



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

The following file is part of the

Reconstruction Finance Corporation Arizona Records

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

XXXXXXXXXXXXXXXXXXXX

325 Heard Building
Phoenix, Arizona
February 20, 1947

TULLY - Chief - Mining Section, RFC - Washington 25, DC

Re: Willard S. Samson - Docket No. B-201 *no card.*

I submit the original and one copy of my report covering the examination of applicant's property for a loan of \$3200.00.

Also submitted is applicant's original application with supporting data which includes:

1. Rough sketch of property by applicant
2. Report by J. A. Wilcox, Manager of Shattuck Denn's operation in Bisbee, Arizona.
3. Copy of Lease and Option Agreement with applicant's partner.
4. Twelve settlement sheets on ore shipped by applicant to Hawley & Hawley, ore buyers.
5. Assay sheet of samples taken by some officials of Coronado Copper & Zinc Company.

CAR
CHARLES A. MASOR
Supervising Engineer

CAR:gnk

Encs:
As above

RECONSTRUCTION FINANCE CORPORATION
MINING DIVISION
REPORT OF SUPERVISING ENGINEER

Docket No: B-201
Date of Authorization for
Examination: February 7, 1947
Date of Examination: February 10-12, 1947
Date of Report: February 19, 1947

1. NAME AND ADDRESS OF APPLICANT:

Willard S. Samson
Pinery Canyon
Dos Cabezos, Arizona

Correspondent: Same

2. CHARACTER OF PROJECT:

To develop a gold and silver mine by driving a 150-foot raise.

3. LOCATION OF MINE:

Approximately in Section 22, T. 19S., R. 30 E., California Mining District, Cochise County, Arizona. The nearest loading ramp is at Bowie, Arizona, approximately 35 miles from the property by a graded dirt type road taken care of by the County and Forest Service in their respective areas. Operations can be carried on for 12 months in the year.

4. APPLICANT:

Applicant is a man about 50 years of age and of the prospector-miner type. He has worked in various mines as a miner and has been working the subject property off and on for about five years. He has spent approximately \$16,000.00 on the property in improvements. It is believed that the applicant is capable of handling the project.

5. LOAN REQUESTED:

Applicant requests a loan of \$3200.00.

6. DESCRIPTION OF PROJECT:

A. General Features:

1. There are no other mine, mill or appurtenances which are not confined to applicant's property.
2. Proposed project will comply with the State Compensation and Safety-first Statutes.
3. There are no legal discrepancies not covered in reports.
4. No impeded right-of-way facilities.
5. No likelihood of surface or sub-surface trespass.

B. Existing Development:

1. Tunnel mine:

- a. A tape and compass survey was made of the underground workings. There is a 400-foot adit tunnel on the vein from which an 85-foot incline raise extends toward another adit tunnel higher on the hill. This tunnel is 50 feet long. There are numerous shallow cuts along the outcrop of the vein.
- b. A number of samples were cut in the 50-foot tunnel as well as some grab surface samples. Also the applicant submits some assay data on samples taken by officials of the Coronado Copper and Zinc Company and shipments made from the property during 1942.

Sample No. 1 was cut across 8 inches of vein material exposed two feet below the surface. It assayed .22 ounces gold and 570 ounces silver.

Sample No. 2 was taken from broken pieces off the outcrop 150 feet up the hill slope. It assayed .12 ounces gold and 6.6 ounces silver.

Sample No. 3 was taken from ore piled on the dump and corresponds to No. 7402 of Coronado Copper & Zinc Co. sample. It assayed .16 ounces gold and 52.0 ounces silver. Their sample assayed .20 ounces gold and 36.5 ounces silver. They also sampled the waste dump which assayed .06 ounces gold and 10.1 ounces silver.

Sample No. 4 was taken across 14 inches in face of tunnel. It assayed .10 ounces gold and 15.80 ounces silver.

Sample No. 5 was taken across 27 inches of vein material and taken in same place as Coronado Copper & Zinc Company's No. 7404. It assayed .20 ounces gold and 38.2 ounces silver. Theirs assayed .065 ounces gold and 25.3 ounces silver.

Sample No. 6 was cut across 36 inches of vein in same place that Coronado Copper & Zinc Company took their No. 7403. It assayed .12 ounces gold and 30.6 ounces silver. Theirs assayed .16 ounces gold and 38.6 ounces silver.

Sample No. 7 was cut across 8 inches in roof of drift, and is in the place where Coronado Copper & Zinc Company took special sample of H1-grade. My sample assayed .16 ounces gold and 47.0 ounces of silver. Their sample (7407) assayed .28 ounces gold and 126.9 ounces silver.

Sample No. 8 was cut in floor across 14 inches of vein in NW end of drift. It assayed .08 ounces gold and 16.2 ounces silver.

The following shipments were made to Hawley and Hawley, ore buyers:

El Tigre Mine

Shipments to ore buyer
✓

<u>Date</u>	<u>Tons</u>	<u>Au. Oz.</u>	<u>Ag. Oz.</u>	<u>Au.</u>	<u>Ag.</u>
2-16-42	3.227	.13	36.0	.4195	116.2
3-30-42	.496	.42	119.4	.2083	59.2
5-4-42	1.358	.47	132.4	.6383	179.8
5-18-42	1.6965	.46	137.9	.7804	233.9
5-18-42	1.375	.06	25.5	.0825	35.1
5-23-42	.8065	.09	30.4	.0726	24.5
6-5-42	3.618	.40	125.1	1.4472	452.6
6-25-42	5.7305	.11	32.6	.6304	186.8
6-29-42	3.0895	.28	79.1	.8651	244.4
7-18-42	3.7965	.17	42.8	.6454	162.5
8-31-42	1.81	.15	49.6	.2715	89.8
9-15-44	1.2375	.10	26.4	.1238	32.7
	<u>28.241</u>	<u>.219</u>	<u>64.4</u>	<u>6.1850</u>	<u>1817.5</u>

← Totals →

- c. All the mine workings are in good condition and accessible.
- d. General features of deposit:

This ore deposit was discovered in 1941 by the applicant and apparently was not known by others before then. It seems that during the summer of 1941 when the applicant and his partner were working other base metal claims high on the Chiricahua Mountains, they chanced on finding a metal bearing boulder in Pinery Creek when the water was higher than normal. They took the specimen, broke it into smaller pieces and submitted it to Hawley and Hawley, assayers at Douglas, Arizona. An unbelievable amount of silver, 600 ounces, was recorded. Neither the applicant nor the assayer believed each other. Nevertheless, the applicant then attempted to find the outcrop from which the silver ore came. Although there have been no 600 ounce samples, it is believed that the applicant has found the vein. Applicant has made some small shipments that assayed over 100 ounces per ton.

The ore deposit is in rather a rugged country, with steep hill slopes that are covered with pine and oak. Although the quartz vein, which in places measures 25 feet thick and can be traced for considerable distances, is covered with sod. Applicant has spent considerable money trying to find an ore shoot along the vein. Most of the vein is mineralized, but low grade, and to find a high grade shoot requires lots of surface trenching and digging. From what little can be seen it is believed that applicant is now near one of the high grade shoots that can occur in this type of mineralization.

Only a little information can be obtained on the geology because of the scanty amount of crosscutting and the overburden. It appears however that a large quartz vein approximately 25 feet thick may have followed a fault fracture in older Mesozoic volcanics and which was covered by younger (Tertiary) volcanics. In the vicinity of the property along Pinery Creek the younger volcanics have been eroded.

The mineralogy is typically Tertiary and epithermal, similar to the argentite-gold deposits described by Spurr from the Tonopah mining district of Nevada. One of the most important features that distinguish this type of mineralization is the character of the quartz. Picking up specimens of ore, one is struck by the closely banded texture of the quartz with dark ribbons of sulfide following the cremlations. Comb structure and crustification are common features. Calcite is present and has been replaced by quartz.

The dark fine-grained blotches in the white quartz apparently contain argentite. However, small specks of pyrite, chalcopyrite and galena were observed under the lense. Also a little ruby silver was identified.

On top of the ridge the applicant found some specimens of free gold by breaking off the outcrop. I have one of these specimens, as well as Mr. Roy Moore of the Coronado Copper & Zinc Company. The outcrop is indistinct and the particular small ledge from which the specimens were broken off could not be found in the short time I had for the examination. But they can be found.

Coronado Copper is much interested in this property and made an offer to the applicant to lease his property. The terms are so simple-minded it would appear that they were trying to get something for nothing.

There is no assurance that a bonanza stope may be found, but there certainly are mineralogical characteristics that might lead to one with a little work.

C. Proposed Development:

1. Recommended plan of development:

It is proposed and recommended that the applicant continue the raise approximately 150 feet to the upper tunnel. However, it is believed that within 50 feet the applicant will encounter the downward extension of the ore.

2. Recommendations concerning applicant's mining method:

None

3. Expected capacity of operations:

- a. Mining - 5 tons per 24-hour day
- b. Drift development - 4 feet per working place
- c. No crosscutting contemplated
- d. Raise development - 4 feet per day
- e. Milling - not applicable.
- i. Local wages scales - \$8.50 and \$9.00 per day.

D. Equipment:

1. Workable equipment and supplies on property:

Ingersoll Compressor, which is belt driven by
an 8-cylinder Buick motor
Receiver tank, 3 x 10
500 feet 2" pipe line installed
500 feet 1" pipe line installed
300 feet of air hose
300 feet of water hose
2 small pressure tanks, 4 x 18
1 new stoper
2 drifters, an Ingersoll and a Thor
2 plugers, Cochise
500 new jackbits
700 new Timken bits
3 mine cars
9 boxes of powder

2. Recommended purchases:

Only the supplies to operate the job. Applicant intends to
rent a compressor for three months to complete the raise.

3. Applicant has sufficient housing facilities.

E. Cost Estimations:

a. Mining	\$10.00
b. Drifting	\$15.00 per foot
c. Raising	\$15.00 per foot
d. Hauling, mine to Bowie, Arizona	- \$3.50 per ton
e. Freight to smelter	\$2.40 per ton
f. Smelter treatment	\$5.00
g. Timber	none
h. Total cost per ton	\$20.90

F. Ore Reserves:

Five samples were cut across the vein exposed in the upper tunnel.
These represent the ore remaining in place, and will give an in-
dication of what to expect lower.

Sample No.	Width	Au. Oz.	Width x Oz.	Ag. Oz.	Width x Oz.
4	14"	.10	1.4	15.8	221.2
5	27"	.20	5.4	38.2	1031.4
6	36"	.12	4.32	30.6	1101.6
7	8"	.16	1.28	47.0	376.0
8	14"	.08	1.12	16.2	226.8
5	<u>99"</u>		<u>13.52</u>		<u>2957.0</u>
Average:	20"	.137		29.9	

At the smelter this has a gross value of

.137 oz. gold x 32.31825	-	\$ 4.43
29.9 oz. silver x 88.5 cents	-	26.46
		<u>\$30.89</u>

The 40 tons at the mouth of the upper tunnel was sampled by Coronado Copper and Zinc Company, and their assay shows .13 oz. gold and 38.8 ounces silver, which, at the above price, has a value of \$1500.00.

Applicant shipped during 1941, 28.241 tons of ore from the open cut shown on the map where I took sample No. 3. The average grade of the ore shipped was .219 ounces gold and 64.4 ounces silver per ton. My grab sample of the remaining ore on the dump assayed .16 ounces gold per ton and 52 ounces silver. Coronado Copper's sample of ore on dump assayed .20 ounces gold and 36.5 ounces silver.

This grade of ore continues beyond as sample No. 1 indicates. At a surface cut across 8 inches the ore assayed .22 ounces gold and 57.0 ounces silver.

On the basis that the ore to be developed will average \$30.89 gross the following costs are charged and the profit estimated:

Gross value per ton at smelter:		\$30.89
Hauling, 10 cents/ton mile	\$3.50	
Freight	2.40	
Smelter treatment	5.00	10.90
Net before mining		\$19.99
Cost of mining, \$10.00 per ton		10.00
Profit		\$ 9.99

The presently exposed ore shoot is 60 feet long and 1.5 feet wide. With 50 feet of depth and a factor of 15 cubic feet per ton, there will be developed 300 tons of ore, or approximately \$3000.00. On the dump there is already mined 40 tons of ore worth \$1500.00. Thus, there is sufficient ore to repay the loan with the expectation of increasing this many times because of the exposures of ore beyond the limits set.

7. EMPLOYMENT:

A. Number of men now employed:

None

B. Number of men to be employed under project:

Two in addition to the applicant.

C. Number of shifts contemplated:

One

8. OBJECTIONS TO PROJECT:

None

9. TIME SCHEDULE:

A. It will take approximately three months to complete the project from time the loan is granted.

B. Length of operating season is twelve months.

C. It will take one year or less to repay loan.

10. ESTIMATED COST OF PROJECT:

A. Total development 150-foot raise, \$15.00 per foot	\$2250.00
B. Rental of equipment	300.00
C. Construction	none
D. General Expense	
1. Supervision	400.00
2. Insurance	150.00
3. Interest and contingencies	100.00
	<u>\$3200.00</u>

11. NATURE AND SOURCE OF REVENUE:

- A. The loan should be repaid out of proceeds from ore on dump already mined and that expected to be mined from the proposed development.

12. COMMENTS OF SUPERVISING ENGINEER:

The applicant is a hard working individual and will be economical in handling the project. If it seems necessary to completion of the project, he will not take any money for his salary. The rock is easy to break, and the application stated that when he was running the raise he was able to break 4 feet a shift easily.

This property does not have sufficient development for a clear understanding of the geological features, but I am impressed with the mineralogical characteristics of the ore that is exposed on the surface, as well as the grade of ore shipped and that sampled. From all appearances the applicant is within shooting distance of the downward extension of the ore and there will be sufficient ore developed to repay the loan. However, it appears that the best ore shoots are ahead and should make the applicant a nice profit when fully developed. I recommend that the applicant be given consideration for his request of \$3200.00 to develop the property.

Charles A. Rasor
CHARLES A. RASOR
Supervising Engineer

CAR:gnk

Attachments:
Assay Certificate
Map

CLAUDE E. McLEAN
P. O. BOX 1888

TELEPHONE 3-6272

ARIZONA TESTING LABORATORIES

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

ASSAY CERTIFICATE

February 14 1947

M F. O. A. Hasor, Supervising Engineer, A.C.,
328 Heard Building,
Phoenix, Arizona

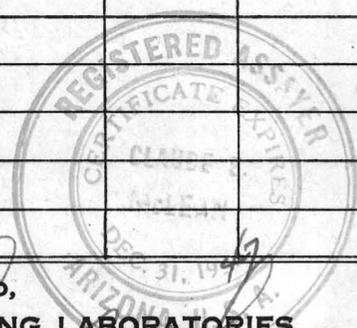
PHOENIX, ARIZONA,

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

GOLD FIGURED AT \$ 38.00 PER OUNCE.
SILVER FIGURED AT \$ 0.90 PER OUNCE.

LAB. FORM 2

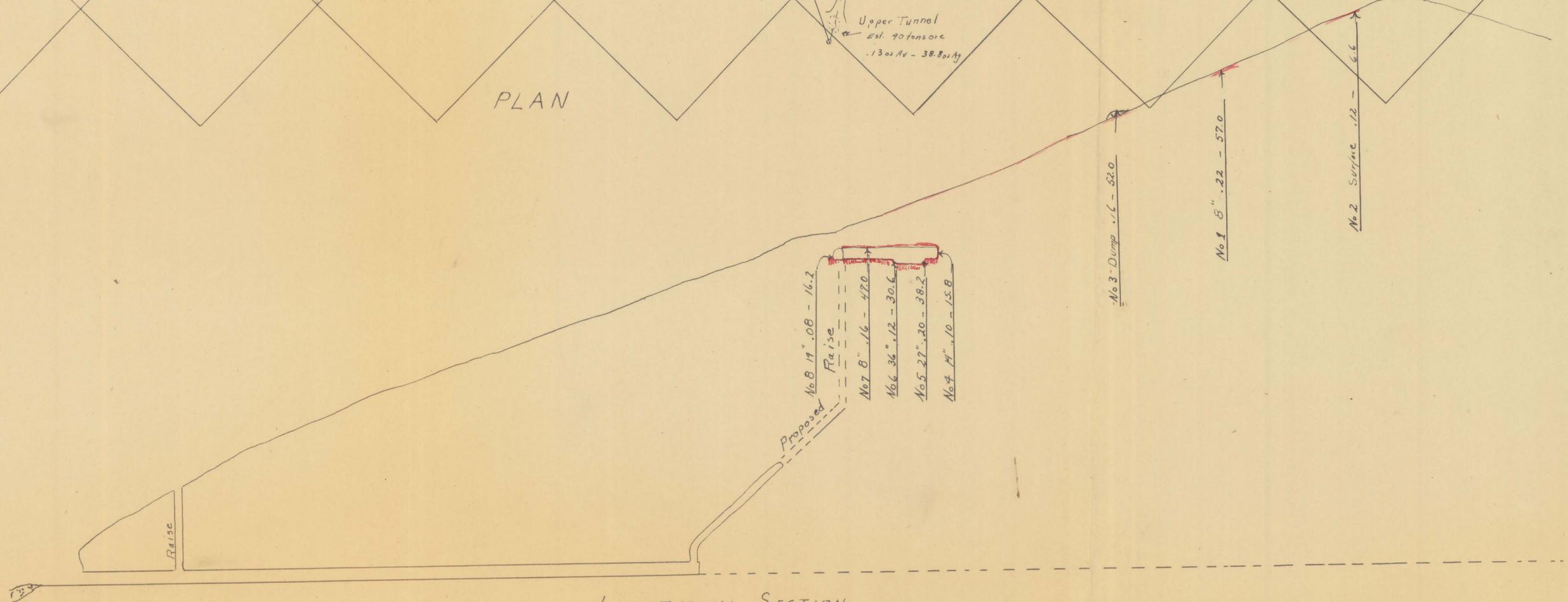
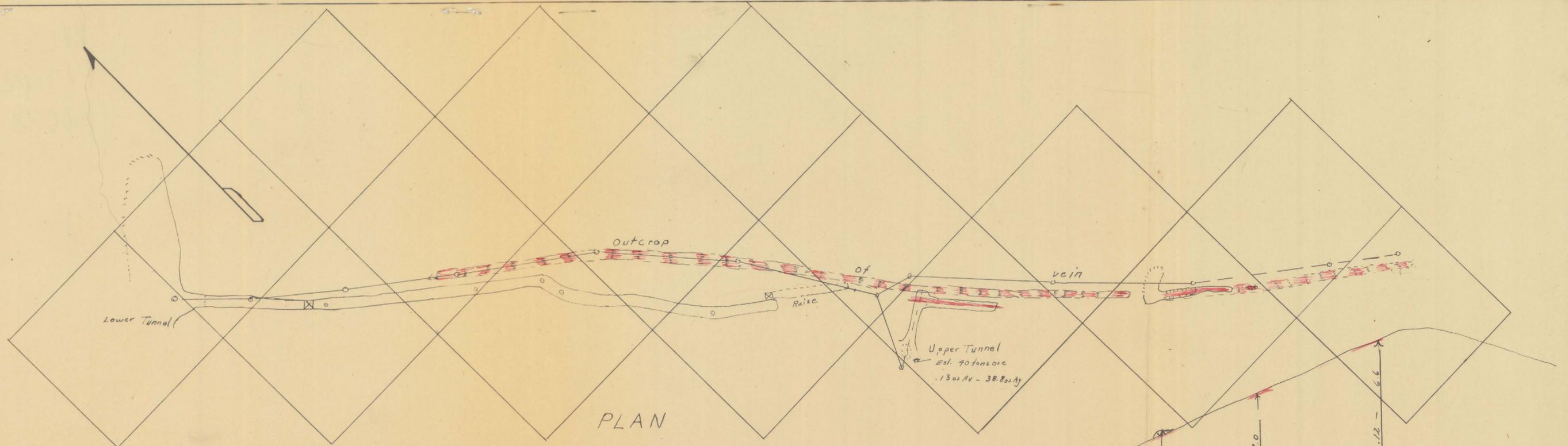
LAB. NO.	SAMPLE	GOLD		SILVER		PERCENTAGES		
		OZ. PER TON	VALUE	OZ. PER TON	VALUE	COPPER	LEAD	
63568	#1 8" cut	0.22	\$7.70	57.00	\$51.30			
69	#2 Grab surface	0.12	4.20	6.60	5.94			
70	#3 Grab from dump	0.16	5.60	52.00	46.80			
71	#4 Face of drift	0.10	3.50	15.80	14.22		14" cut	
72	#5 27" cut	0.20	7.00	38.20	34.38			
73	#6 36" cut	0.12	4.20	30.60	27.54			
74	#7 8" cut	0.16	5.60	47.00	42.30			
75	#8 14" cut	0.08	2.80	16.20	14.58			
	W. S. Sampson Property							



RESPECTFULLY SUBMITTED,
ARIZONA TESTING LABORATORIES

BY Claude E. McLean ASSAYER

CHARGES \$ 8.00



W. S. Sampson
 DocKat No B-201
 Scale 1" = 50'
 Feb. 10-12, 1947
 Charles A. Rasmussen, Sup. E.

1960-01-0079-01
 BE5/14