not interested in using Government funds for the Republic.

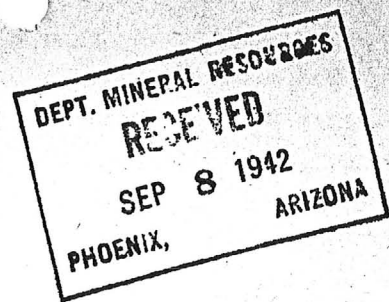
Thanking you and with kind regards, I am,

Very truly yours,

WILLIAM A. HOOTON.

WAH:SMC

B124



C O P Y .

W A R P R O D U C T I O N B O A R D .

Washington, D. C.

September 1st, 1942.

Mr. William A. Hooton,
Draoon, Arizona.

Dear Mr. Hooton,

This is in reply to your letter of August 25th.

We have not received the questionnaire, the reports of Tenney and Botsford nor the assay plan of Herndon and Schmitt. Mr. Broadgate has advised us that Mr. Willis' office sent him a copy of the Tenney and Botsford reports, which he returned to Phoenix.

The above mentioned data is all of interest to us and we would appreciate it if you will forward it to us as soon as possible.

Very truly yours,

Signed FRANK A. AYER.
Chief of Production,
Copper Branch.

September 3, 1942

MEMORANDUM

REPUBLIC MINE
W. A. HOOTON

TO: W. C. Broadgate

FROM: Earl F. Hastings

Hooton has evidently arranged financing (confidentially, with Harvey Mudd) and expects to go ahead with them. He is, however, continuing with his request for a general mining loan so that in the event there is some gap in negotiations, he can proceed without loss of time.

He has not made application for a "C" loan and we doubt that he will, as he feels this work is not necessary in view of the tremendous showing he has in workings which are already accessible.

We have forwarded to Mr. Ayer a photostatic copy of the Peru Mining Company's block map of the upper workings.