

#### **CONTACT INFORMATION**

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## ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: RATTLESNAKE MINE

ALTERNATE NAMES:

GILA COUNTY MILS NUMBER: 349

LOCATION: TOWNSHIP 7 N RANGE 9 E SECTION 15 QUARTER S2 LATITUDE: N 33DEG 56MIN 45SEC LONGITUDE: W 111DEG 25MIN 35SEC

TOPO MAP NAME: RENO PASS - 7.5 MIN

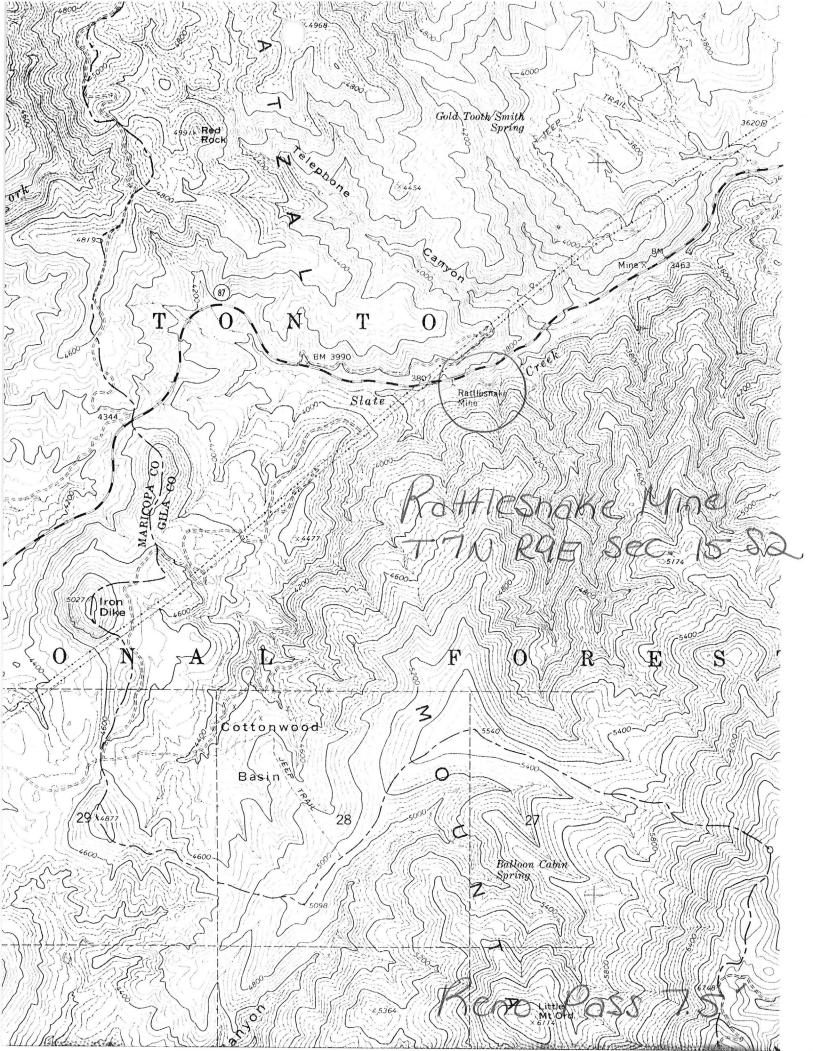
CURRENT STATUS: PAST PRODUCER

COMMODITY:

MERCURY

BIBLIOGRAPHY:

ADMMR RATTLESNAKE MINE FILE
ADMMR CYPRESS GROUP FILE
ADMMR RATTLESNAKE MILL FILE
USGS IC 8252 "MERCURY POTENT US" P 67; 1965
LAUSEN C & GARDNER E D "QUICKSILVER RESOURCES
AZ" AZBM BULL 122 1927 P 102
AZBM BULL 180 "MIN & WATER RES AZ" 1969 P 228
USGS MF 1162-H



ABM Bull. 102 p. 103 ABM Bull. 122

IC 8252 p. 67

Plat of survey of the Rattlesnake Rattlesnake Extension & Cypress Mining Groups

Cypress Group (file)

PARTIESPARE MILL (PILE)

## Arizona Department of Mines and Mineral Resources

# INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

MM 1636 Cinnabar in Schist

GIA MARIGOPA COUNTY

RATTLESNAKE MINE,

mILS# 349

O-AKA'n

Rattlesnake mine (file)

## DEPARTMENT OF MINERAL RESOURCES STATE OF ARIZONA

FIELD ENGINEERS REPORT

Rattlesnake

June 7, 1960 Date

District Sunflower, Gila County

Engineer

Subject: Mine visit and report by L. D. Cunningham

• No one was at the mine and apparently had not been for a while. Since Irl Conway is now tending the Forest Service's Mt. Ord fire tower, he will doubtless be away from the Rattlesnake until fall. Cunningham stated that the Conways had erected a small retort at the Conway Ranch, east of Sunflower store, but he did not know whether it had produced any mercury. When the last visit was made Conway and a helper were developing a narrow (but good grade) offshoot vein from the Rattlesnake Vein. They appeared to have done little work since February.

LEWIS A. SMITH

## LABORATORIES

A DIVISION OF CLAUDE E. McLEAN & SON LABORATORIES, INC. PHONE AL 3-6272 817 WEST MADISON ST.

P. O. BOX 1888

PHOENIX

For Mr. C. I. Dunning

Date December 3, 1954

Sample of

Ore

Received:

Submitted by: Nr. Dunning

#### ASSAY CERTIFICATE

Gold figured at \$ 35.00 per ounce.

Silver figured at \$ 0.90 per ounce.

Lab. No.	Luck .	Gold		Silver		Percentages	
	Identification	Oz. per Ton	Value	Oz. per Ton	Value	MERCURY	
116010	# 11					0.45	
11.6011	# 1.2					0.03	
116012	# 13					0.30	
116013	# 14					0.17	
116014	<b># 1</b> 5					0.78	
116015	# 16					0.12	
116016	# 17					1.05	
116017	# 1.8					0.45	
116018	# 19					1.33	
116019	# 20					1.95	

Respectfully submitted,

ARIZONA TESTING LABORATORIES

Charges: \$\_30.00

Claude B. McLean

## LABORATOR

A DIVISION OF CLAUDE E. McLEAN & SON LABORATORIES, INC. PHONE AL 3-6272 817 WEST MADISON ST. P. O. BOX 1888

PHOENIX

For Mr. C. N. Durning

Date December 3 , 1954

Sample of

Received:

Submitted by: Ar. Dunning

#### ASSAY CERTIFICATE

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Silver figured at \$ 0.90 per ounce.

Lab. No.	Identification	Gold		Silver		Percentages	
		Oz. per Ton	Value	Oz. per Ton	Value	ERCURY	
116020	# 21						
						1.48	
116051	# 22					1.50	
116022	# 23					0.45	
116023	# 24					0.35	
	Tal						
1							

Respectfully submitted,

ARIZONA TESTING LABORATORIES

Charges: \$\_12.00

Claude E. McLean

Jast wall 1.33 hole in us Width in Inch 72 (vein 50) Parallel 1.40 1 0 m 26.) 0 10 2000 1 4 E 4 4 20 30 21/39 1 0 ×20 Carl Sample Face W leve 100 Preliminary Sampling. RATTLESNAKE MINE East North Dec 1954 Scale 20'=1" Je150 Facing Xat Tunnel Entrance Level No. of the state o 红 19/4 00, En limit 01m < \* 77045 77045

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A DIVISION OF CLAUDE E. McLEAN & SON LABORATORIES, INC. PHONE AL 3-6272 817 WEST MADISON ST. P. O. BOX 1888

PHOENIX

For Mr. C. T. Dunning

Date December 3, 1954

Sample of Ore

Received:

Submitted by: Mr. Dunning

#### ASSAY CERTIFICATE

Gold figured at \$3%, 0 per ounce.

Silver figured at \$ 0.90 per ounce.

Lab. No.		Gold	Gold		er .	Percentages	
	Identification	Oz. per Ton	Value	Oz. per Ton	Value	MERGURY	
116000	# 1					0.11	
116001	# 2					0.02	
116002	# 3					0.02	
116003	# 14					0.10	
11600h	# 5					0.07	
116005	# 6					0.24	
11.6006	# 7					0.15	
116007	# 8					0.05	
116008	# 9					0.35	
116009	# 10					0.78	

Charges: \$ 30.00

Respectfully submitted,

ARIZONA TESTING LABORATORIES

Glaude E. McLean

#### DEPARTMENT OF MINERAL RESOURCES

## STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Rattlesnake Claims

Date

10-8-58

District

Sunflower Dist., Maricopa Co.

Engineer

Lewis A. Smith

Subject: As reported by J. B. Folmar

Claims: 17 claims

Earl and Bed Conway, Tonto Basin, Arizona Owners:

J. B. Folmar (Tonto Basin) and Frank Ratcliffe

Work done last year: Old drift, 390' long, opened and timbered. Shaft was partly opened up, but will have to be dewatered again. The future plans call for the installation of a hoist, a small flotation unit and a retort. The available reserves amount to about \$70,000 of +15% Hg ore. Mr. Folmor believes that they have some favorable ground in which new ore may result. He obtained many assays during last year along the main mineralized zone (30-40' wide), which ranged from 1% up to as high as 17%. However, the occurrence of ore is mainly in schist and affiliated quartz veins, the bulk of the showings being in the schist. The extent of the old workings will not be known until the whole mine is dewatered and rehabilitated. Once the mill is in, he hopes to carry a head of more than 15# to the ton. At present the whole proposition depends upon financing.

SURVEY OF OPERATING MINES

DEPT. MIMERAL RESOURCES

BE SENIE

June 4, 1942
RATTLESNAKE, QUICKSILVER GROUP

By: Fred H. Perkins

PHOLI

JUN 9 1942

ARITONA

Rattlesnake Co-partnership

Chas. McWaters
Alfred Packard

Manager, Globe, Arizona, % T. J. Long Partner, Payson, Arizona

#### Rattlesnake Mine

Located on Slate Creek adjoining Ord mine and on same vein, 30 miles douth of Payson on Bush Highway.

- 1941 Production all in Quicksilver. Due to the fact this ground was originally a part of the Ord Mine holdings it is difficult to say just what production was for 1941.
- 1942 So far this year 50 flasks were produced. Six men are working and mine run of ore is 1% Quick. This is one of the richest quicksilver mines in Arizona. Average vein 4 ft. in thickness and is called (Felite) or Purple schist. If your McWaters has constructed his own furnace for extraction and says he will improve on its construction.

mg

Mig Mines & Senelapment Co.

NAME OF MINE: RATTLESNAKE  OPERATOR AND ADDRESS:	min <b>e</b> sta	COUNTY: GILA DISTRICT: HG	<b>E</b>
DATE: 5/1/44 Vic L. Smith, Parker	DATE: 5/1/44		
			the state of the s

14-12-42

1. MINING SOURNAL 6-42

#### DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

#### FIELD ENGINEERS REPORT

Mine

RATTLESNAKE QUICKSILVER GROUP

Date

APRIL 30, 1957

District Sunflower, Gila County

Engineer

B. J. SQUIRE

Subject:

LOCATION:

In S15, T7N, R9E, unsurveyed, Gila County - consists of 8 unpatented lode mining claims, adjoining and west of the Ord Mercury Mine claims and on the north bank of Slate Creek. The claims lie east of Slate Creek or Red Rock Pass and the new highway runs through them.

HISTORY:

Located originally by the Packard family in 1925, they were part of the Ord Mine during 1941. Later Vic Smith owned the property and in 1954 Ed and Cal Conway were the owners. They leased the mine to B. W. Stevenson and Archie Criffeth who did some development work and sold out to Arizona Mining and Development Corp. . President - Frank Kadcliff.

The Arizona Mining and Development Corp. built a 40 ton Gould Furnace 2 miles east of the Ord Mine in the fall of 1955 and produced quicksilver intermittently for several months. They shut down late in April, 1956.

PRODUCTION:

The Mine is credited with 50 flasks in 1942 and must have produced at least 100 during 1955-56.

GROLOGY AND MINERALIZATION:

Ore is cinnabar in flat lying stringers of quartz and the adjacent shist lying in a nearly vertical shist layer which strikes ME and dips steeply NW. The shist zone varies in width up to 10'. The grade mine-run, according to Mr. Charles Dunning, who was consultant for the company in 1955, is about 0.25% Hg, although he believes that by careful selective mining, mill heads could be maintained at O.h%. The mining would have to be horizontal cut and fill to do this. All mining done was by shrink stoping and robbing of high grade pillars.

WORK DONES

There is a long cross cut from the north bank of Slate Creek to the vein and considerable work on the vein including 150 feet of drifting done in 1954-55.

An old winze on the vein is filled with water but is supposed to show considerable high grade cinnabar in the bottom.

Arizona Mining and Development Company, 1316 North Central Avenue, Phoenix, Arizona

> Attention: Mr. Frank O. Ratcliffe, Subject: Rattlesnake Mine.

Gentlemen:

• الحق التي المسلم

Since November, 1954, I have made several inspections of your Rattlesnake Mine, and will compile herewith the results of such examinations, together with recommendations to effect a successful operation.

#### LOCATION

The property is known as the Rattlesnake Mine and consists of several (10) unpatented mining claims. The group is located on the Payson Highway, and on Slate Creek, about 11 miles north of Sunflower Store, and 3 miles south of the Ord Mine, and adjoining same.

#### HISTORY

The property has been known for several years and has produced sporadically during times of high mercury prices. Observation of the old stopes indicates that 500 - 1000 tons have been previously mined above the tunnel level, and probably a larger tonnage, of higher grade, below. From samples of pillars and margins, and knowledge of costs and the price of mercury during those times, the ore probably averaged over 1.00% Hg. While far from being the largest producer in the district in the past, it was probably the most successful.

The Rattlesnake Mine is written up in the Arizona Bureau of Mine Bulletin No. 122, June, 1927, by Lausen and Gardner.

#### MORE RECENT HISTORY

In 1955 a 50 ton furnace was installed at a good location about 4 miles from the mine.

Finances did not permit proper development and preparation of the mine for economical extractive mining, and the wrong mining method (shrinkage stoping) was used.

The result was heavy dilution of the ore because of the loose hanging wall, and from blasting heavily into spots that were changing from ore to waste. Having no place to dispose of waste, it was mixed with the ore. This matter will be further discussed under "Recommendations".

While the furnace plant worked very well after minor adjustments and changes, the operating result was unprofitable because the ore had been so heavily diluted, and there had been no development nor preparation for mining in other than one small stope.

#### GEOLOGY

The mine is in the Slate Creek sector of a large zone of pre-Cambrian schist which courses through the terrain for several miles. Within this general area are several minor zones, somewhat parallel, which contain commercial mercury orebodies.

The ore "veins" are not true veins but zones without well defined walls, containing veinlets. These veinlets are usually quartz containing cinnabar (sometimes almost pure cinnabar). Mercury also occurs as crystals and smears in the laminations of the schist. The veinlets are usually parallel to the schistosity but sometimes cross it.

Both pre-mineral and post-mineral faulting have taken place.

Ore deposition seems allied to the pre-mineral faulting although no definite controls have been worked out. Displacement by post-mineral faulting is usually minor.

Geology of the district has been thoroughly studied and written up in the above mentioned bulletin.

At the Rattlesnake Mine, development and extractive mining has been confined to one known shoot of ore about 100 feet long, three feet wide, and of unknown depth. The vein, itself, strikes a little north of east and dips about 70 degrees to the north. The main shoot apparently rakes steeply to the west. Within the shoot the mercury values are spotty and lensey, but average well. There are possibilities of other shoots along the strike, and of parallel mineralized zones.

#### DEVELOPMENT and SAMPLINGS

The mine was originally developed by a shaft from the surface 350 (?) feet deep. Later a crosscut tunnel was driven from Slate Creek north (at right angles to the vein) intersecting the vein near the shaft at 550 feet from the portal, and 200 feet below the surface. This was then used as an adit and the shaft practically abandoned. Drifts were run on the vein east and west, and stopes started above the level. The "section on vein " sketch attached shows these workings and also my samples and assays.

I have been reliably advised that the old shaft/winze from the tunnel level on down was in ore with a wide width of excellent ore in the bottom. That a considerable tonnage of over 1.00% ore had been "gouged" from this working, but that a large tonnage of less than 1.00% ore remained ready to mine, together with possibilities

of developing new virgin ore in all directions.

As will be mentioned under "Recommendations "this situation should be immediately opened up, explored, and developed.

#### METALLURGY

It is common practice to treat mercury ores by roasting at the mine in small rotary furnaces. Small stationary furnaces called "retorts" are not continuous and must be operated in "batch" manner. They are used for very high grade ore or concentrates.

In some instances concentration by flotation has successfully preceded retorting but tests made on the Rattlesnake ore by the
Arizona Bureau of Mines and by myself indicate that the ore is not
amenable to flotation.

It does, however, readily yield its mercury content by direct distillation in a furnace, and such has been well proven by trial runs already made.

#### ECONOMICS

Considering a furnace of 50 ton capacity per 24 hours, your cost for treatment should be about \$5.00 per ton. Extraction should be about 85%.

Mining should be done carefully and selectively to keep the ore as clean as possible. At the best there will be at least a 20% dilution as compared to stope assays. I could not at this time judge whether cut-and-fill, open stope, or shrinkage stope mining methods should be used. Possibly each in various places. But it is important that knowledge, experience, and care be exercised. The dip of the vein is ideal for cheap mining, but the schisty hangingwall can overbreak

very easily and the ore can quickly change from commercial grade to undergrade - and you cannot make a profit reasting waste. I would estimate mining costs, if carefully conducted, at \$15.00 per ton.

Allowing \$5.00 for overhead and miscellaneous, we would have a total operating cost of \$25.00 per ton.

At present prices of \$4.00 per pound this would require ore containing 7 pounds of mercury (0.35%) per ton. At Government price of \$225.00 per flask, 8.5 pounds (0.425%) would be required.

The average of the ore as sampled, per sketch, is 0.548%, (10.96 lbs).

It must be considered that the above average of samples is almost entirely made up from ore left by previous operators who had to have 1.00% or better. By opening up virgin territory you should find considerable ore of a content 1.00% or greater to which you can add the marginal ore that they left, and produce a mill head well above economic grade.

### RECOMMENDATIONS

The irregular occurrence of the ore and the loose nature of the hangingwall preclude mining by the "shrinkage stope" method. An adaptation of the "cut and fill" method must be used. In such method, the ore would be carefully broken down onto a platform or trough, and raked mechanically, or by hand into "mill hole" raises. Such platform or trough is then taken up and waste spots or wall blasted down to fill the stope - leaving only working headroom. Such a method is expensive, but keeps the ore clean.

It is advisable that exploration and development be kept well ahead of extractive mining. The history of these deposits has

shown no diminution in size or values at reasonable depth. It is more likely that parallel veins or lenses will consolidate and become less irregular; and virgin territory holds more potentials than marging left by previous operators.

Considerable deadwork will always be necessary in this type of deposit, and should be considered as a necessary part of mining costs.

It is essential that <u>several</u> places be maintained in condition to furnish ore. Then if one place requires dead work, the others will supply the needs.

In more detail I will recommend the following items of exploration and development as first requisites: \*\* Unwater the shaft/ winze and run levels where conditions indicate.

Probe for parallel ore occurrences, as such are indicated in this vicinity.

Clean out the cave in the west tunnel/drift and extend this drift as long as ore is indicated.

Diamond drill the surface ore which is exposed as a cropping to the east, and after drilling results are available, survey and correlate with east tunnel/drift and connect up underground.

Clean up and extend the "150 level" to permit starting of definite stopes. Probe here, also, for parallel conditions.

Raises should be run at frequent intervals to prove ore in a more positive manner, and as a start toward stopes.

The above program should provide <u>several</u> places for stoping, and a continuous ore supply. Results should indicate still further places for exploration and development - ad infinitum.

#### CONCLUSION

If the above recommendations are followed, under good management, I believe the Rattlesnake Mine can be very successfully operated.

The two important points are the opening up of sufficient "places to mine", and the avoidance of excessive dilution by employing the right mining method under proper management.

The above program will require financing, but it is my opinion that such financing is fully justified.

Respectfully submitted,

## DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

#### FIELD ENGINEERS REPORT

Mine

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Date

APRIL 30, 1957

District Sunflower, Gila County

Engineer

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RRB WR 8/29/80: Bob DeWitt reported the John R. Allen owner of the Rattlesnake Quicksilver Group, Sunflower District, Gila County, wants to either sell, lease, or operate the property. Wanted information on leaching mercury.

RATTLE SNAKE MINE GILA COUNTY

Visit and conference with Alex Anderson

Alex Anderson, Superior and Wm. Hunter of Miami, have a lease and option on the Rattlesnake. They had repaired the 600-foot tunnel since October and shipped 200 tons of gob and sluff material that in part, assayed about 2 pounds a ton and in part less to the Rattlesnake Mill (this is said by Gordon Grimes to have treated well in part, but part of it did not carry much). Wet weather and locally very heavy ground has greatly curtailed the underground work for the past 2 months. A ton or more of high grade ore (2½-3 percent Hg) is ready for retorting. This was sorted from the 2 pound material. The mineralization, according to Alex is on a strong shear zone. Alex was not certain as to the future of the project. Next to the sericite-quartz schist is a wide band of hornblende and epidote-rich greenstone. According to Alex Anderson, the latter rock does not appear to mineralize well here. However, it is reported to carry some values in the Ord zone. LAS Memo 2-23-66

Active Mine List Oct. 1968 - 6 men

Visited Rattlesnake plant - Mr. Grimes preparing to mine and treat ore from Cypress mine. FTJ WR 2-27-70

Went on to the Rattlesnake Hg mine and furnace but there was no activity. GW WR 10/17/74

RATTLESNAKE MINE GILA COUNTY

Corporation Commission reports that the Arizona Mining & Development Company, Inc. was incorporated January 4, 1955; is still in good standing; Frank O. Ratcliffe, President and the statutory agent J. S. Riggs, Title and Trust Bldg. Phoenix. 9-9-59

Carlson said that it was reported that part of the Rattlesnake claims had been optioned to Hanson & Weather Co. of Colorado, but thus far nothing has been done.

J. B. Fullmer, reported that he, Gus Packard and others would attempt to get the remaining Rattlesnake claims going during this summer. Last year they cleaned up the old 600 ft. tunnel and rehabilitated the top 40 feet of the shaft. Fullmer said they had some good ore but were trying to finance a retort. This was reported at Tonto Basin. LAS WR 6-5-59

Completely owned by Ed & Irl Conway, Tonto Basin, Arizona - idle now.

Previously Allan & Allan ( J. R. Allan, Mesa & his son) had lease on part of claims as did J. B. Fullmer of Tonto Basin. These Leases are dropped. LAS Memo 10-13-59

Daniel Land

300

Arizona Mining and Development Company, 1316 North Central Avenue, Phoenix, Arizona

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Considering a furnace of 50 ton capacity per 24 hours, your cost for treatment should be about \$5.00 per ton. Extraction should be about 85%.

Mining should be done carefully and selectively to keep the ore as clean as possible. At the best there will be at least a 20% Variable places, whether cut-and-fill, open stope, or shrinkage stope mining methods methods places, whether cut-and-fill, open stope, or shrinkage stope mining methods in proper than the usedy Possibly each in various 1 dilution as compared to stope assays. A could not at this time judge should be used. Possibly each in various places. But it is important that knowledge, experience, and care be exercised. The dip of the vein is ideal for cheap mining, but the schisty hangingwall can overbreak

very easily and the ore can quickly change from commerical grade to undergrade - and you cannot make a profit resting waste. I would estimate mining costs, if carefully conducted, at \$15.00 per ton.

Allowing \$5.00 for overhead and miscellaneous, we would have a total operating cost of \$25.00 per ton.

At present prices of \$4.00 per pound this would require ore containing 7 pounds of mercury (0.35%) per ton. At Government price of \$225.00 per flask, 8.5 pounds (0.425%) would be required.

The average of the ore as sampled, per sketch, is 0.548%, (10.96 lbs).

It must be considered that the above average of samples is almost entirely made up from one left by previous operators who had to have 1.00% or better. By opening up virgin territory you should find considerable one of a content 1.00% or greater to which you can add the marginal one that they left, and produce a mill head well above economic grade.

## RECOMMENDATIONS

The irregular occurrence of the ore and the loose nature of the hangingwall preclude mining by the "shrinkage stope" method. An adaptation of the "cut and fill" method must be used. In such method, the ore would be carefully broken down onto a platform or trough, and raked mechanically, or by hand into "mill hole" raises. Such platform or trough is then taken up and waste spots or wall blasted down to fill the stope - leaving only working headroom. Such a method is expensive, but keeps the ore clean.

It is advisable that exploration and development be kept well ahead of extractive mining. The history of these deposits has

shown no diminution in size or values at reasonable depth. It is more likely that parallel veins or lenses will consolidate and become less irregular; and virgin territory holds more potentials than marging left by previous operators.

Considerable deadwork will always be necessary in this type of deposit, and should be considered as a necessary part of mining costs.

It is essential that <u>several</u> places be maintained in condition to furnish ore. Then if one place requires dead work, the others will supply the needs.

In more detail I will recommend the following items of exploration and development as first requisites: Unwater the shaft/ winze and run levels where conditions indicate.

Probe for parallel ore occurrences, as such are indicated in this vicinity.

Clean out the cave in the west tunnel/drift and extend this drift as long as ore is indicated.

Diamond drill the surface ore which is exposed as a cropping to the east, and after drilling results are available, survey and correlate with east tunnel/drift and connect up underground.

Clean up and extend the "150 level" to permit starting of definite stopes. Probe here, also, for parallel conditions.

Raises should be run at frequent intervals to prove ore in a more positive manner, and as a start toward stopes.

The above program should provide <u>several</u> places for stoping, and a continuous ore supply. Results should indicate still further places for exploration and development - ad infinitum.

#### CONCLUSION

If the above recommendations are followed, under good management, I believe the Rattlesnake Mine can be very successfully operated.

The two important points are the opening up of sufficient "places to mine", and the avoidance of excessive dilution by employing the right mining method under proper management.

The above program will require financing, but it is my opinion that such financing is fully justified.

Respectfully submitted,

## ARIZONA TESTING LABORATORIES

A DIVISION OF CLAUDE E. McLEAN & SON LABORATORIES, INC.

PHONE AL 3-6272

817 WEST MADISON ST.

Date June 25 , 1955

P. O. BOX 1888

PHOENIX

Chemists . . . Engineers.

For

Arizona Mining and Developement Go. 1316 North Central

Phoenix, Arizona

Sample of

Um

Submitted by:

Received:

ASSAY CERTIFICATE

Gold figured at \$35.00 per ounce.

Silver figured at \$ 0.90 per ounce.

	7.00						
5)		Go	ıld	Silve	er	Percent	ages
Lab. No.	Identification	Oz. per Ton	Value	Oz. per Ton	Value	MERCURI	
and the same of th			Ŷ		•	(Hg)	
121306	# 1 Rattlesnake	150	1. ml			0.08	
121307	# 2 Rattlesnake	10				0.70	
121308	# 3 Rattlesmake	150				0.64	
e			STERFE CLAUDING MOLE	E ESS			

lee: Mr. C. H. Dunning

Respectfully submitted,

ARIZONA TESTING LABORATORIES

mail

Claude E. McLean

## DEPARTMENT OF MINERAL RESOURCES

## STATE OF ARIZONA FIELD ENGINEERS REPORT

Mine Rattlesnake

Date February 3, 1960

. ...

District

Sunflower Dist., Gila Co. (Gila &

Engineer Lewis A. Smith

Maricopa Counties)

Subject: Mine Visit

Property: 8 patented claims

Tonto Basin

Owners: Ed and Irl Conway and Gus Packard, SWAFLOWER, Arizona

New Work: A 60 foot shaft equipped with a windlass and 1/2 yd. bucket, was sunk on a vein (or shear zone). Cuts and pits lie along the shear. This shear is in the hanging wall of the main Rattlesnake vein, or shear, and is about 40 feet northwest of the main deposit. A trench 20' long and 3' wide has opened up the new discovery to a depth of 6' at the face. The mineralized portion is about 2' wide and runs up to  $1\frac{1}{2}\%$  of Hg. Two pits, one 6' deep and 50' northeast of the shaft, and the other 75' southwest of the shaft. Both show  $1\frac{1}{2}$ -2' of ore. It is planned to crosscut from the bottom of the shaft in an attempt to intercept this vein. A 300 Ingersol Rand Compressor is on hand for air.

Geology: The area consists of a series of thin bedded sericite, quartz-mica and horn-blende schists which trend W 40° E and dip 40-45° to the northwest. The laminae are roughly in this trend but locally are severely crinkled and deformed. The series belong to the Mazatzal pre-Cambrian group of formations. At the shaft a cross fracture trending about N 60° W and dipping nearly vertically, disrupts the continuity of the schist laminae and folds them acutely. The cross fault carries thin veinlets containing azurite and malachite. The cinnabar and metacinnabarite are very fine impregnations in the laminae which are very thin at the lower pit, south of the shaft, and the laminae thickens to 1/4 inch and contains coarser cinnabar blebs, as well as thin veinlets. This deposit trends in general parallel to the general pre-Cambrian trends of the district. The cinnabar and cinnabarite favor an orange stained zone. This orange limonite has generally been proven to be an accurate indicater in most of the district.

The deposit lies about 50 feet above and 100 feet NE of the Bee Line Highway. The haul to the Rattlesnake Mill would be about 3 miles, the last mile being on a good level dirt road.

Mr. Conway states that but for some portal caving, the original tunnel and lateral workings lying 100 feet below are in very good condition. Should the new shear deposit prove out, 100 feet of drift would connect it to the old workings. A good road could be built down to the old tunnel at little expense.

## DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

#### FIELD ENGINEERS REPORT

Mine

Rattlesnake Claims

Date

10-8-58

District

Sunflower Dist., Maricopa Co.

Engineer

Lewis A. Smith

Subject:

As reported by J. B. Folmor

Claims:

17 claims

Owners:

Earl and Earl Conway, Tonto Basin, Arizona

Lessee: J. B. Folmor (Tonto Basin) and Frank Ratcliffe

Work done last year: Old drift, 390' long, opened and timbered. Shaft was partly opened up, but will have to be dewatered again. The future plans call for the installation of a hoist, a small flotation unit and a retort. The available reserves amount to about \$70,000 of \*1½% Hg ore. Mr. Folmor believes that they have some favorable ground in which new ore may result. He obtained many assays during last year along the main mineralized zone (30-40' wide), which ranged from 1% up to as high as 17%. However, the occurrence of ore is mainly in schist and affiliated quartz veins, the bulk of the showings being in the schist. The extent of the old workings will not be known until the whole mine is dewatered and rehabilitated. Once the mill is in, he hopes to carry a head of more than 15# to the ton. At present the whole proposition depends upon financing.

. D. Feb 1956

Table of the state of the state

Arizona Mining & Development Co., Phoenix, Ariz. Att. Mr. Frank O. Ratcliffe.

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off the motion and weing, early beginned and m

Gentlemen:-

I have today made a sipplemental examination of your Rattlesnake Mine. The purpose was to inspect a certain shaft/winze which was under water at the time of my previous examinations.

This winze was originally a vertical shaft from the surface passing through the adit level at about 200 ft and proceeding downward for another 200 ft. ( More probably the shaft was sunk first and then the adit run to connect after the ore was found to continue downward).

This shaft is vertical, and as the vein dips to the north about 70°, short crosscuts were run to the vein on the 50, 100; and levels. At the latter level, an inclined winze, following the vein, was sunk an additional depth of 80 feet.

Considerable stoping had been done on each of these levels - probably totaling 5000 tons. The ore is considerably wider, up to 10 feet in many places, than in the workings above the adit. It also has better continuity and is higher grade.

While it is impossible to measure positive tonnage until these old workings are cleaned up and there is more development it seems probably that there is as much ore left in that one shoot, to the present bottom of the workings as was taken out.

Old operations when the price of mercury dropped during the depression and one can visualize from these workings that the price was dropping during their last operations, because they left more and more good ore. They had to hold their grade above 1.0% or 20 lbs. In many cases they left areas of ore in either or both walls as well as in unfinished stopes. Naturally they took the best and easiest to get. I would estimate that the remaining ore can be held to a grade of .80% or 16 lbs. At \$3.50 per lb this would be \$56.00 per ton.

As stated above mining costs would be ites than for the ore above the adit because of the greater width and continuity. By letting the grade drop to .80% the ore should be put on the surface for about \$10.00 per ton.

In the inclined winze, below the bottom of the vertical winze, the vein was supposedly cut off by a horizontal fault. While there is a fault there it appears to be entirely pre-mineral. A semblence of the vein passes on through it. There may be two reasons why the rock immediately under this fault is not mineralized: (a) The rock on one side of the fault was more receptive to replacement mineralization than on the other, and, (b) this spot, where cut by the winze, is exactly on the line of the projected eastern extremity of the ore shoot on its westerly rake. Drifting to the west would therefore be in order, but instead of that they drifted only to the east, probably in hope of picking up a faulted continuation of the ore - but there is no such post-mineral fault.

In fact there is practically no post-mineral faulting in the mine. There is however a great deal of abrupt irregularity due to the fact that pre-mineral slips and faults brought about at the time earth pressures created the schist out of former rocks, caused irregular channels of circulation, and abrupt changes in the receptive characteristics of the host rock.

Mineralization has already been proved to depths far below surface or gash vein conditions, and other mines in the same generalzone, while not as rich as the Rattlesnake, have never found a bottom of the mineralization.

other ore shoots - one to the west and one to the east - show good surface exposures. There are also possibilities of blind shoots in between. Drifting along the general strike, with frequest crosscut drill holes, is fully justified and would be convenient from one of your lowest levels. These should add greatly to your ultimate tonnage.

Summing up:you have an unknown but important tonnage of fair ore in the vicinity of the old workings above the adit level; a probable 5000 tons or more of excellent one in the one shoot between the adit level and the bottom of the shaft; excellent chances of a continuation downward of this shoot; and probability of other shoots along the general strike producing more tonnage than the one shoot that has been worked on.

The project certainly justifies financing for concerted development and production.

June 27, 1955.

Arizona Mining & Development Co., 1318 N. Central, Phoenix, Ariz.

Below is a rough sketch of the samples taken at the Rattlesnake Mine on the 24th.

As reported to you verbally this 150 level drift is itself very crocked and irregular, and the ore showing thereon is very irregular. Whether or not there is ore in the walls when none shows in the drift is problematical. There is not doubt some, but probably blank areas also. It looks like a case of overlapping parallel lenses, and only mining by following the ore will determine how much ore there will be.

I feel that the samples as taken are representative of the average values over minable widths, for areas where taken.

Yours Very Truly,

hes HA morning

West 150 Level

West 150 Level

Section on Vein lecking North

But One below

XXXXX

X Somple no good on the standard of the s

January 17, 1944

Mr. Herbert Kent 6200 Franklin Avenue Hollywood (28), California AIR MAIL

Dear Mr. Kent:

Vic L. Smith, I will say that I have known Mr. Smith for many years in connection with mining work and can say that he invariably gets results on any property he tackles.

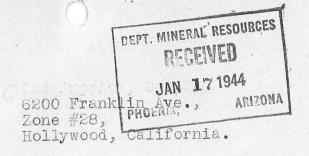
I have examined the Rattlesnake Quicksilver property with him and believe there is a large tonnage of ore that can be commercially handled already developed on the property and that further development should expose additional ore.

There is a certain change in the War Production Board policy on mercury, however, and you and Mr. Smith should get all the details and be conversant with the situation regarding quick-silver. I would suggest that you contact the Metals Reserve consultant in Los Angeles. He is Mr. G. A. Joslin and I believe his address is Rives-Strong Building, Los Angeles.

Very truly yours,

J. S. Coupal Director

JSC: JES



Mr. J. Sam Coupal, Home Builders Building, Phoenix, Arizona.

Dear Mr. Coupal:

I am about to embark on a mining venture with Mr. Vic L. Smith, of Arizona, and he has referred me to you for reference as to his mining ability, responsibility, capability, integrity, and character. He represents to be the owner of the Rattlesnake Quicksilver Mine, in Gila County, Arizona.

I am very favorably impressed with Mr Smith and his sincerity and anything that you can confirm regarging Mr. Smith and or his Rattlesnake Quicksilver Mine would be very much appreciated by me.

Inasmuch as there is a time element in the plans I am endeavoring to consumate, I would appreciate an immediate maply and I am herewith enclosing an air mail stamp for reply.

Very Sincerely,

Herbert Kent.

## January 15, 1944

Mr. Vic'L. Smith c/o Ralph H. Gorman 512 Chester Williams Building 215 West Fifth Street Los Angeles (13), California

Dear Vic:

Percey Flumerfelt was just in and I talked to him on the general mercury situation and it was important enough for him to call up Mr. Machris and I had a talk with Mr. Machris regarding their operations.

Elimerfelt mentioned to me the fact that your title to the Rattle Snake property is haning on a very thin thread. Chris Martin is taking steps to foreclose on the property due to your \$2500 which is unpaid.

I might say that I saw Chris Martin while in Sunflower this week and the old boy is not in very good shape physically. I also understand that Mrs. Long has advised that probably all of your possessions in the apartment at Globe. It will be sold due to your unpaid bill there.

I believe you have neglected taking care of these things and arelapt to have difficulties on account of them.

Yours very truly,

J. S. Coupal, Director

JSC: JES

January 14, 1944

Mr. Vic L. Smith c/o Ralph H. Gorman 512 Chester Williams Building 215 West Fifth Street Los Angeles (13), California

Dear Vic:

In reply to your letter of January 8, forget about seeing Seth Brady. I was in Los Angeles over the New Year's and managed to see him regarding the Rattle snake Quicksilver.

I am glad to hear you have a contract with Metals Reserve,
There has been a cutback elective taken by Metals Reserve for paying
\$20 per flask bonus BUT this bonus is payable on a basis of the average
monthly production for the past six months' applied to the production from
January 31, 1944 to December 31, 1944. You can see from this that
a new operation or one which had no production during the six months
prior to January 31, 1944 has no chance for a bonus.

I have heard indirectly that RFC will not consider further loans on quicksilver. I believe any new quicksilver operations will have to depend on the open market for quicksilver and that it will sell below \$192 a flask in a short while. How far below \$192 or how far above is anyone's guess just as it is anyone's guess how long the present war will last. I in no way concur with the War Production policies on metal production.

With best wishes and kindest personal regards, I am

Very truly yours,

J. S. Coupal Director

JSC: JES

DEPT. MINERAL RESOURCES RECEVEN JAN 10 1944 PHOENIX,

## RALPH H. GORMAN

512 CHESTER WILLIAMS BUILDING

215 WEST FIFTH STREET LOS ANGELES 13, CALIF.

gan 8th 44 TRINITY 2171 Dear friend Jam: Ive tried repeatedly to contact Seth Brady in rasponse of yours of How 20th, but, so help me Sam, he is a tough one to contact. Ill keep at it however. That's all I can do. On Nov 20th 1943 I reed a Metals Reserve & contract for marcury for the Rattlesnake Quickilors Mine covering 1944. Then last week I received a notice that they will not quaranter the price but will Elick to pay \$ 2000 per flask bonus I had, & still have, funds now available to me for my praliminary requirements to place me in a position for R.F.C. application so as to do the job

right in mining & retorting. But my friend is now hisitating.

a whispering campaign is on that R.F.C. will not make any more loans for Burchsilver

Mining - What is the status on this in Oringona

Sam? This war is far from over much as wed all like to believe. In fearful that the Washington

D.C. anties on Strategie metals will put our production back where we will again soon find our nation SHORT on these much needed minerals adding any

PHOENIX, RALPH H. GORMAN 12/2/43 C 512 CHESTER WILLIAMS BUILDING 215 WEST FIFTH STREET LOS ANGELES 13, CALIF. Dear Umigo Dam:-Shanks for yours of Nov 20th = Ive delayed replying because I wanted to see Deth Brady first. In spile of 9 attempts I can't locate him & was advised today that the office didn't know where he was, and I believe that he just drops in there now & Then = Mostly THEN Ill krep after him Sam. Looks like Ill be going again adios from Vic S. Smith

November 20, 1943

Mr. Vic L. Smith c/o Ralph H. Gorman 512 Chester Williams Bldg. 215 West Fifth Street Los Angeles 13, Calif.

Dear Vic:

Many thanks for your letter of November 16 and I am very glad to hear that you hope to soon get the Rattlesnake into production. Arizona has had a production of a little over 400,000 flasks of mercury in the last few decades. It should have been more as we have several properties which I know under proper financing and operation could have greatly increased this amount. We have just been getting into real production in the past year and I feel quite sure that the Rattlesnake could add greatly to it.

I note your remark about a Dr. H. Leroy Yielding and his interest in the Olivette Mine near Tucson. I also know J. P. Anderson and do not question his ability regarding mining but I do know that he has been having some difficulties in and around Tucson in the last six or eight months.

The settlement by smelters on zinc is in my opinion excessive. I do not believe the figures reach 60% but the deductions come rather close to it when you figure out the hauling, freight and sliding scale of deductions based on increased labor costs. If you add to this the deductions, then you have to have the ore milled, it may come close to 60% based on the ceiling price for zinc which is 8-1/4 cents. Consideration must be taken of the A premium paid on zinc which is 2-3/4 cents a pound from which only a very minor deduction is taken and that due to the fact that something like 85% or 90% of the assay value of the zinc is paid for on the premium plan.

I look forward to seeing you as soon as you come to Phoenix.

Yours very truly,

J. S. Coupal, Director

JSC:LP

P.S. I do not know whether or not I have asked you before to call on a Seth Brady, Room 405, 811 West 7th Street, Los Angeles, phone: Tucker 8761. Brady

may be hard to locate but I would appreciate your making a try to see him, in fact, you might leave your phone number at the above address and say you wish to talk to him on mining.

Months ago I let Brady have reports and photographs on the Kheep Tanks Mine. He has not returned them in spite of the fact I have requested it a number of times and feel as though he has given me rather shabby treatment. Ed Mills and myself are greatly and seriously inconvenienced by not having these reports.

You can talk to him as rough as you want. He is a sizeable chap but in this particular instance he is wrong both technically and morally and I would like your assistance. I ought not to be treated this way by and I would like your assistance. I ought not to be treated this way by Brady as he is indebted to me for \$100 over a good many years standing which I advanced for his expenses east, so you can understand why I say be as rough as you wish either physically or verbally.

J.S.C.

PHOENX | PECOURGES RALPH H. GORMAN GEOLOGIST 512 CHESTER WILLIAMS BUILDING 215 WEST FIFTH STREET DEar amigo Dam; -In still Expecting to get over soon so as to proceed with the Kattlesnake Quicksilver Mine. - Just have written

proof of over 3000000 prion production & avery
labout 20 lebo per ton.

In replying please incorporate in your letter anything you can say to be helpful as Im getting a little assistance here - I HOPE. - It is almost a certainty. Incidently a Dr H. Lerry Yielding and a brotherinlaw have a financial interest in the Olivetta Mine - Olivette District Pina County any of Fanderson is the Shipper to Bisber from Hucson Lead, Selver & Zinc. Dr Gilding is all up in the air - states that the Smelter takes about 60% = Can you shed any light on this? Ill get more dope soon as it don't make sener to me; adios anigo Mis: Vic hamily

Pany MINERAL RESOURCES RECEIVED OCT 14 1943 RALPH H. GORMAN PHOSNIC GEOLOGIST 512 CHESTER WILLIAMS BUILDING 10/14/43 215 WEST FIFTH STREET Los Angeles 13, Calif. Dear friend Sam: Just a note = On Ang 28th I was put in the hospital un conscious. a car or truck (9!2 P.M. because it slopped my wrist watch / with blinding lights ran me off the highway & THEN hix my left front wheel of my he dots - locking it I durned us over - I was thrown clear of the car & lix on my head. I get had been the other End I guess it would have killed me They thought my nach was broken & it still sometimes feels like it . And two holes in my right legt one gash in my by I was hix when I gave all the highway but about 22 inches & I was driving hospitalization but Expect to be over soon. The De Soto is a complete wrich to In told That's why I haven't been over to October 18, 1943

Mr. Vie L. Smith c/o Ralph H. Gorman 512 Chester Williams Building 215 West Fifth Street Los Angeles (13), California

Dear Vic:

Many thanks for your letter of October 14. I am very sorry to hear of your accident and you should consider yourself lucky for getting out of it whole.

Yesterday, I mat Mr. Thomas J. Long and was told that within a few days or very shortly, your furnishings in Globe will probably be put up for Sheriff's sale. Someone else is now occupying the apartment and your goods have been placed in storage. You had better act on this.

Best wishes,

J. S. Coupal Director

JSC:JES

Mr. Vic L. Smith 512 Chester Williams Bldg. 215 West Fifth Street Los Angeles 13, Calif.

Dear Vic:

Was glad to hear from you in your letter of August 21 and will do what I can if David Stohl calls at the office regarding the Rattlesnake Quicksilver.

I do know that on one or two occasions Percy Flumerfelt has said that you had better get busy if you wish to retain your holding on the Rattlesnake.

Will hope to see you some time soon.

Yours very truly,

J. S. Coupal, Director

JSC:LP

5/2 Chester William RALPH H. GORMAN GEOLOGIST 512 CHESTER WILLIAMS BUILDING 215 WEST FIFTH STREET LOS ANGELES 13, CALIF. Dear friend Sam; I PHOESING on you Re-your opinion of my Rattlesnake Quicksilver Mine of 200 A. = Muf Sed We plan to clear title of apply for a R.F.C. loan. C-U. Hoon Regards as always from The L'Amin Mr. Vic L. Smith Mayfair Hotel Los Angeles, California

Dear Vic:

I am enclosing a copy of the recent circular on quicksilver setting forth details about qualified producers.

I have been wondering what you are doing on the Rattlesnake, whether you have neglected or forgotten about it and suggest that if there are any obligations connected with it, you had better not sleep on your rights.

With best wishes and kindest regards, I am

Very truly yours,

J. S. Coupal, Director

JSC: kk Enclosure

RALPH H. GORMAN ang 4 4 43 DEar friend Dam: Well old timer - How are you. Will probably C.U. soon. Had a nice visit with Mr. Hockwood R.F.C. & ix looks like well soon go to the bat for an up to date furnace & retork at the Kattlesnake. Alex Hibley may drop in to have a chat with you re-this quicksilver mine - in the near future. In sure you will agree that The property justifies a Gov. loan. future. T.S. Engineers report shows from Vie L. Smith P. S. an Out tanding

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Engineers Rattlesnuter on Openying

Engineers Rattlesnuter to the Engineers Rattlesnuter to the source and Cas Angeles

Engineers Rattlesnuter to the source and Cas Angeles

Engineers Rattlesnuter to the source and Cas Angeles

Dear friend Sam: V Excuse my delay in thanking you for your generals cooperation Tregarding the Rattersnohe Quicksilver Mines. - of 10 claims. IX Hooks like will get under way soon for a 15 ton plus retork of furnaceft may do'x without you aids. per mo, receipts for 12 mo to misting that old out of date wood burning retorx m: Waters built - 243 mon! You may get some inqueries sood - 4/ Die B. C. N. U. soon Have been kinda knocked out af a 25' fall but am sure will be able to travel over soon. I Have quite a bix of good 20 lb cenibar over all the mine shit sure will justify adibs & belief P.S. Mibley is to be associated with one LOS ANGELES, CALIF.

TRINITY 2171

AMR 7 43 215 WEST FIFTH STREET DEarl Bam: Mr. alex Hibley is air Mailing the Metale Reserve Co. representative in Phoenix Pa - Rathbanake Quicksilve to see if they would be favorable to a Goo. loan for reduction with Modern Equipment. This meets with my approved though it was not my idea. Raph/Saverstock once sampled to the 400'level 4 got 20 lbs average. Of course we have swell ciniba Mon & was producing. I hold Millaters 1942 receipts
showing better than 12,000 returns in 12 months 1942 - with 8 flacks during april 1942.

during april 1942.

Wifte Ima a letter I can show siero en u

Wifte Ima a letter I can show willow en u

go above address - som the Same Dear amigo Bam! - June 6th 43
Thanks for Thanks for your letter - Rec'd fast week as I live been out of Circulation - A Reef gave Deway

4 I shipped about 25 ft & took a jold that popped my spine & Impired both toses phase = am holbbling about now & doing something on Rattlesnake Q! Mine How may get an inquiry through your Dept regarding I have over 12,000° in receipt for 1942 with that old wood burning patory that lost about half the sure unit or bo SOON. Will C. V. Soon - Huf Ded Will C. V. Soon from the I Smit

MESSAGE WILL B	FOREIGN
FULL RATE	FULL RATE
DAY LETTER	CDE RATE
NIGHT LETTER	URGENT
SERIAL	DEFERRED
RESERVATION	NIGHT LETTER
TOUR-RATE	SHIP RADIO



CHARGE ACCOUNT NUMBER	
CASH NO.	TOLLS
	CHECK
TIME FILED	(STANDARD TIME)

Send the following message, subject to the Company's rules, regulations and rates set forth in its tariffs and on file with regulatory authorities

DECEMBER 1

Phoenic, Arione, June 9, 1943

710 L. Dath Here'l Hayfulr les Ameles, Collivedo

Howo Cleansond Hibler Lotton with Coloring Caief Aricons 201. He color

to to roply. In this look forecoming on look application but granting look Generals town formers date proceeded to formers explication. See A. C. Reduced III representative Preffic Actual Deliding Les Acquies. Ches this city. Tricing.

J. D. Coupel, Director Deportunit of Mastel Resources

June 9, 1943 Mr. Vic L. Smith Care of R. H. Gorman 512 Chester Williams Building 215 West Fifth Street Los Angeles, California Dear Vic: I received your wire and also your airmail letter regarding the Rattlesnake Quicksilver. I am enclosing a copy of a day letter I have just sent to you. Upon receipt of your letters I discussed this situation with Mr. William B. Gohring, Chief of the RFC Mine Loan Division here at Phoenix. He told me that he had received a letter from Mr. Alex Nibley and when I told him I was wiring you he asked me to reply for him also.

The RFC will look favorably on an application for a loan for the operation of the Rattlesnake Quicksilver Mine to include installation of proper beneficiation plant. You must remember, however, that the granting of a loan depends entirely upon the factual data you can present in the formal application which would show justification for the installation of a plant.

Blanks for making this application can be obtained from A. C. Rockwood, who is the RFC representative, in the Pacific Mutual Building, Los Angeles.

In making the application it is necessary in the case of plant installation that you show a definite tonnage of ore blocked out of such value that in treatment it will show a net operating profit of twice the amount of the loan. That was the former standard which was used in granting loans for plant erection and it may be somewhat modified today.

Most of the loan applications that are rejected are poorly prepared and do not present all of the data necessary to make a sound determination. Very few mines actually have blocked ore and one of the requirements is to show on a map the underground workings and a rather complete assay map showing widths and values of ore.

Other quicksilver work in the district is showing excellent results and I hope you will be able to properly present the Rattlesnake for a loan.

With best wishes and kindest personal regards, I am

Very truly yours,

J. S. Coupal, Director

JSC:kk Enclosure 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

A. N. WILLIAMS

NEWCOMB CARLTON

J. C. WILLEVER

SYMBOLS

DL=Day Letter

NT=Overnight Telegram

LC=Deferred Cable

NLT=Cable Night Letter

Ship Radiogram

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

SA358 53 DL=LOSANGELES CALIF 8 1150A

SAM COUPAL=

1943 JUN 8 PM 4 09

HOME BUILDERS BLDG PHOENIX ARIZ=

ALEX NIBLEY MY APPROVAL WIRING METALS RESERVE PHOENIX IF THEY
WILL LOOK WITH FAVOR MY RATTLESNAKE QUICKSILVER FOR GOVERNMENT
AID FOR MODERN REDUCTION PLANT ETC STOP PLEASE WRITE ME YOUR
OPINION FIVE TWELVE CHESTER WILLIAMS BUILDING LOSANGELES STOP I
HOLD ENGINEERS REPORT ALSO TWELVE THOUSAND PLUS RECEIPTS FOR
FORTY TWO LETTER FOLLOWS REGARDS=
VIC L SMITH.

SURVEY OF OPERATING MINES

June 4, 1942

By: Fred H. Perkins

DEPT. MINERAL RESOURCES

RECEMEN

JUN 9 1942

PHOSE

APPLONA

RATTLESNAKE, QUICKSILVER GROUP

Problems.

Was not able to go into this matter with Mr. McWaters on this trip but at a later date he will know better what his problems are now. The furnace that he is using is of his own making and is in more or less an experimental stage. After it has been operated a little longer he is willing to make the necessary changes.

