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

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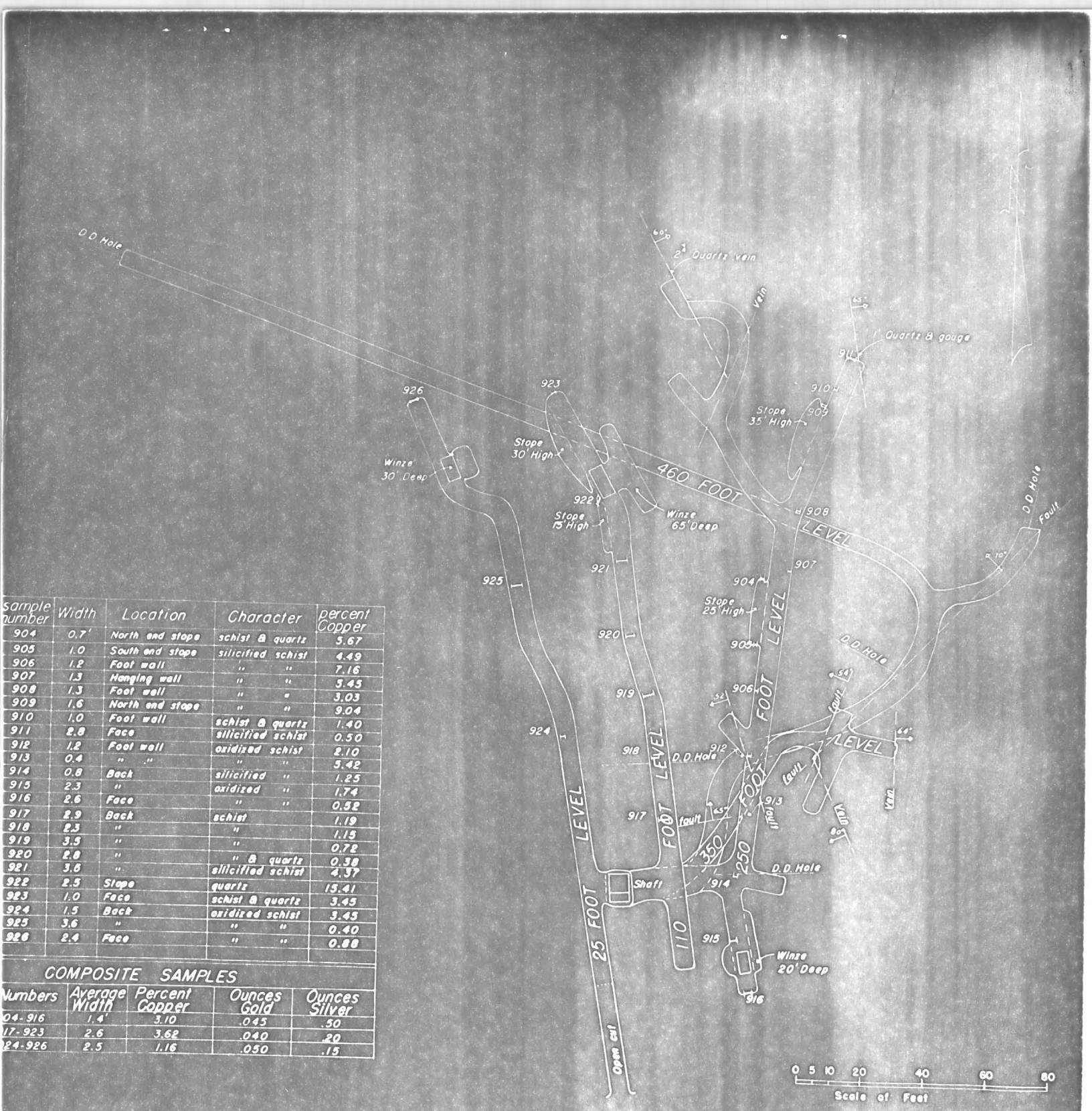

Sample number	Width	Location	Character	percent Copper
904	0.7'	North end stope	schist & quartz	5.67
905	1.0	South end stope	silicified schist	4.49
906	1.2	Foot wall	" "	7.16
907	1.3	Hanging wall	" "	5.45
908	1.3	Foot wall	" "	3.03
909	1.6	North end stope	" "	9.04
910	1.0	Foot wall	schist & quartz	1.40
911	2.8	Face	silicified schist	0.50
912	1.2	Foot wall	oxidized schist	2.10
913	0.4	" "	" "	5.42
914	0.8	Back	silicified "	1.25
915	2.3	"	oxidized "	1.74
916	2.6	Face	" "	0.52
917	2.9	Back	schist	1.19
918	2.3	"	"	1.15
919	3.5	"	"	0.72
920	2.8	"	" & quartz	0.38
921	3.8	"	silicified schist	4.37
922	2.5	Stope	quartz	15.41
923	1.0	Face	schist & quartz	3.45
924	1.5	Back	oxidized schist	3.45
925	3.6	"	" "	0.40
926	2.4	Face	" "	0.88

COMPOSITE SAMPLES

Numbers	Average Width	Percent Copper	Ounces Gold	Ounces Silver
04-916	1.4'	3.10	.045	.50
17-923	2.6	3.62	.040	.20
24-926	2.5	1.16	.050	.15

G. 1 - ASSAY MAP AND PLAN OF THE MOUNTAIN COPPER MINE, YAVAPAI COUNTY, ARIZONA

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine	MOUNTAIN COPPER CORPORATION CU.	Date	January 4, 1943
District	Agua Fria	Engineer	Earl F. Hastings

Subject: Reconstruction Finance Corporation
Preliminary Development Loan

Docket No.	C-ND-Phoenix 119
Date Application Received	January 1, 1943
Date of Field Examination	None
Date of Report	January 4, 1943

1. Name and address of applicant (correspondent):
Mountain Copper Company, Pierre Perry, President, Box 182, Mayer, Arizona.

2. Character of project and estimated cost thereof:
Copper. Unwater and re-enter the 250, 350, and 460 foot levels from the main shaft. $5000.00.

3. Location of property:
Agua Fria Mining District, T 12 N, R 2 E, Yavapai County, Arizona.

4. Applicant's interest in or ownership of property:
Applicant is President of owning corporation.

5. Loan requested:
$5000.00

6. Loan recommended:
$5000.00

7. Comments:
(A) The mine is currently in operation, development being accomplished in both the northerly and southerly faces of the 109 foot level drift. The applicant stated in verbal communication that the last three settlement sheets in the attached exhibit represented unsorted ore from these drift headings. They assay 4.03%, 5.12%, and 3.64% respectively.

(B) The north face of the 250 foot level offers production possibilities immediately following unwatering. There is apparently a shoot of ore, some 120 feet long, exposed in Tunnel #1, a winze therefrom, the north 109 level and the north 250 foot level from which ore ranging widely from 4 to 20% copper can be shipped. A smaller shoot is exposed south of the shaft on both the 109 and 250 foot levels. Some ore is exposed near the shaft on the 350 and 460 foot levels, but the above shoots have not been developed on these levels.

(C) Reopening the 250 foot level appears definitely justified for production purposes. Unwatering the 350 and 460 foot levels for development can be accomplished at slight additional cost. The latter levels need not be repaired in their entirety, but only so far as is required for such development of these specified shoots. This development can be accomplished while productive from the upper levels.

(D) Added to the docket is a Mine Owners Report executed by the former president of the Mountain Copper Company. The report attached to the form is a copy from the printed original of Carl G. Barth, deceased, a former Field Engineer for the Department of Mineral Resources.

Arizona Department of Mineral Resources

Earl F. Hastings
Assistant Director and Projects Engineer

(1) 111

Repat of Supervising Engineer

Docket No CND 8021
Date Authorization for
Examination Received
See Note Below
Date of Examination June 11, 1943
Date of Report

On Jan 1943 a $5000 loan was granted this project in order to ~~make~~ pump out a 460 foot shaft and make 5 levels of the mine accessible. applicant, corporation, did this work but did not notify this office that the mine was accessible ~~but~~ also on one of my trips into this area I stopped on June 11, 1943 at the mine to find out what progress was being made. The president of the Corporation Mr. Pierre Perry was not at the mine at the time of my visit, and due to an inflow of water the mine was again not accessible below the 250 foot level although the Bureau of Mines Engineers had already mapped and sampled the mine before the time of my visit. a copy of their maps and report accompanies this report. Comes now the applicant with a request for a further loan of $30,000.

(1)

1. Name + address of applicant.

Name - Mountain Copper Corp
Address - P.O. Box 182
City + State - Mayer, Ariz
Correspondent - Pierre Perry, President

2. Character of Project

To mine a block of partly developed, siliceous copper ore and to do a limited amount of lateral development work.

(2)

3. Location of Mine - Minor Mine

Township, range Section - Unsurveyed section, T12N, R2E, G+SR. B+M.

County + State - Agua Fria Mining District, Yavapai Co, Ariz

Name + Distance by road nearest railway station -

Mayer a town on the Santa Fe Railway is 5 miles by road west of the mine

Condition and seasonal accessibility of road mine to railway.

This is a well graded dirt road that should be accessible at all times of the year as the elevation at the mine is only 4200 feet so little if any snow falls during the winter

4 Applicant

The applicant corporation is under the control of Mr. Pierre Perry a middle aged Frenchman who is apparently a practical mine operator. I do not believe that he has had a great deal of actual mining experience but he is energetic and resourceful and since the operation of this project is not complicated he should be capable ~~of~~ to operate this mine

5 Loan Requested

The application dated June 15, 1943 requests a loan of $30,000. However in the applicants letter of Aug 12 (which is attached to the application) he requests a loan of $20,000 and later on Aug 17th the applicant requests me to make any changes or reductions I see fit. It is my opinion that the mine will will not require more than $10,000 to place

3,00
60
8
52
24
208
104
1248

(3)

st on production and do the limited amount of development work indicated. Therefor at the request of the applicant I have reduced the loan to $15,000. Of this amount $5000 will be used to repay the previous loan and $10,000 to be used for future work.

6 Description of Project

Applicant corporation owns 15 unpatented claims. The project should comply with all State Mining laws.

7. Existing Development

(3)

The property is developed by a 460 foot one and one half compartment vertical shaft with 5 levels but only the three upper levels are in ore. Accompanying this report are two mine maps based upon a survey by the Bureau of Mines. Also attached is a report on the mine by the Bureau of Mines. Since this report fully describes the mine and was found correct I do not believe it necessary for me to repeat the data.

The ore is exposed on three levels and in a number of small winzes and raises. The assays show that the limits of the ore body have not been reached either to the north or south on the 110' level nor to the north on the 200' level otherwise the size and shape of the ore lense is well defined.

(4)

8 Improvements and Equipment

The mine now contains all of the necessary tools and equipment with which to stope the ore exposed and do the required development work. This equipment consists of the following

1 - 1 cylinder fuel oil engine + hoist
1 - V8 Ford 5 ton dump truck
2 - large air pressure tanks
1 - Jack pump for shaft
1 - Peerless deep well turbine pump in shaft
2 - 1 ton tram cars
1 - Rix 210 cu ft compressor with gas engine
1 - Erd 30 H.P. 4 cylinder gas engine
(4) 1 - Waukesha 4 cylinder 8 H.P. gas engine
1 - I.R. air tugger hoist
1 - I.R. Imperial #10, 2 cylinder horizontal compressor and 1 cylinder "Charter" fuel oil engine
5 Jackhammers, 3 stopers, drill steel tools, etc

The Peerless pump ($1400.00) and $350.00 worth of pipe and tools were purchased with loan funds. In addition the shaft was dewatered and the mine cleaned out with the balance of the $6000 loan already granted.

143.34
152.61
56.17
352.12

(5)

9. Ore Reserves.

According to the Bureau of Mines and my estimation the mine contains 6630 tons of partially blocked out ore that will average 3% copper and 0.044 ounces of gold. It is safe to say that in addition the mine also contains ~~and~~ 3000 tons of probable ore of the same grade which will probably be found literally along the margins of the main ore shoot to the north and south.

The applicant intends to ship to the Clarkdale smelter and he states that he has been granted an additional copper premium of 8.9¢ per pound. Based on these figures the value of the ore can be calculated as follows:-

Smelter Value of Ore (Clarkdale Smelter, Phelps Dodge)

3% copper = 60 lbs - 10 lbs = 50 lbs x $0.09275	= 4.64
0.044 oz gold x $31.00	= 1.36
Total Smelter value of ore	$6.00 per ton

Premium Payments a Ore

60 lbs x 97% x $0.05 per lb (1st premium)	2.91
60 lbs x 97% x $0.089 per lb (2nd premium)	5.18
Total premium value of ore	$8.09

Total value of ore	14.09

Marketing charges.

Base Smelter Rate (minimum)	$2.75
Rail Rail freight (Mayer - Clarkdale)	1.03
Trucking 9 miles Mine to Mayer	1.03
Total marketing charges	$4.81
Net value of ore at collar of mine shaft	$9.28
Estimated mining cost per ton (2 ft wide vein)	6.00
Estimated net profit per ton	$3.28

(6)

Estimated total profit on 6630 tons $21,746.40

The ore can be selectively mined; ~~and~~ the grade increased and the tonnage decreased thus increasing the net profit per ton. However this would defeat the purpose of the premium as it would decrease the total poundage of copper produced. The walls of the vein stand well and the ore is not too hard so mining costs should not be excessive. The chief disadvantage in handling this ore is the narrow width of the vein and it may be necessary to carry a ~~wider~~ stope under than the width of the vein. ~~It~~ The production rate should be 20 tons per day ~~and~~ to and 6 men ~~should be~~ on 1 shift per day should be

10 Proposed Expenditures

I have had no opportunity to discuss the proposed expenditures in detail with the applicant altho we have reached an agreement in principle. I consider the following expenditures necessary as it will take 30 days before smelter settlements are paid!

Repayment of first Forest loan	$5000.00
30 days labor 6 men @ $7 per day each (stoping)	1260.00
Insurance deposit	500.00
Payroll taxes, compensation insurance, etc	200.00
Advance on freight 20 tons/day × 30 days × $1/ton	600.00
" " handling " " "	600.00
Operating supplies for 30 days (powder, fuel, etc)	1500.00
Stope preparation (installation of chutes, timber, etc)	1000.00
New Development Work	
Drift south 30 ft on 110' level @ $17/ft	510.00

.12
.9
1.00

(7)

Drift north on 110' lead 50 ft @ $17/ft 850.00

Drift north a 250' lead 50 ft @ $17/ft 850.00

17
5
850

~~Reserve~~

Reserve for ~~contingencies~~ Contingencies 2130.00

Total for loan $15,000.00

It is entirely possible that this property in the hands of an experienced operator could be placed on production for less than $10,000 but since mining costs are rising and there is always a certain amount of expensive delays in getting a property started, I ~~believe~~ consider ~~it will be necessary~~ $10,000 will be necessary.

(7)

I believe that one of the conditions of the loan should be that the applicant must start stoping the ore first and after he is on a permanent shipping basis, the ~~loan~~ drifting on the various levels as outlined above should be done. Furthermore I do not believe that any exploration work should be allowed on the 350 or 460 foot levels as this would be prospecting and I do not believe that the applicant should spend any further money on equipment or surface improvements.

12870
2130

// Comments of Supervising Engineer

I believe that a loan as outlined is warranted for this project provided that ~~a copper~~ siliceous ore is still needed at the Clarkdale Smelter and copper for War Effort.

This is a marginal property containing

(8)

a limited tonnage of ore. Without the additional bonus of 8.9¢ per pound for copper, the ore will not pay to ship.

The property during the last two years has produced 309 tons of sorted ore that averaged 5.38 % copper and 0.048 oz gold. In the future the prop mine should produce 6630 tons of ore averaging 3 % copper and 0.044 ounces of gold.

Since this mine is now fully equiped and ready to start producing and is now employing two of the 6 men necessary to operate the project, I believe a loan is justified due to the increased price of copper already granted.

(8)

Wm B Maitland
Sup Eng.

Mountain Copper Corp

Shipments under "A Loan"

Shipment No	Dry Tons	Date	oz Gold	% Cu	Smelt. Net Before Hauling & Mining Cost	Premium 13.94	Total Net	Total Net/Ton	Location of ore in Mine
5	47.694	1/6/44	0.07	2.85	$134.45	$247.87	$382.32		220
6	40.640	2/4/44	0.05	1.74	4.86	190.71	195.57		220
7	46.842	2/10/44	0.035	1.42	-48.74	179.31	130.57		220
8	92.833	3/6/44	0.03	1.89	-44.80	473.16	428.36		220
9	109.598	4/4/44	0.05	2.12	90.59	626.55	717.14		220
10	52.823	4/10/44	0.04	2.99	106.24	425.90	532.14		220
11	41.242	4/18/44	0.05	2.80	85.93	311.50	397.43		220'
12	45.609	5/10/44	0.04	7.19	415.45	884.32	1299.77		W winze 110 level
13	42.741	5/16/44	0.01	2.37	-13.83	273.14	259.31		yellow kid shaft
14	50.146	5/29/44	0.08	4.67	312.78	631.62	944.40		110' level main shaft
10	570.168	11/6 - 5/29	0.046	2.76%	$1042.93	$4244.08	$5287.01	$9.27	
Per ton	114.03 tons/mo.		0.046	2.76%	$1.83	$7.44	$9.27	$9.27	

Position as Of June 1, 1944

Total Loan Granted		$15,000.00
Less "C" Loan		5 060.27
Loan funds available for mining		$9,939.73
Credit for shipments (accrued)	$5287.01	
Misc credits	211.75	
Total credits		5498.76
Total receipts		$15,438.49
Less expenditures to date		13,251.91
Balance of funds on hand or accrued		$2,186.58
Approximate expenditures per month (7 mos)	$1,893.13	
" receipts from shipments per month (5 mos)	$1,057.40	
Estimated net loss per month to date		$835.73

239
2) 478

Block 1

1.5	3.45	5.18
3.6	0.40	1.44
2.4	0.88	2.11
3.0	5.47	16.23
2.9	1.19	3.45
2.3	1.15	2.65
3.5	0.72	2.52
3	0.25	0.75
2.8	0.38	1.06
3.5	4.37	15.30
2.5	15.41	38.53
1.0	3.45	3.45
32	2.9	92.67
2.7'	2%	

Block 2

3	5.41	16.23
2.9	1.19	3.45
2.3	1.15	2.65
3.5	0.72	2.52
3	0.25	0.75
2.8	0.38	1.06
3.5	4.37	15.30
2.5	15.41	38.53
1.0	3.45	3.45
2.6	0.52	1.35
2.3	1.34	3.08
0.8	1.25	1.00
0.4	5.42	2.17
1.2	2.10	2.52
1.2	7.16	8.59
1.0	4.49	4.49
0.7	5.67	3.97
1.3	5.45	7.09
1.3	3.03	3.94
1.6	9.04	14.46
2	9.35	18.70
1.0	1.40	1.40
2.8	0.50	1.40
44.7	3.5	158.10
1.9'		
2'		

Block 3

average

.044

3.0%

2 pt

324.93

96.9

44)

20.2

74.16

1.4'

3.7%

23

35

2300
3840
440
6630

8, 9 f forno.

Mayer Mine

RECONSTRUCTION FINANCE CORPORATION
MINING DIVISION
LIQUIDATION REPORT

Borrower: Mountain Copper Corporation
Docket No.: ND-5746
Date of Report: January 9, 1945

1. NAME AND ADDRESS OF APPLICANT:

Mountain Copper Corporation
Box 182
Mayer, Arizona

2. LOCATION OF PROJECT:

In unsurveyed portions of T. 12 N., R. 2 E., Agua Fria Mining District, Yavapai County, Arizona; about 5 miles from Mayer, Arizona.

3. Amount of Loan and Date of Authorization:

A loan of $15,000 was approved to Mountain Copper Corporation on September 13, 1943.

4. PURPOSES FOR WHICH LOAN WAS EXPENDED:

Loan was expended in mining siliceous copper ores, doing a limited amount of drifting in the upper levels and in purchasing a small amount of equipment.

5. EQUIPMENT:

a. Equipment purchased with loan funds:

1 - Peerless Hi-Lift Pump	$1,364.15
1 - Air tugger	125.00
473 feet 3" pipe	118.25
1 - 1941 Ford V8 motor for dump truck (Truck not owned by R.F.C.)	175.00
Parts for Le Roi Portable Compressor (Compressor not owned by R.F.C.)	129.70
420 feet 2" Std. Gal. Pipe, under water	107.90
1 Sullivan Wiggle Tail Stoper	25.00
200 Timkin bits	57.50
1 Bench vice	7.50
1 Receiver	16.00
200 Assorted Timkin bits	61.50
16 pieces of Timkin Steel	51.30
580 pounds of steel plates	17.40
2-6:50 V16 tire chains	11.00
Unassorted quantity of unions, bushings, valves, cocks, couplings	38.50
525 feet of gal. pipe, various sizes, under water	46.00
2 Emery wheels	6.00
18' - 12" f-ply Bull dog belting	35.00
Miscellaneous small tools	100.00
	$2,492.70

b. Equipment on hand, resale value and location:

473 feet 3" pipe	$80.00	Arizona Mining Supply Corp., Prescott, Ariz.
18' - 12" 5 ply Bull dog belting	20.00	"
1 Sullivan Wiggle Tail stoper	15.00	At the mine
200 Timkin bits	25.00	" " "
1 Receiver	8.00	" " "
200 Assorted Timkin bits	30.00	" " "
16 pieces of Timkin steel	25.00	" " "
580 pounds of steel plate	9.00	" " "
Miscellaneous assortment of unions, bushings, valves, cocks, couplings	18.00	" " "
2 - Emery wheels	3.00	" " "
Miscellaneous small tools	50.00	" " "

c. Disposition of equipment:

Air tugger and vice sold latter part of December for $65.00. Proceeds deposited in Trust account. Peerless Hi-lift pump sold latter part of December for $600.00. Deposited in account January 3, 1945. Pump is in the mine and under water.

473 feet of 3" pipe and 18 foot belting are stored at Arizona Mining Supply, Prescott, Arizona.

d. Steps taken to liquidate remaining equipment:

Applicant has arranged for Arizona Mining Supply Corporation to store remaining equipment until sold.

6. PROPERTY:

Borrower holds property by right of location under state and federal laws.

7. COMMENTS:

Operations were terminated December 15, 1944, after the applicant had spent all of the money and had mined 830 tons of siliceous copper ore. The average grade was 3.65% cu and .069 ounces gold per ton. Returns netted the Borrower $13.52 per ton before mining, hauling, overhead, and development. The property was last visited by Supervising Engineer William B. Maitland on June 23, 1944. Borrower has $741.26 in the Trust account and will have $62.04 coming from cancellations of compensation insurance. There will undoubtedly be some gas tax refunds, but no great amount. Apparently, from the contents of Borrower's letter to this office, there will be some additional bills and taxes to pay from funds received from sale of equipment.

8. CONCLUSION:

Should contain a statement such as: The proposed project failed to develop any material quantity of ore, and with the exception of the remaining equipment worth salvaging, the property is believed to be of no value. Consequently, except for the salvage value of equipment, the loan should be considered a loss.

9. RECOMMENDATION:

It is recommended that this account be closed when the remaining equipment acquired, in whole or in part, with loan or operation funds which is considered worth salvaging has been liquidated and proceeds applied on Borrower's indebtedness.

CAR

CHARLES A. RASOR
Supervising Engineer

325 Heard Building
Phoenix, Arizona
July 6, 1944

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

Re: Gold Hill Dredging Co - Docket No. ND-5541
Mountain Copper Corp. - Docket No. ND-8021
Victory Manganese Co. - Docket No. B-ND-4320

Enclosed herewith please find my Progress Report, in duplicate, on the above captioned projects.

WILLIAM B. MAITLAND
Supervising Engineer

Encs -
bkb

RECONSTRUCTION FINANCE CORPORATION

MINING DIVISION

PROGRESS REPORT OF SUPERVISING ENGINEER

Mountain Copper Corporation
Docket No. ND-8021
Dated: July 6, 1944

On June 23rd I visited this project and found three men working. The 250 ft. level had been allowed to flood with water so was not accessible. According to the men working at the mine, as Mr. Perry was not present, they had exhausted the ore possibilities on the 250. They were then working above the 110 ft. level and were stoping a small amount of ore. Apparently this project will only produce three or four more cars of ore and then will be shut down.

Following is a recapitulation of the ore shipments to date and a statement of a balance of the funds on hand. From this analysis it is apparent that the operation has not been economical.

Shipments under "A Loan"

Shipment No.	Dry Tons	Date	Oz Gold	% Cu.	Smelter Net before Hauling & Mining Cost	Premium 13.9¢	Total Net	Total Net/ton	Location of ore in Mine
5	47.694	1-6-44	0.07	2.85	$134.45	$247.87	$382.32		220
6	40.640	2-4-44	0.05	1.74	4.86	190.71	195.57		220
7	46.842	2-10-44	0.035	1.42	-48.74	179.31	130.57		220
8	92.853	3-6-44	0.03	1.89	-44.80	473.16	428.36		220
9	109.598	4-4-44	0.05	2.12	90.59	626.55	717.14		220
10	52.823	4-10-44	0.04	2.99	106.24	425.90	532.14		220
11	41.242	4-18-44	0.05	2.80	85.93	311.50	397.43		220'
12	45.609	5-10-44	0.04	7.19	415.45	884.32	1299.77		Winze 110 lev.
13	42.741	5-16-44	0.01	2.37	-13.83	273.14	259.31		Yellow Kid shaft
14	50.146	5-29-44	0.08	4.67	312.78	631.62	944.40		110' level minor shaft
10	570.168	1-6 - 5-29	0.046	2.76%	$ 1042.93	$4244.08	$5287.01	$9.27	
Per ton	114.03/mo/ tons		0.046	2.76%	$ 1.83	$ 7.44	$ 9.27	$9.27	

Position as of June 1, 1944

Total Loan Granted		$15,000.00	
Less "C" Loan		5,060.27	
Loan funds available for mining		$ 9,939.73	
Credits for shipments (accrued)	$5,287.01		
Misc. credits	211.75		
Total credits		$ 5,498.76	
Total receipts			$15,438.49
Less expenditures to date			13,251.91
Balance of funds on hand or accrued			$ 2,186.58

Approximate expenditures per month (7 mos)	$1,893.13	
Approximate receipts from shipments per month (5 mo.)	1,057.40	
Estimated net loss per month to date	$ 835.73	

WM. B. MAITLAND
Supervising Engineer

Mineral Dept

325 Heard Building
Phoenix, Arizona

September 3, 1943

Tully - Ass't Chief - Mining Section - Washington

Re: Mountain Copper Company - C-ND-8021

On August 27, 1943, I mailed you my report on this project with the comment that I would again visit the property in order to ascertain if additional work had been done since the time of my first visit.

On September 1, I re-visited this property and found that no important new development work had been done by the applicant. There are 3 men nowworking on this project and they are extending the stope located at the north end of the 250' level. This stope is now about 60' above the level of the drift and exposes a vein 3' wide.

Attached to this letter is an assay certificate. Sample No. 2 represents a grab sample of the ore last broken in the above mentioned stope. Sample No. 1, taken across 36" represents a small raise that has been started on the 250' level on the vein that is parallel to and just west of the vein in the stope already mentioned. This raise is located nearly at the intersection of the 2 veins shown on my map accompanying my report. I do not consider that these assays materially affect the conclusions given in my report, but I am submitting this information to you for your records.

WM. B. MAITLAND
Supervising Engineer

WBM:MJ
Enclosure
Assay Certificate

No. 382 Ma

Phoenix, Arizona,

Sept. 3, 1943.

CHAS. A. DIEHL

ARIZONA ASSAY OFFICE

Phone 3-4001 — 815 North First Street — P. O. Box 1148

This Certifies That samples submitted for assay by Mr. Wm. B. Maitland. contain as follows per ton of 2000 lbs. Avoir.

No.	MARKS	SILVER Ounces	SILVER Tenths	VALUE (Oz.)	GOLD Ounces	GOLD Hundths	VALUE (Oz.)	TOTAL VALUE Of Gold and Silver	% PERCENTAGE COPPER %	REMARKS
31	MTN. COPPER CORP. 36"				.03		$1.05		.80	
32	Grab --- 36"				.04		$1.40		2.25	

Charges $ 3.00

Assayer ARIZONA ASSAY OFFICE

E. A. D.

325 Heard Building
Phoenix, Arizona
August 27,1943

Mountain Copper Corporation,
P.O.Box No. 182,
Mayer, Arizona.

Re: Mountain Copper Corporation
Docket No. C-ND-8021

Gentlemen:- Attention:- Mr. Pierre Perry.

I intend to be in Mayer Tuesday on another matter, and would like to visit your property on Wednesday, September 1st in order to inspect the new ore showings about which you have written us. If it is convenient for you, I would like to see you at the property in order to discuss certain aspects of your loan application. It is indeed unfortunate that I always happen to be out of the office at the time your visits to Phoenix. However, your loan application has been sent to Washington together with my report. After my inspection of the property, I anticipated sending a Supplementary Report to Washington in order that your application will not be delayed.

Sincerely yours,

WM. B. MAITLAND
Supervising Engineer

WBM:mr

cc Washington

325 Heard Building
Phoenix, Arizona
August 28,1943.

TULLY - Asst. Chief - Mining Section - Washington D. C.

Re: Mountain Copper Corp., Docket No. C - ND- 8021.

Enclosed please find two copies of my report on the above captioned docket together with one copy of an application for $30,000 loan. It is my recommendation that this loan be reduced to $15,000, $5,000 of which is to be used to repay the accessibility loan granted this project January,1943.

There is some confusion in the dates pertaining to this application. The applicant dated his application as of June 15th, but did not submit it to this office until this month as he was waiting for a premium on copper from the War Production Board, and this premium of 8.9¢ was recently granted. On June 11th I examined the mine in order to report on the progress being made and it is on the basis of this examination that my report was written. I do not believe that much if any development work was done after the time of my examination as at that time the applicant had already spent all of his funds. However, in order to be sure of this point, I plan to reexamine the mine within the next few days, and will submit immediately to Washington a Supplementary Report on any work subsequently done since my first examination. Since the applicant does not live in Phoenix, it has been difficult to discuss with him the changes I have made in his application. However, the enclosed correspondence indicates that the applicant will be satisfied with any alteration I have made. In any event, it is my opinion that the mine does not justify a loan greater than the amount I have recommended.

WM. B. MAITLAND
Supervising Engineer.

RECONSTRUCTION FINANCE CORPORATION
MINING DIVISION
REPORT OF SUPERVISING ENGINEER

Docket No. C-ND-8021
(Date Authorization for Examination
(Received See Note Below
Date of Examination June 11,1943.
Date of Report August 31,1943.

In January, 1943 a $5,000 loan was granted this project in order to pump out a 460-foot shaft, and make 5 levels of the mine accessible. Applicant corporation did this work, but did not notify this office that the mine was accessible although on one of my trips into this area I stopped on June 11,1943 at the mine to find out what progress was being made. The president of the Corporation, Mr. Pierre Perry was not at the mine at the time of my visit, and due to an inflow of water the mine was again not accessible below the 250-foot level although the Bureau of Mines Engineers had already mapped and sampled the mine before the time of my visit. A copy of their mapsand report accompanies this report. Comes now the applicant with a request for a further loan of $30,000.

1. NAME AND ADDRESS OF APPLICANT

Name..... Mountain Copper Corporation
Address..... P.O.Box No. 182
City & State..... Mayer, Arizona
Correspondent - Pierre Perry, President

2. CHARACTER OF PROJECT

and To mine a block of partly developed silicious copper ore/to do a limited amount of lateral development.work.

3. LOCATION OF MINE - Minor Mine,

Township, Range Section - Unsurveyed Section, T12N, R2E, G & S.R. B & M.
County & State - Aqua Fria Mining District, Yavapai County, Ariz.
Name and distance by road nearest railway station- Mayer, a town on the Santa Fe Railway is five miles by road west of the mine.
Condition and seasonal accessibility of road mine to railway. This is a well graded dirt road that should be accessible at all times of the year as the elevation at the mine is only 4,200 feet so little if any show falls during the winter.

4. APPLICATION

The applicant corporation is under the control of Mr. Pierre Perry, a middle-aged Frenchman who is apparently a practical mine operator. I do not believe that he has had a great

deal of actual mining experience, but he is energetic and resourceful and since the operation of this project is not complicated, he should be capable to operate the mine.

5. LOAN REQUESTED

The application dated June 15,1943 requests a loan of $30,000. However, in the applicant's letter of August 12th (which is attached to the application) he requests a loan of $20,000, and later on August 18th, the applicant requests me to make any changes or reductions I see fit. It is my opinion that the mine will not require more than $10,000 to place it on production, and do the limited amount of development work indicated. Therefore, at the request of the applicant I have reduced the loan to $15,000. Of this amount $5,000 will be used to repay the previous loan and $10,000 to be used for future work.

6. DESCRIPTION OF PROJECT

Applicant corporation owns 15 unpatented claims. The project should comply with all State Mining Laws.

7. EXISTING DEVELOPMENT

The property is developed by a 460-foot one and one half compartment vertical shaft with 5 levels but only the three upper levels are in ore. Accompanying this report are two mine maps based upon a survey by the Bureau of Mines. Also attached is a report on the mine by the Bureau of Mines. Since this report fully describes the mine, and was found correct, I do not believe it necessary for me to repeat the data.

The ore is exposed on three levels and in a number of small winzes and raises. The assays show that the limits of the ore body have not been reached either to the north or south on the 110' level nor to the north on the 250' level, otherwize the size and shape of the ore lense is well defined.

8. IMPROVEMENTS AND EQUIPMENT

The mine now contains all of the necessary tools and equipment with which to stope the ore exposed and do the required development work. This equipment consists of the following:

1 - 1 cylinder fuel oil engine & hoist
1 - V8 Ford 5-ton dump truck
2 - Large air pressure tanks
1 - Jack pump for shaft
1 - Peerless deep well turbine pump in shaft
2 - 1 ton tram cars
1 - Rix 210 cu. ft. compressor with gas engine
1 - End 30 H.P. 4-cylinder gas engine
1 - Waukesha 4-cylinder 8 H.P. gas engine
1 - I. R. air tugger hoist
1 - I. R. Imperial #10, 2-cylinder horigontal compressor and 1-cylinder "Charter" fuel oil engine
5 - Jackhammers, 3 stopers, drill steel tools,et.

The Peerless Pump ($1400.00) and $350.00 worth of pipe and tools were purchased with loan funds. In addition the shaft was dewatered and the mine cleaned out with the balance of the $5,000 loan already granted.

9. ORE RESERVES

According to the Bureau of Mines and my estimation the mine contains 6,630 tons of partially blocked out ore that will average 3% copper and 0.044 ounces of gold. It is safe to say that in addition the mine also contains 3,000 tons of probable ore of the same grade which will probably be found laterally along the margins of the main ore shoot to the north and south.

The applicant intends to ship to the Clarkdale smelter and he states that he has been granted an additional copper premium of 8.9¢ per pound. Based on these figures, the value of the ore can be calculated as follows:-

Smelter Value of Ore (Clarkdale Smelter, Phelps Dodge)

3% copper = 60 lbs. - 10 lbs. = 50 lbs. x $0.09275...	4.64
0.044 oz. gold x $31.00.....	1.36
Total smelter value of ore.....	6.00 per ton

Premium Payments on Ore

60 lbs. x 97% x $0.05 per lb. (1st premium)	2.91
60 lbs. x 97% x $0.089 per lb. (2nd premium).....	5.18
Total premium value of ore.....	$8.09

Total value of ore	14.09

Marketing Charges

Base Smelter Rate (minimum).....	$2.75
Rail freight (Mayer-Clarkdale)..	1.03
Trucking 9 miles Mine to Mayer..	1.03
Total marketing charges.....	4.81
Net value of ore at collar of mine shaft.....	$ 9.28
Estimated mining cost per ton (2ft. wide vein).....	6.00
Estimated net profit per ton.....	3.28

Estimated total profit on 6,630 tons..... $21,746.40

The ore can be selectively mined; the grade increased and the tonnage decreased thus increasing the net profit per ton. However, this would defeat the purpose of the premium as it would decrease the total poundage of copper produced. The walls of the vein stand well and the ore is not too hard so mining costs should not be excessive. The chief disadvantage in handling this ore is the narrow width of the vein and it may be necessary to carry a stope wider than the width of the vein. The production rate should be 20 tons per day and 6 men on one shift per day should be sufficient.

10. PROPOSED EXPENDITURES

I have had no opportunity to discuss the proposed expenditures in detail with the applicant although we have reached an agreement in principle. I consider the following expenditures necessary as it will take 30 days before smelter settlements are paid:-

Repayment of first loan.....	5,000.00
30 days labor, 6 men @ $7.00 per day each stoping	1,260.00
Insurance deposit.....	500.00
Payroll taxes, compensation insurance, etc.	200.00
Advance on freight 20 tons/day x 30 days x $1/ton	600.00
Advance on hauling 20 tons/day x 30 days x $1/ton	600.00
Operating supplies for 30 days (powder, fuel, etc)	1500.00
Stope preparation (installation of chutes, timber, etc.)	1000.00
New development work	
Drift south 30 ft. on 110' level @ $17/ft	510.00
Drift north on 110' level 50 ft @ $17/ft	850.00
Drift north on 250' level 50 ft @ $17/ft	850.00
Reserve for contingencies.....	2130.00
Total for loan.....	15,000.00

It is entirely possible that this property in the hands of an experienced operator could be placed on production for less than $10,000, but since mining costs are rising and there is always a certain amount of expensive delays in getting a property started, I consider $10,000 will be necessary.

I believe that one of the conditions of the loan should be that the applicant must start stoping the ore first and after he is on a permanent shipping basis, the drifting on the various levels as outlined above should be done. Furthermore, I do not believe that any exploration work should be allowed on the 350 or 460-foot levels as this would be prospecting, and I do not believe that the applicant should spend any further money on equipment or surface improvements.

11. COMMENTS OF SUPERVISING ENGINEER

I believe that a loan as outlined is warranted for this project provided that silicious ore is still needed at the Clarkdale Smelter and copper for War Effort.

This is a marginal property containing a limited tonnage of ore. Without the additional bonus of 8.9¢ per pound for copper, the ore will not pay to ship.

The property during the last two years has produced 309 tons of sorted ore that averaged 5.38% copper and 0.048 oz. gold. In the future the mine should produce 6,630 tons of ore averaging 3% copper and 0.044 ounces of gold.

Since this mine is now fully equipped and ready to start producing and is now employing two of the 6 men necessary to operate the project, I believe a loan is justified due to the increased price of copper already granted.

WM. B. MAITLAND
Supervising Engineer.

19.8470	11.2	222.29	.106	2.10
45.9165	6.83	313.61	045	2.07
43.0685	5.12	220.51	046	1.98
58.4570	5.72	334.07	045	2.63
29.2475	4.04	118.60	025	1.02
42.5125	3.64	154.75	045	1.91
39.2145	4.54	178.03	045	1.76
30.1625	3.88	118.83	04	1.20
308.89	5.38	1660.99	.048	
309 two				

50
05
250

Prince Perry June 11, 1943

Sample No 1B - 2' vein grab from stope 250' Level

Sample No 2B - 3' vein in face on 109 level arsenic + qtz

Sample No 3B - 3' vein in back at 80' from shaft on 109' level at Perry sample

Water in shaft between 350 + 450 level

No ore reported on 350 or 450 level

612 S Montezuma Prescott

Equip, 1 fuel oil diesel hoist 1 cylinder

V8 Dump truck

2 large pressure tank

1 Jack pump

1 Peerless Hi lift deep well turbine No 25216

2 tram cars

4' drum

1 Portable compressor Ri4 R15

1 Ed 30 Hp 210 cu ft 2 cylinder

4 cyl gas engine

1 Waukesha 4 cyl gas engine

4 cyl gas engine

1 IR tugger hoist gas engine 8 HP

1-IR comp #10 2 cyl Hor Comp + Charter 1 cylinder fuel oil engine

3 stopers 5 jackhammers + 2 drifters

oxyacetylene outfit

M7 File

325 Heard Building
Phoenix, Arizona
July 24, 1943

(8021 2)

Mr. Pierre Perry
P. O. Box 182
Mayer, Arizona

Re: Docket No. C-ND-8201

Dear Mr. Perry:

Received your letter of July 17th. I intend to be in the office for the next six or seven days and I hope by that time you will have definite word on your new premium price for copper and that as soon as you hear we can submit your application directly to Washington. On a marginal mine such as yours, I believe it advisable to obtain a premium price before making application for additional loan funds.

Sincerely yours,

WILLIAM B. MAITLAND
Supervising Engineer

WBM-b

M4 File

325 Heard Building
Phoenix, Arizona

Tully - Asst. Chief Mining Division - RFC - July 24, 1943.

Re: Mountain Copper Corporation
Docket No. C MD-8021

Some time ago this project was granted $5,000 accessibility loan, and the applicant has made the underground workings accessible with this money. I examined the property on June 11th in order to report on the progress being made. Shortly thereafter the applicant corporation applied for additional funds with which to mine the copper ore they have exposed.

The applicant wishes to hold temporarily in abeyance his application for additional funds and as a consequence my report on the property until he has received final word on an additional premium for copper which he applied for some time ago and which the War Production Board assured him he would have.

The Bureau of Mines also sampled and mapped the mine and I now have available this report, which will be included with my progress report, which will be mailed to you as soon as applicant has obtained definite information on an additional premium for copper.

WM. B. MAITLAND
Supervising Engineer

WBM-b

Progress Report

Mountain Copper Co
ND 8021
Date of Visit Feb 21, 1944
Date of Report Feb 25, 1944

On Feb 21, 1944 I visited the above project in order to inspect the progress being made. At the time of my visit two men were working underground, the applicant, Mr. Perry, was running the hoist, and another man was working on the surface.

applicant has constructed a very substantial 80 ton ore bin at the collars of the shaft. He informed me that it cost him a little over $1900. I believe it is too large and expensive for the size of the mine.

The only other work done on the property has been underground work and all work to date was done on the 250 foot level. Referring to the maps accompanying my original report a raise has been started to connect the 250' and the 110' levels. As ordered by the mine inspector. This two compartment raise was started 35' south of sample No 911 (taken at the face) applicant informed me that the raise was 90 feet high and headed for the bottom of the 65' winze on the level above but I could not confirm this as the raise was partly blocked near the top. The raise was in ore for most of the way altho it should have reached the bottom of the winze at a height

of 70 feet.

a second raise also now partly blocked with ore was started below at Sample No 904 and is reported to be 70 feet high and in ore

a third raise started below Sample No 905 is 35' high and in ore, and from the top of this raise there is a connection over to the 70' raise.

I tried to discuss with the applicant the advisability of stoping the ore properly. Also before the loan was granted I explained to the applicant he should drive a series of raises on 25' centers above the 250' level and connect these raises together about 15' above the draft back. Since the vein is narrower than stopeable I suggested that a filled stope be used in order to get rid of the waste obtained from breaking one wall of the vein.

(1)

apparently however the applicant is not competent to properly carry out a definite stope system altho he appears to be working very hard and to be sincere in his endeavors. I believe he lets his two Mexican miners mine the ore as they please.

He reports that he has already shipped 5 cars of ore from the raises and has about 10 tons of broken ore to ship.

Under his new loan we have returns deposited for three cars of ore as follows:

	Date Received at Smelter	Dry tons	oz Gold per ton	% Copper	Net smelter returns (less smelting and RR freight only)	5¢ + 8.9¢ Premiums due or paid.	Total Receipts	Per ton net value at Railroad
1	Jan 6, 1944	47.694	0.07	2.85	134.45	366.54	500.99	10.50
2	Feb 4, 1944	40.640	0.05	1.74	4.86	190.71	195.57	4.81
3	Feb 10, 1944	46.842	0.035	1.42	−48.74	179.31	130.57	2.79
	Total	135.176			90.57	736.56	827.13	6.12

From the above it is obvious that the ore ~~go~~ for shipped contained waste dilution and would not pay trucking and mining costs.

~~Off~~ the $10,000 development loan recently granted there remained on Feb 21 a balance of $1597.57 which I believe will be sufficient only for another months operation. It is extremely doubtful if this operation will be successful ~~due to the app~~ and this will be due primarily to the applicants lack of mining experience.

Wm B Mankin

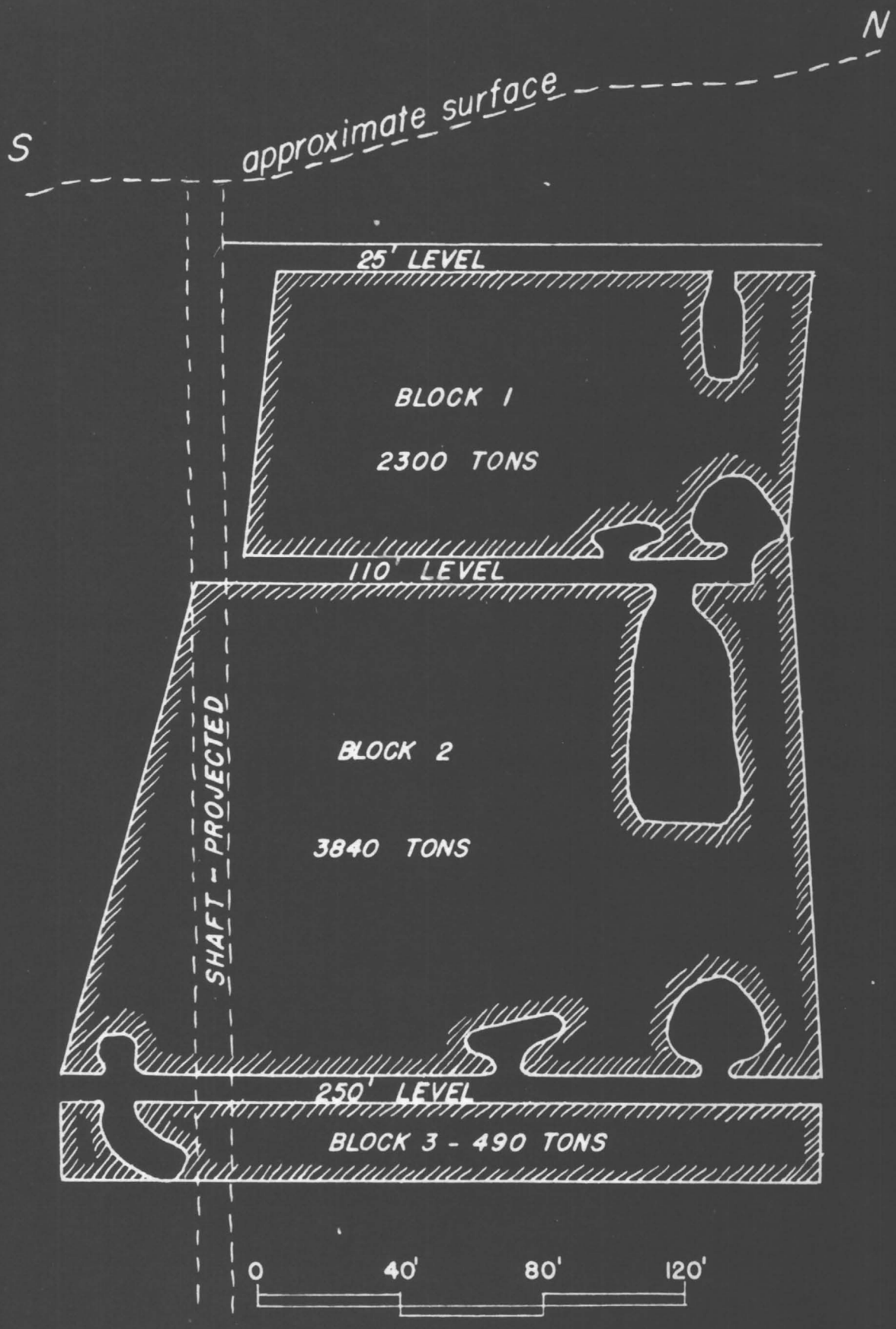

FIG. 2 - SECTION IN PLANE OF VEIN, SHOWING ORE TONNAGE BLOCKS

sample number	Width	Location	Character	percent Copper
904	0.7'	North end stope	schist & quartz	5.67
905	1.0	South end stope	silicified schist	4.49
906	1.2	Foot wall	" "	7.16
907	1.3	Hanging wall	" "	5.45
908	1.3	Foot wall	" "	3.03
909	1.6	North end stope	" "	9.04
910	1.0	Foot wall	schist & quartz	1.40
911	2.8	Face	silicified schist	0.50
912	1.2	Foot wall	oxidized schist	2.10
913	0.4	" "	" "	5.42
914	0.8	Back	silicified "	1.25
915	2.3	"	oxidized "	1.74
916	2.6	Face	" "	0.52
917	2.9	Back	schist	1.19
918	2.3	"	"	1.15
919	3.5	"	"	0.72
920	2.8	"	" & quartz	0.38
921	3.5	"	silicified schist	4.37
922	2.5	Stope	quartz	15.41
923	1.0	Face	schist & quartz	3.45
924	1.5	Back	oxidized schist	3.45
925	3.6	"	" "	0.40
926	2.4	Face	" "	0.88

COMPOSITE SAMPLES

Numbers	Average Width	Percent Copper	Ounces Gold	Ounces Silver
904-916	1.4'	3.10	.045	.50
917-923	2.6	3.62	.040	.20
924-926	2.5	1.16	.050	.15

FIG. 1 - ASSAY MAP AND PLAN OF THE MOUNTAIN COPPER MINE, YAVAPAI COUNTY, ARIZONA

W. M. R. _____ July 1943

WAR MINERALS REPORT *

Report of the Bureau of Mines to Secretary of the Interior, Harold L. Ickes

MOUNTAIN COPPER MINE
Agua Fria Mining District
Yavapai County, Arizona

- Copper -

Summary

The Mountain Copper Mine, situated 5-1/2 miles east of Mayer, Arizona, adjoins the Stoddard Mine on the northwest and is apparently a southerly extension of the same mineralization in the Yavapai schist.

The Stoddard has a creditable record of copper production and the proximity of the two on the strike of the same schist and less than one-half mile apart, probably stimulated the somewhat extensive and rather fruitless exploration at the Mountain Copper.

The main shaft is 470' deep, with five levels and over 1,000' of drifting and crosscutting, as shown on the map (figure 1) which accompanies this report. The best values in copper are on the 110' level. Seven samples taken by the Bureau of Mines averaged 3.62% copper with an average width of 2.6'. Seven shipments of sorted ore from this level totaling 265.7 tons averaged 5.64% copper. These shipments were made in 1942 by the present owners.

* The War Minerals Reports of the Bureau of Mines are issued by the United States Department of the Interior to give official expression to the conclusions reached on various investigations relating to domestic minerals. These reports are based upon data made available to the Department from other sources. The primary purpose of these reports is to provide essential information to the war agencies of the United States Government and to assist owners and operators of mining properties in the production of minerals vital to the prosecution of the war.

The workings below the 110' level have only recently been unwatered with an R.F.C. loan and the mine has been surveyed and sampled by Bureau of Mines engineers.

On the 250' level, 13 samples spaced 20' apart averaged 3.10% copper. The average width on this level was only 1.4'. There is no record of the shipments that were made from two stopes on this level.

There is no ore showing on the 350' or 460' levels. However, there are several places where some exploration would be justified if the vein showed better width and value.

The total "Indicated Ore" from the 25' level to the 250' level is calculated to be 6,600 tons, averaging 3.0% copper. The "Inferred Ore" is estimated to be one-half that of the "Indicated Ore," a possible total of 10,000 tons. If this were all measured ore of 3% copper, the development would not justify a mill.

The ore can be mined and hand sorted, as were the seven shipments from the 110' level, to raise the value to about 5% copper, but this makes slow and expensive mining, with only a small daily output likely.

The disappointingly low values in copper from the 23 samples taken coupled with the narrow width of the vein on the 250' level and small tonnage of indicated and inferred ore, do not justify further exploration by the Bureau of Mines.

There is a possibility of developing ore immediately to the north on the main vein and also of finding the vein by a crosscut east of the fault on the 350' and 460' levels. However, the probability

of developing enough low grade ore to justify a mill seems too remote to warrant recommending that this exploration be undertaken.

There is undoubtedly several thousand tons of ore in pockets or shoots along the vein which with the 5¢ bonus can be mined, by hand-sorting and shipped to the Clarkdale smelter, at a profit. The mine is sufficiently well equipped to handle a small tonnage, and the management seems to be competent and anxious to get out a little copper for the war emergency.

Introduction

The Mountain Copper Mine was brought to the attention of the Bureau of Mines by one of the owners. It was visited by a Bureau engineer on February 17 and 18, 1943, and was surveyed, sampled, mapped and examined by two Bureau engineers*, after the mine was unwatered, from May 5 to May 18, 1943. Mr. Pierre Perry, President of the Corporation, furnished the Bureau engineers with maps, reports and smelter returns.

Location and Accessibility

The property is located in the Agua Fria mining district, Yavapai County, Arizona, T.12 N., R.2 E., G. & S.R.B. & M. By road it is 5-1/2 miles east of Mayer, Arizona. The road to the mine turns right from the county road at the top of a hill, one mile east of Mayer, thence 4-1/2 miles over a fairly good mine road to the property.

Mayer is on highway 69 and is the terminus of a branch line of the A.T. & S.F. Railroad. A major transmission line of the Arizona Power Corporation passes within 1-1/2 miles of the mine.

Ownership

The property consisting of one patented and 14 unpatented lode

* Harlow D. Phelps and R.M. Grantham, mining engineers

claims, is owned by the Mountain Copper Corporation. Mr. Pierre Perry, President, of Mayer, Arizona, is the owner of 51% of the capital stock.

History

The mine was owned and operated by the Arizona Redlands Copper Company from 1923 to 1929. Practically all the present development was done at that time. Co-incident with the depression and drop in the copper market, the property closed down.

In 1937, John W. Burke of Clarkdale and M. Robert Herzog of Ajo, Arizona, formed a partnership and relocated the claims. They shipped six cars of sorted ore from the 110' level which averaged about 14% copper, but did not unwater the mine below that level. Mr. Herzog died and the property was idle until 1942 when Mr. Perry acquired control and organized the present corporation.

Production

There is no record of any production by the Arizona Redlands Copper Company, who did most of the exploration work.

According to a former report on the property, Burke and Herzog shipped 6 cars of sorted ore totaling 239 tons from above the 110' level. This ore averaged about 14% copper and netted $3,829.44 at the smelter.

In 1942 the present owners shipped seven cars or 265.68 tons of sorted ore which averaged 5.64% copper. This ore was mined from the 110' level and mostly from one stope near the end of the drift.

The smelter assay returns on these sevel lots of ore were as follows:

Date	Dry tons	Oz.per ton Au	Ag	% Insol.	% SiO_2	% Al	% Fe	% Cu	Tons x % Cu
10-1-42	45.92	.037	.35	60.4	56.2	7.1	11.2	6.74	309.5
11-10-42	58.46	.045	.35	65.0	59.8	6.4	9.3	5.72	334.0
11-28-42	43.06	.046	.37					5.12	220.5
12-21-42	29.24	.035	.55					4.04	118.2
1-16-43	29.20	.04	.16		61.0	7.0	8.8	3.88	113.2
	39.94				61.0	7.6	9.8	4.54	181.2
2-6-43	19.85	.106	.30	42.9	40.6	5.1	15.2	11.20	222.3
Total	265.68								1499.5

Average = 1499.5 ÷ 265.68 = 5.64% copper

There is no present production from the mine. However, the management expects to start mining operations as soon as reconditioning of machinery is completed.

The prospective production is very indefinite. However, there are undoubtedly several thousand tons of ore on the 110' and 250' levels from which ore of shipping grade can be hand-sorted. The possibilities for production that might result from further exploration are discussed under "Development."

Physical Features

The topography is fairly rugged and mountainous and the elevation about 4,200'. The climate is mild, with seldom any extremely hot or cold weather throughout the year. There is little vegetation other than a scattered growth of cedar trees and catclaw bushes.

The mine makes about 20,000 gallons of water per 24 hours. Some of this water is used for domestic purposes. There is also a spring about 1/4 mile away from which water could be piped to the camp. An additional supply, if needed could be pumped from the Agua Fria River, a distance of about 1/2 mile with a lift of about 400'.

The mine equipment is as follows: An Ingersoll-Rand two-stage compressor of 350 cu.ft. capacity, direct connected to a 70 h.p. single cylinder gas engine; a hoist and 1,000' of 3/4" cable direct

connected to a Western, heavy duty, single cylinder 35 h.p. gas engine; a Peerless impeller type pump of about 60-gallons-per-minute capacity.

The mine is fairly well equipped for operating on a small scale. The buildings consist of an engine and hoist house, blacksmith shop and change room and four camp buildings, with accommodations for possibly a dozen men.

Geology and Ore Occurrence

The prevailing country rock is the broad, irregular area of Yavapai schist, which extends in a northwesterly direction from the Blue Bell mine to Jerome.

The rock on the claims of the Mountain Copper Corporation consists of a light-colored sericite schist, a dark blue chloritic schist, a hard compact phyllite and a quartz porphyry schist, with many outcroppings of white quartz. There are some igneous intrusions within the schist.

The ore occurs as copper carbonates and sulfides in lenses within the schist and along fractures and faults, but generally following the lines of schistosity.

The gangue material is largely quartz and schist. On the surface there is rather an extensive area showing small veins following the schistosity and in the fissures, fractures and faults.

The strike of the main vein varies from N.20°W. to N.10°E. and the dip from 65° east to 80° east.

Development

The main shaft is 470' deep. The drifts, crosscuts, diamond drill holes, stopes, winzes and principal faults are shown on the map

(figure 1), which accompanies this report.

Most of the work which has been done is in the nature of exploration rather than development. However, the vein is exposed on the 25' level for a length of about 180' and average width of 2.5'; on the 110' level for a length of about 160' and average width of 2.6'; on the 250' level for a length of 210' and average width of 1.4'.

There is ore at the north faces on the 25-, 110-, and 250' levels and further exploration work could be done on the vein, immediately north on the 100' and 250' levels, but there is very little surface showing of ore north of the present workings until reaching the Stoddard property.

At the south face on the 250' level the vein is 2.6' wide, but on the surface there is a sharp gulch about 100' south of the shaft with very little surface indication of ore south of this gulch.

There is no ore on either the 350' or 460' levels and it is possible that the fault encountered on the 460' level, striking N.45°E. and dipping 70° west may have faulted the main vein on both the 350- and 460' levels. A short easterly crosscut might therefore be driven at the end of the present drifts on both the 350- and 460-foot levels. Also the vein might be encountered by a crosscut following a diamond drill hole which is located east of the shaft on the 460' level. The log of this drill hole indicates 15' of ore, 5' of which is "good ore" at 68 to 83' east along this hole.

The crosscut which was driven northwesterly on the 460' level a distance of 280' and which appears to have followed an old drill hole,

apparently encountered no parallel vein west of the main vein.

There is reported to be 840' of diamond drilling on the 350' level and 1,200' on the 460' level.

The results of this drilling are given in a report by A. R. Bowen and also shown on an old map by the corporation. The report states that the records kept of the drilling on the 350' level were unsatisfactory. In fact, the logs of the holes on both levels, as shown on the map, are open to question and it is doubtful whether any of it can be relied on.

The northwesterly crosscut on the 460' level, previously referred to, apparently encountered no parallel veins west of the main vein, but the log of this hole, as shown on the old corporation map, indicates six eveins within the 280' length, varying in width from 2 to 19' and giving copper values from 0.82% to 1.51%. The map bears no signature or name of the party who prepared it.

On the surface there are a number of small shafts, cuts and adits north and east of the main shaft. The veins, where found, were small and no samples taken.

There is a shaft over 100' deep and about 1,000' northwesterly from the main shaft which is partly filled with water. The shaft is apparently located too far to the west to be on the main vein.

Ore Reserve

The ore partly blocked out, as shown on the map (figure 2) accompanying this report, totals 6,630 tons of "Indicated Ore" averaging 3.0% copper.

There is a possibility of developing ore immediately north on the main vein, as the vein shows a width of 2.4', 1.0' and 2.8' on the 25-, 110-, and 250' levels, respectively.

There is also the possibility of finding on the 350- and 460-foot levels the faulted segment of the vein that appears to have been cut off by the northwesterly dipping fault encountered on the 460' level.

It is, therefore, safe to assume that there is at least one-half as much additional ore, or 3,300 tons of "Inferred Ore."

Living Conditions and Labor

The bunkhouse at the property might be arranged to accommodate possibly a dozen men and other facilities are adequate for a crew that size. There are usually a few miners in and about Mayer and Prescott.

Operating Costs

Where hand sorting is necessary and the vein small, the cost of mining will be high, probably $6 to $8 a ton. Estimated costs are as follows:

Mining cost	$8.00 a ton
Trucking to Railroad at Mayer . . .	1.00 " "
Freight from Mayer to Clarkdale .	1.00 " "
Treatment charge - Clarkdale smelter	2.50 " "
T o t a l	$12.50 a ton

Possible returns from assumed 5% copper ore are as follows:

Clarkdale smelter returns on 5% copper, assuming the ore has a net of $1.50 in gold and silver, would be as follows:

Gold and silver	$1.50
5% copper - 0.4% @ $0.09050	8.33
5¢ bonus (97% of assay @ 5¢ a lb.)	4.85
	$14.68

This indicates an operating profit of $2.18 a ton.

Sampling

Samples, spaced 20' apart, were cut with moil and hammer across the back, for the full width of the vein on both the 110- and 250-foot levels.

The ore appears to be highly oxidized and leached on the 25' level. The back was too high to reach without staging in most places. Three samples were cut on this level spaced 50' apart.

Most of the samples were hard and showed quartz with the sulphide in a gangue of altered chloritic schist.

The minerals present were largely sulphides except where otherwise stated in the following table. The number and location of each sample is shown on the map (figure 1) and figure 2 which accompany this report.

Sample No.	Length (Width)	Location	Description	Assay Percent Copper	Assay x feet
904	0.7	250 ft. level, stope	Schistose & quartz	5.67	3.97
905	1.0	" "	Dark schist	4.49	4.49
906	1.2	" back	Hard siliceous	7.16	8.59
907	1.3	" "	"	5.45	7.09
908	1.3	" "	Schistose	3.03	3.94
909	1.6	" stope	"	9.04	14.46
910	1.0	" back	Hard black rock	1.40	1.40
911	2.8	" face	"	0.50	1.40
912	1.2	" back	Soft oxidized	2.10	2.52
913	0.4	" "	"	5.43	2.17
914	0.8	" "	Hard siliceous	1.25	1.00
915	2.3	" "	Oxidized	1.74	4.00
916	2.6	" face	Oxidized schist	0.52	1.35
Total	18.20				56.38
	Average width, 18.20 ÷ 13 = 1.4'; 56.38 ÷ 18.2 = 3.10% Cu.				
917	2.9	110' level, back	Black schistose	1.19	3.45
918	2.3	" "	" "	1.15	2.65
919	3.5	" "	Hard and soft schist	0.72	2.52
920	2.8	" "	Hard schist & quartz	0.38	1.06
921	3.5	" "	Hard siliceous	4.37	15.30
922	2.5	" stope	Hard quartzite	15.41	38.53
923	1.0	" face	Siliceous	3.45	3.45
Total	18.50				66.96

Average width, 18.50 ÷ 7 = 2.6'; 66.96 ÷ 18.50 = 3.62% Copper

Sample No.	Length (Width)	Location	Description	Assay Percent Copper	Assay x Feet
924	1.5	25 ft. level, back	Red Oxidized	3.45	5.18
925	3.6	" "	" "	0.40	1.44
926	2.4	" face	" "	0.88	2.11
Total	7.50				8.73

8.73 ÷ 7.50 = 1.16% copper

Total average assay ₱ $\frac{132.07}{44.2}$ = 2.99% copper

Conclusion

The Bureau of Mines, after an examination, survey and sampling of the Mountain Copper mine concludes that:

(1) There is 6,600 tons of "Indicated Ore" averaging 3.00% copper
(2) There is approximately one-half as much, or 3,300 tons of "Inferred Ore" of the same value.
(3) It is believed that only by developing enough of this low grade ore for milling operations can the mine be successful operated to produce a substantial output of copper.

(4) There is a possibility of developing ore immediately north on the main vein and also of finding the vein by a crosscut east of the fault on the 350- and 460-foot levels. However, the probability of developing sufficient tonnage of low grade ore to justify a mill, seems too remote for the Bureau of Mines to recommend that this exploration be undertaken.

(5) There is, however, several thousand tons of ore in pockets or shoots along the vein on the 110- 250-foot levels which, with the 5 cent bonus can be mined at a small profit by hand sorting to 5 percent grade and shipping to the Clarkdale smelter.

(6) The mine is sufficiently well equipped to handle a small tonnage and the management seems to be competent and anxious to get out a little copper for the war emergency.

7/10/43

Mountain Copper. Co.

A. C. Van Hook.

Squaw Peak Copper

Mountain Copper Corporation
Minoi Mine or Mountain Copper Mine

13.9¢.

				Assay			Analysis						Tons	Total Metal			Gross / Ton	Net	To Shipper	13.9¢. Bonus	
				Au	Ag	Cu.	Zn	Fe	CaO	SiO_2	Al_2O_3	S.		Au	Ag	Cu					
7/23-43	3	Clarkdale	2487	.02	.16	2.20	.3	9.6	.1	63.1	9.7	2.3	35,492	.70	5667	1562	3.15	1.40	2273		
8/18/43	4	"	2520	.05	.21	3.30	.5	7.9	.3	63.7	8.4	2.8	37,580	1.87	7.89	2480	6.80	4.05	113.10		544.98
1-10-44	5	"	2743	.07	.14	2.85	.3	10.1	0.0	61.0	10.1	3.4	47,694	3.338		2719	6.61	3.86	134.45		247.87
2-4-44	6	"	2839	.05	.16	1.74	.3	8.2	0.9	61.7	11.3	2.6	40,640	2.03		1414	3.91	1.16	4.86		
2-10-44	7	"	2819	.035	.13	1.42	.2	8.3	.2	63.5	10.8	2.3	40842	1.84		1330	2.73	.20	48.74		
3-7-44	8	"	2863	.03	.13	1.89	.2	6.6	.1	64.3	10.7	2.2	28,833	2785		3509	3.42	1.67	44.80		473.16
4-4-44	9	"	2948	.05	.19	2.12	.2	8.3	.3	64.2	10.0	3.5	109,578	5.48		4647	4.42	1.87	90.58		
4-11-44	10	"	2969	.04	.22	2.99	.2	8.8	.2	64.1	8.5	3.6	52,823	2.113		3161	5.82	2.07	106.24		1052.50
4-18-44	11	"	2985	.05	.23	2.80	.3	8.2	.1	63.5	9.5	3.0	41,242	2.062		2310	5.88	3.13	85.73		
5-10-44	12	"	3043	.04	.18	2.19	.4	12.6	.0	59.0	7.6	6.3	45,609	1.824		4558	13.51	10.16	415.45		1467.42
5-18-44	13	"	3059	.01	.22	2.37	.1	11.4	.1	62.3	9.0	3.2	42,741	—		2026	3.47	.72	13.83		
5-31-44	14	"	3092	.08	.38	4.67	.5	14.1	.4	53.5	8.3	4.0	50,146	4.012		4684	10.31	7.28	312.28		
6-19-44	1	Naylon	474	.05	.32	3.63		8.8		63.5	9.7		55,540	1.943		4037	6.68	4.17	92.48		
6-26-44	2	"	490	.101	.18	2.08		7.1		60.2	10.2		41,654	4.207		2586	7.68	5.12	94.48		
7-5-44	15	Clarkdale	3236	.40	1.23	10.28	0.8	13.4	.1	50.3	5.3	11.3	46,234	18.498	56.9	9506	31.62	26.38	1220.15		
													786,682	52.50	56.9	52504			2440.39	7079.13	
10-2-44	16	"	3387	.10	.72	9.69	.6	14.9	.2	48.7	5.8	8.7	38,419	3.838	27.6	7457	20.05	16.05	552.45		
12-4-44		Wilkinsburg	1918	.16	.40	2.50							5,129	.820		768	10.80		45.24		
				.068		3.65							830,283	59.168	84.6	60329			3038.16	8188.07	Total Bonus
	Squaw Peak Copper																				
9-20-44	1	Clarkdale	3370	.02	2.41	22.69	.3	23.8	.6	18.3	5.0	24.4	5,016	—	12.1	2276			167.43		
11-7-11		MRC											1,082.26				687.98		746.94	93.24% MoS_2	
1-5-45		"											588.85		84				404.98		
12-19-44		Clarkdale	3383	.91	1.83	24.41	.7	24.5	.2	15.0	4.4	24.7	4,579		5.7	2206			159.98		
3-19-45		"	3981	.017	1.69	24.29	.4	24.4	.4	15.2	4.4	25.7	4,434		7.5	2134			155.16		
4-12-11																				742.89	
5-11-11																				389.51	
5-10-11		Clarkdale	3765	.03	1.80	24.32	.3	24.0	.4	15.0	4.8	26.1	5,624	.169	10.1	2740			206.25		
														.167	38.4	9376			688.84	2482.23	Tons 9626.94
5-8-44	A.C. Von Hook Silver		3022	.17	12.63	2.58	.2	15.7	2.9	46.9	5.1	12.5	37,343	6.348	47.16	1927	18.29	12.61	335.37	93.95	

3.66 Smelt
7.86 Bonus
13.52

Bonus
1104.40
1107.00
1104.45
1326.90
454.75