CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

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PRINTED: 01-31-2009

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: SUNRISE

ALTERNATE NAMES:
A.B.EXTENSION

MARICOPA COUNTY MILS NUMBER: 347

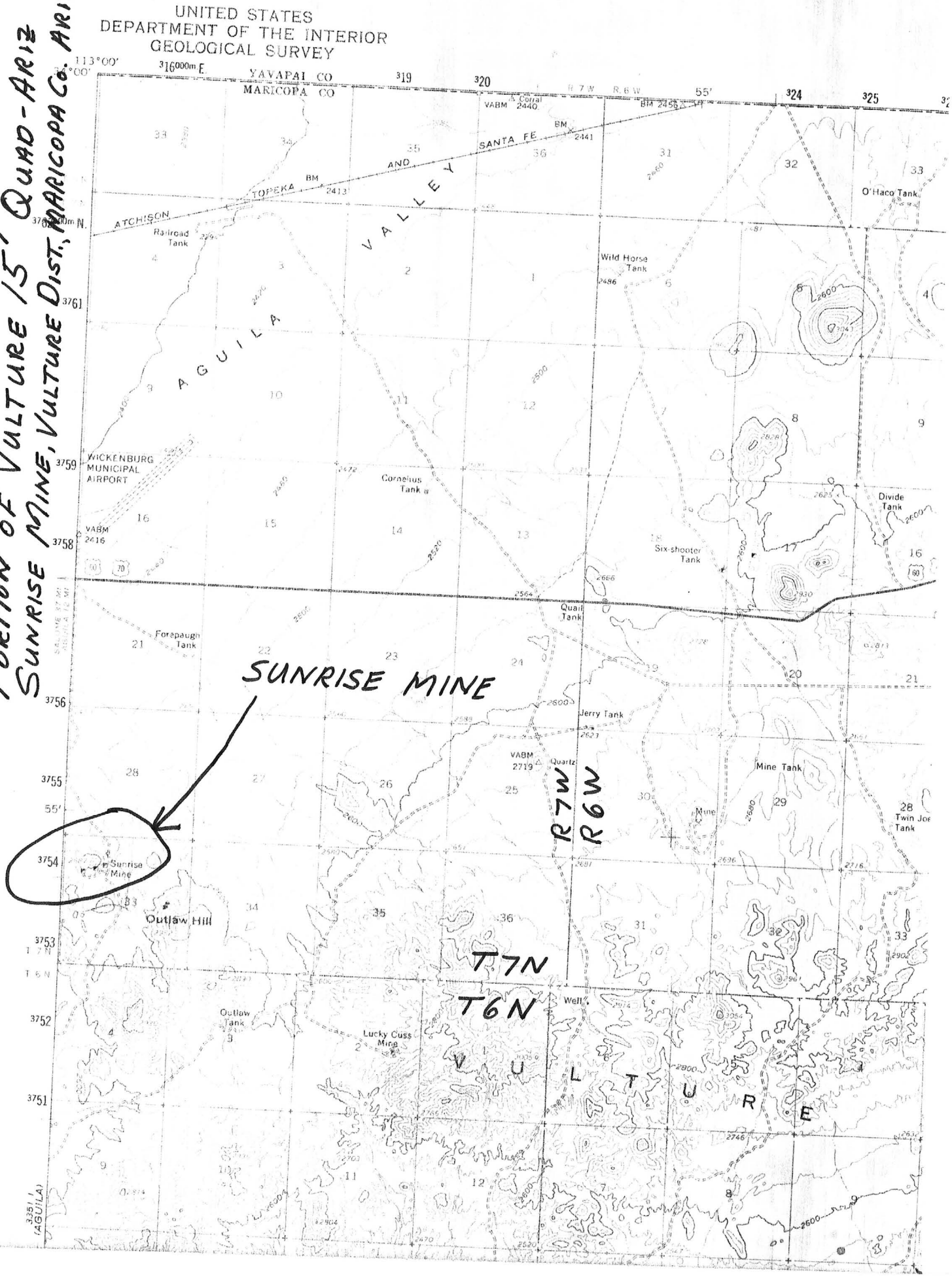
LOCATION: TOWNSHIP 7 N RANGE 7 W SECTION 33 QUARTER NW
LATITUDE: N 33DEG 54MIN 34SEC LONGITUDE: W 112DEG 59MIN 34SEC
TOPO MAP NAME: VULTURE MOUNTAINS - 15 MIN

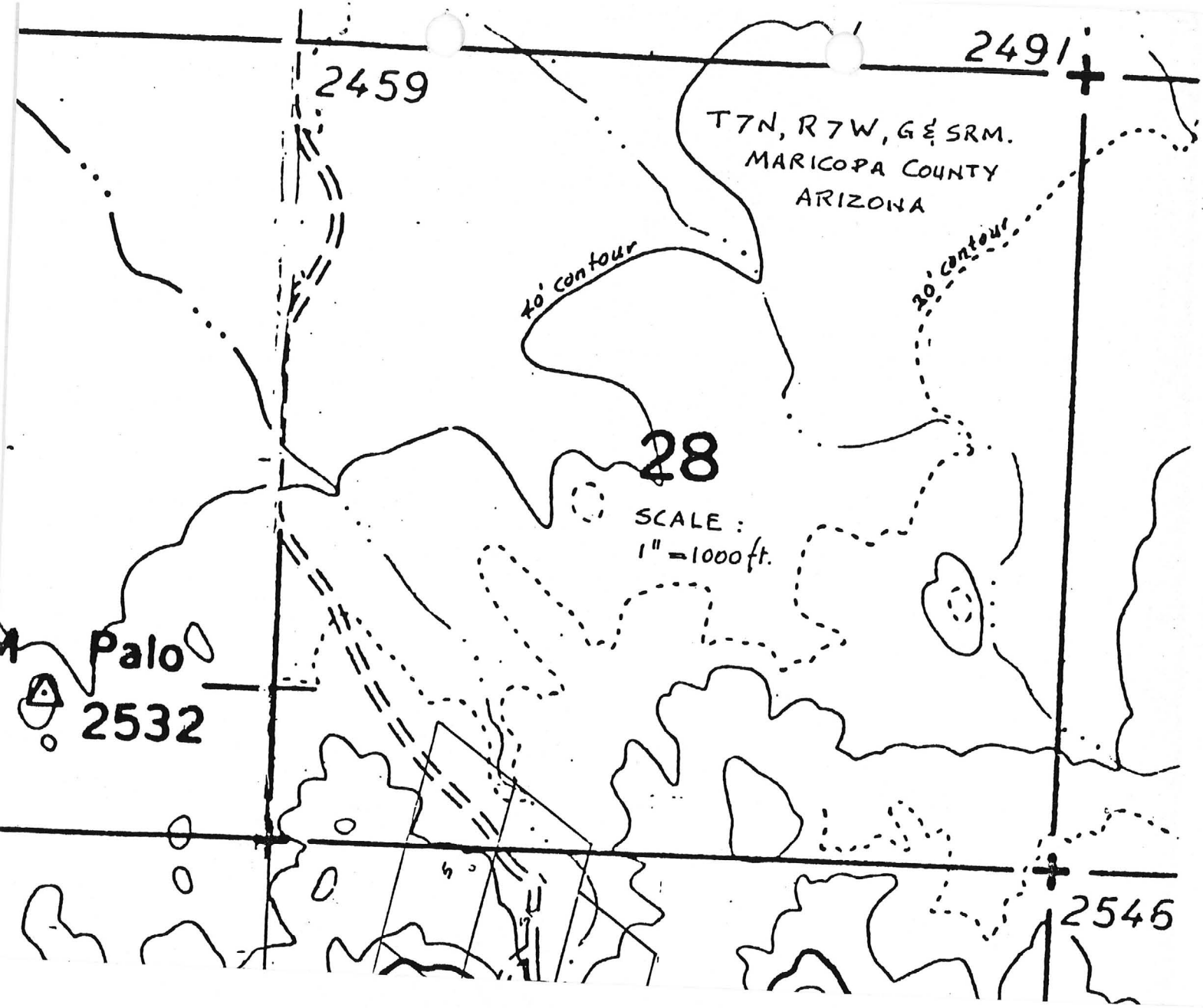
CURRENT STATUS: PAST PRODUCER

COMMODITY:
GOLD
SILVER
SILICON SMELTER FLUX

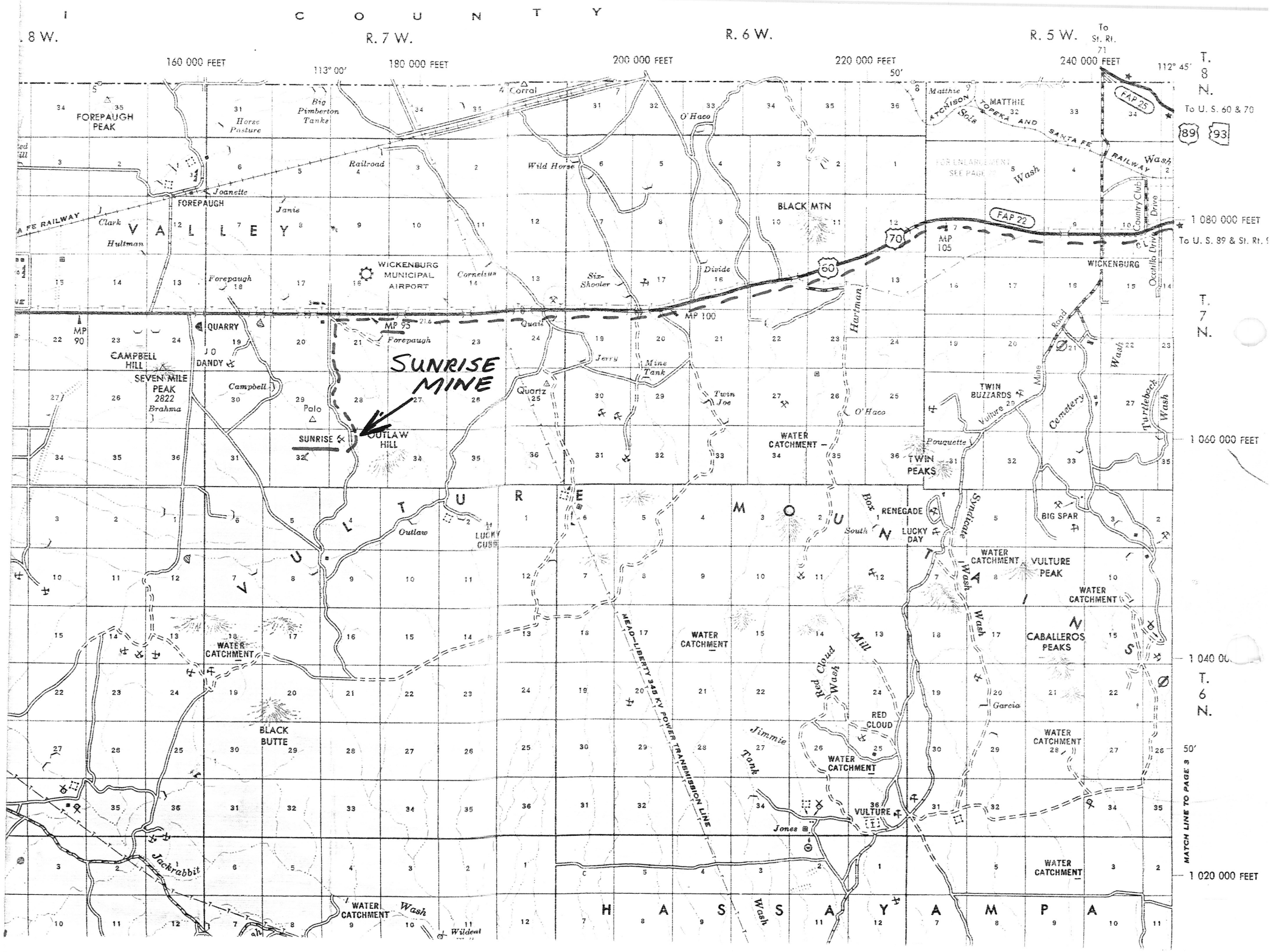
BIBLIOGRAPHY:
ADMMR SUNRISE MINE FILE
METZGER O USBM IC 6991 P 58
WILSON E, CUNNINGHAM J & BUTLER G. AZBM BULL 137 P 162-163
ADMMR "U" FILE AU 6
METZGER O USBM IC 6991 P 58-60
ADMMR SUNRISE MINE COLVO FILE
ADMMR A.B. EXTENSION CLAIMS COLVO FILE

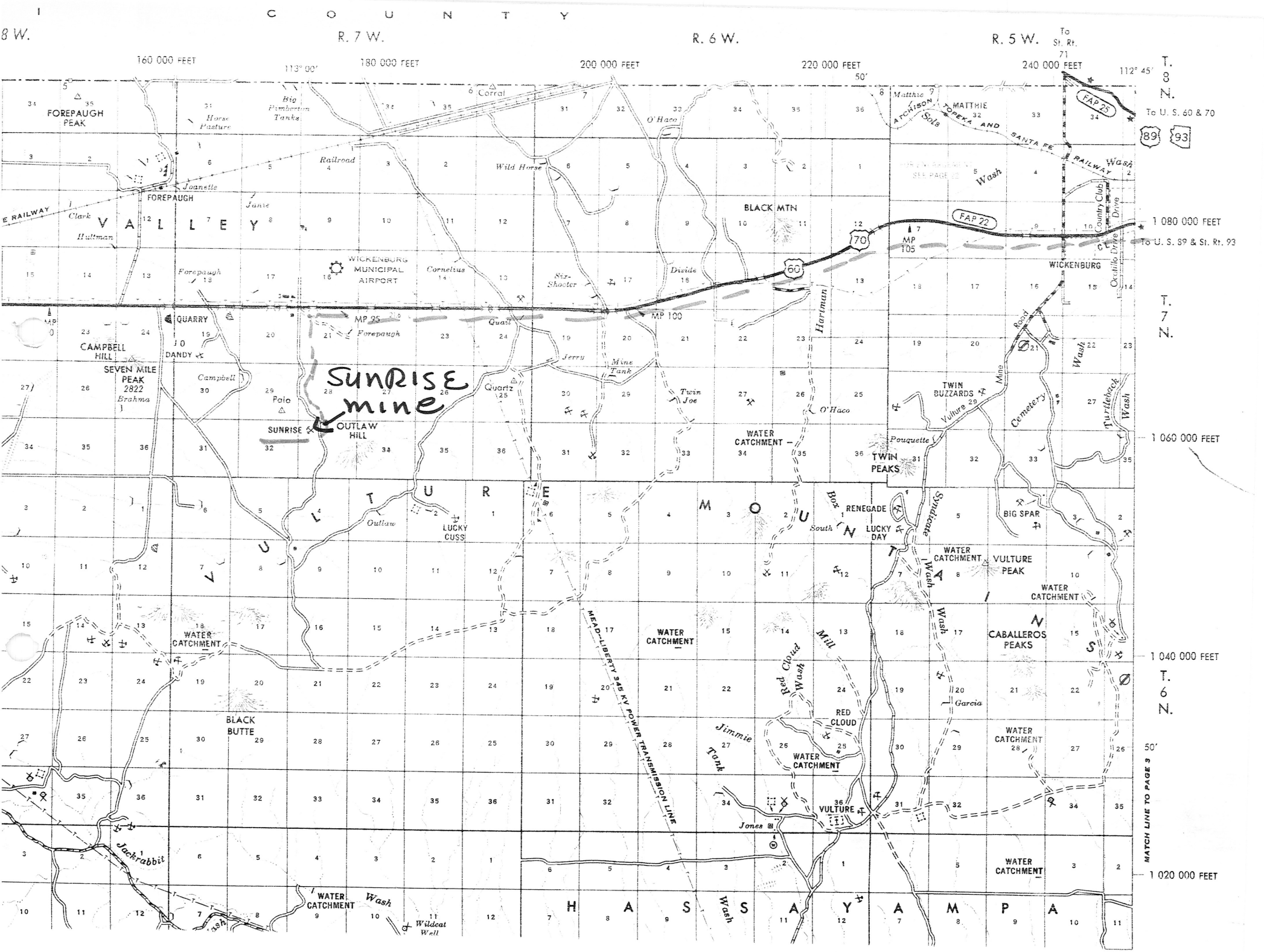
PORTION OF VULTURE 15' QUAD - ARIZ
SUNRISE MINE, VULTURE DIST., MARICOPA CO. ARIZ





ARIZONA DEPT. OF MINES & MINERAL RESOURCES
STATE OFFICE BUILDING
416 W. CONGRESS, ROOM 161
TUCSON, ARIZONA 85701


COUNTY
R. 8 W.
R. 7 W.
R. 6 W.
R. 5 W.
160 000 FEET
180 000 FEET
200 000 FEET
220 000 FEET
240 000 FEET
113° 00'
112° 45'
50'
T. 8 N.
T. 7 N.
T. 6 N.
1 080 000 FEET
1 060 000 FEET
1 040 000 FEET
1 020 000 FEET
To U. S. 60 & 70
To U. S. 89 & St. Rt. 9
To St. Rt. 71
FAP 25
FAP 22
FOREPAUGH PEAK
Horse Pasture
Big Pimberton Tanks
Corral
O'Haco
Matthie
MATTHIE
ATCHISON TOPEKA AND SANTA FE RAILWAY
Wash
Railroad
Wild Horse
Joanette
FOREPAUGH
Janie
Clark
Hultman
VALLEY
BLACK MTN
MP 105
WICKENBURG MUNICIPAL AIRPORT
Forepaugh
Cornelius
Six-Shooter
Divide
Hartman
WICKENBURG
Country Club Drive
Ocotillo Drive
MP 90
QUARRY
MP 95
MP 100
CAMPBELL HILL
JO DANDY
SEVEN MILE PEAK 2822
Brahma
Campbell
Palo
Quartz
Jerry
Mine Tank
Twin Joe
SUNRISE MINE
SUNRISE
OUTLAW HILL
WATER CATCHMENT
TWIN BUZZARDS
Vulture
Mine Road
Cemetery
Turtleback Wash
Pouquette
TWIN PEAKS
ULTUREMOUNTAINS
Outlaw
LUCKY CUSS
Box
South
RENEGADE
LUCKY DAY
Syndicate
BIG SPAR
VULTURE PEAK
CABALLEROS PEAKS
Mill
Red Cloud Wash
RED CLOUD
Garcia
Jimmie
Tank
MEAD—LIBERTY 345 KV POWER TRANSMISSION LINE
BLACK BUTTE
Jackrabbit
VULTURE
Jones
Wildcat
HASSAYAMPA
MATCH LINE TO PAGE 3



SUNRISE mine

SUNRI (F) MARICOPA CO.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

EVAN MECHAM, GOVERNOR
GERALD H. TELETZKE, PH.D., DIRECTOR

NOTICE OF INTENT TO ISSUE AN AQUIFER PROTECTION PERMIT(S)

Pursuant to Arizona Administrative Code, Title 18, Chapter 9, Article 1, the Director of the Arizona Department of Environmental Quality intends to issue an Aquifer Protection Permit(s) to the following applicant(s), subject to certain special and general conditions.

Public Notice No. 5-90AZAP — On or about January 25, 1990

RDH Ventures
Mr. Hobart Randall
P. O. Box 274
Yarnell, Arizona 85362
Aquifer Protection Permit No. P-102178

US 60 MP 94.
2.7 MILES SOUTH

RDH Ventures is located near Wickenburg, Arizona, in Maricopa County. Depth to groundwater is estimated to be greater than 300 feet.

The facility is restricted to operate a hydrometallurgical precious metal recovery facility utilizing a closed circuit cyanide heap leaching method. The facility consists of mine dump materials, a chemical storage, an overflow pond, and carbon adsorption columns. All construction details will be based on the plans approved by ADEQ Water Permits Unit. The best available demonstrated control technology design for this facility includes 1) both of the pregnant solution and barren solution tanks are provided with double containment systems, 2) the leach ore pad and overflow solution pond are both lined with a single synthetic liner and equipped with leak detection systems. Liners to be installed will have a minimum permeability of 10^{-7} cm/sec. All containment facilities will be bermed to prevent runoff from a storm event. A diversion channel, adequately designed using a SCS (Soil Conservation Service) curve number calculation will be provided for off-site storm water runoff.

The point of compliance is proposed to be located at north northeast in the alluvial wash along RDH property. Because of the remote location and facility design, no groundwater monitoring will be required in the permit. However, should an Alert Leval be violated in the leak detection monitoring, the permittee is required to install a monitor well and initiate a groundwater monitoring program (Contigency Requirement).

The permit and related material are available for public review Monday through Friday, 8:00 a.m. to 5:00 p.m. at Arizona Department of Environmental Quality, Water Permits Unit, 2005 North Central Avenue, Phoenix, Arizona 85004.

Persons may submit comments or request a public hearing on the proposed action, in writing, to ADEQ at the above address within thirty (30) days from the date of this notice. Public hearing request must include the reason for such request.

The Department of Environmental Quality is An Equal Opportunity Affirmative Action Employer

SUNRISE MINE

MARICOPA COUNTY
VULTURE DISTRICT

KAP WR 2/17/84: A visit was made to Ted Housley's cyanide heap leach gold operation at Sunrise Mine, Maricopa County where Mr. Housley is recovering gold from the dump material. A more detailed report has been written for the files. Mr. Housley, who is apparently leasing the mine property has subleased the underground portion of the property to an undisclosed California firm.

KAP WR 6/29/84: Ted Housley reported his wife Marie past away in March, 1984. In February a fire destroyed his mobile home, back hoe-loader and lab equipment at the Sunrise Mine (file) Maricopa County. He plans to sell out his heap leach operation and his lease posistion at the mine and go to Alaska.

KAP WR 3/14/86: A visit was made to the Sunrise Mine (file), Maricopa County. This property had been operated by Ted Housley through early Spring of 1984. At the time of this visit on March 12, 1986 the operation was in a state of abandonment. The leach pit was partially overgrown with brush and a few pieces of junk equipment remained. A site for a 100 x 100 foot leach pad had been prepared but never used. The collar of the inclined shaft remains in very good condition.

NJN WR 2/5/88: Al Szabo reported that the State lease on the Sunrise (file) Maricopa County has been transfered from Dottie Danielson to Fischer-Watt Gold Corp (card).

SUNRISE MINE

MARICOPA COUNTY
Vulture District

RRB WR 4/24/81: Ben McIntyre, 1645 E. Thomas 13A, Phoenix, Az 277-9097 was in to find information on leaching. He is considering leaching the dumps on the Sunrise Claims, 18 miles west of Wickenburg. He said that a Mr. Brock, who was subsequently killed in an accident, told him that it was "real good". I advised him to sample the dumps and run leach tests before investing money in the operation.

RRB WR 5/15/81: In the company of Ken Phillips visited the Sunrise Mine south of Forepaugh with Ted Housely and John Holmes. Mr. Housley has option on property and is considering working the dumps while evaluating the underground.

RRB WR 1/29/82: Ted Hously called for information on barite and beryl. He reports that he has sold the Sunrise and he thinks he has the Paydirt sold.

RRB WR 3/12/82: Visited the Sunrise MIne south of Forepaugh in Maricopa County. No one was at the property and the only equipment was a mechanics truck. There was evidence of sampling on the dumps, the vein had been exposed west of the shaft and many acres had been cleared as though a heap leaching operation was planned.

(date out of sequence)
RRB WR 2/5/82: Chuck Bentzen, Reuter Equipment, reported that United Consolidated Mines, Inc, 3616 Omega Circle, Mesa, Arizona are setting up a leach pad at the Sunrise Mine south of Forepaugh. Dick Oelrich is in charge and Mike O'Leary has done consulting work on it.

RRB WR 8/20/82: It was reported that Lonny Williams and United Consolidated Mines are acquiring equipment to operate the Sunrise Mine south of Forepaugh, Maricopa County.

NJN WR 10/22/82: It was reported that Stan Griffith, a contract miner is cleaning out and retimbering the shaft at the Sunrise Mine, Vulture District, Maricopa County for the United Consolidated Mines.

SUNRISE MINE MARICOPA COUNTY

RRB WR 12/10/82: John Challinor reports that Stan Griffith was, as of October 16, retimbering the Sunrise south of Forepaugh, Maricopa County preparatory to a sampling program. Mike Escapule was to do a 50 ton cyanide test using a cement mixer.

RRB WR 1/21/83: Visited the Sunrise Mine south of the old Forepaugh airport. It has apparently been abandoned again. Most of the equipment was already gone and while I was there Bill Poe of Rampo Exploration came to get an amalgamator. He reported that the outfit trying to operate it has gone belly-up.

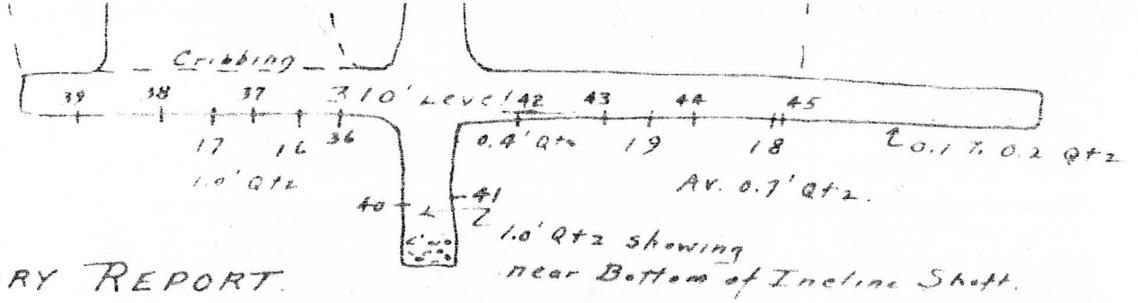
RRB WR 2/25/83: Assisted the Industrial Commission in their investigation of a claim filed by Roger Fike at the Sunrise Mine, Maricopa County. Apparently Mr. Fike was the Safety Engineer at the mine and asserts that he contracted hepatitis from the bat and rodent manure in the mine.

RRB WR 8/26/83: Visited the Sunrise Mine south of Forepaugh. There has been considerable activity since my last visit but things are still too disorganized for me to determing what has been planned. There are piles of crushed ore but none on a pad.

NJN WR 11/18/83: It was reported that a cyanide heap leaching operation is being set up at the Sunrise Mine, Maricopa County.

KAP WR 12/9/83: Ted Housely, Wickenburg, reported he has started a small cyanide heap leaching operation at the Sunrise Mine on old dump material.

RRB WR 1/6/84: Ted Housley reports that he is pouring 5 - 6 ounces of gold at the end of each 20 day cycle at his one man (plus wife) operation leaching the dumps at the Sunrise Mine south of Forepaugh in Maricopa County.



not based on actual Sur
and complete measur
The 310 ft. Level equal
Approx. 200 ft. below
Collar of the Shaft.

PRELIMINARY REPORT

JUNE 19, 1981

Au = 467.10
Ag = 10.25

Sample No.	Level	Distance from Shaft East	Distance from Shaft West	Description	Sample Width	Oz. Gold	Oz. Silver	Value Au + Ag	Value	Over 4'
1	180	48'		Quartz only	0.8'	0.34	0.04	10.96	163.23	32.64
2	"	42'		Schist Banded with Qtz - Milling	5.0'	0.18	0.12	5.86	85.31	85.31
3	"		25'	In Cross Cut - Qtz + Schist	2.1'	0.02	—	0.64	9.34	4.90
4	"		105'	Grab Sample from Shute + Stope - Little Qtz		0.02	—	0.64		
5	200	56'		Apparent full width of ore - Qtz + Schist	6.2'	0.03	0.17	1.07	15.75	15.75
6	"	32'		In Raise - 10' up - Qtz only	1.3'	0.01	0.19	0.44	6.62	2.15
7	"	32'		" " 16 " " " and Schist	5.6'	0.04	1.36	2.12	32.64	32.64
8	"	25'		Qtz - Little Schist	3.2'	0.16	0.24	5.30	77.19	61.76
9	180	42		Mostly all Schist - 10' above Sample No 2	5.7	0.52	0.10	16.80	243.92	243.92
10	"		122'	Mostly Schist - 1.1' Band of Qtz	7.0'	0.01	0.04	0.34	5.08	5.08
11	230'	13'		4 cuts across Qtz - Av. width 1.4	1.4'	0.31	—	9.98	144.80	50.68
12	"	37'		1.3' Qtz + 1.4' Schist - Narrows to Face	2.7'	0.46	1.00	14.51	225.12	151.95
13	"		18	Qtz only	1.0'	1.84	—	59.24	859.46	214.87
14	280	24'		" "	1.6	6.20		199.64	2896.02	~~1158.41~~
15	"	44		" "	1.0	1.10	0.15	35.5	515.35	128.84
16	310	16		" "	1.4	0.41	—	13.20	191.51	67.03
17	"	25		" "	1.1	0.14	—	4.50	65.39	17.98
18	"		39	1.0' Qtz + 2.0' Schist little Qtz in Schist	3.0	0.14	0.06	4.50	66.01	49.51
19	"		25	Quartz - Chip - Cuts - Av. width 0.7	0.7	0.62	0.28	20.30	292.47	51.18
20				Grab Sample from Sorted ore from Dump		1.23	—	39.60		

SUNRISE SAMPLES PAGE 1

nchine Shaft

FINAL REPORT

6-19-1981
Au 467.10
Ag 10.25

No	Level	Description	Width ft.	Oz. per Ton Gold	Oz. per Ton Silver	$ Value		Over 4'
21	230	Quartz only	0.8'	0.04	0.02	1.31	18.89	3.78
22	"	" Little Schist	1.0'	0.46	–	12.87	186.84	46.71
23	"	Nearly All Schist	1.1	0.03	–	0.96	14.01	3.50
[illegible]	"	Quartz only	1.3	0.51	–	16.42	238.22	77.42
25	"	" "	1.1	0.12	–	3.86	52.32	14.39
26	Shaft	" "	0.8	0.26	–	8.37	121.45	24.29
27	"	" "	0.8	0.52	–	16.74	242.89	48.58
28	"	" "	1.0'	0.62	–	19.96	289.60	72.40
29	"	" "	0.9'	0.03		0.96	14.01	3.15
30	280	" and Schist	1.0	0.20		6.42	93.42	23.36
31	"	" only	1.8'	0.10		3.22	46.71	21.02
32	"	" and Little Schist	0.5	2.50	–	80.50	1167.75	145.97
33	"	" Schist	1.4	0.18	0.10	5.85	186.08	65.13
34	"	" only	1.1	0.60	0.40	19.57	284.36	78.20
[illegible]	"	" " High Grade Pocket X		8.56	0.54	275.97	~~4063.91~~	
36	310	" "	1.5	0.36	0.34	11.80	171.64	64.36
37	"	" "	1.3	0.04	–	1.28	18.68	6.07
38	"	" "	0.6	0.20	0.20	6.56	95.47	14.32
39	"	" "	0.4	0.02	0.18	0.75	11.19	2.52

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SUNRISE SAMPLES PAGE 2

nchine Shaft

FINAL REPORT

6-19-1961

N°	Level	Description	Width ft.	Oz. per Ton Gold	Oz. per Ton Silver	$ Value	Au 467.10 Ag 10.25	Over 41
21	230	Quartz only	0.8'	0.04	0.02	1.31	18.89	3.78
22	"	" Little Schist	1.0'	0.40	—	12.87	186.84	46.71
23	"	Nearly All Schist	1.1	0.03	—	0.96	14.01	3.50
[illegible]	"	Quartz only	1.3	0.51	—	16.42	238.22	77.42
25	"	" "	1.1	0.12	—	3.86	52.32	14.39
26	Shaft	" "	0.8	0.26	—	8.37	121.45	24.29
27	"	" "	0.8	0.52	—	16.74	242.89	48.58
28	"	" "	1.0'	0.62	—	19.96	289.60	72.40
29	"	" "	0.9'	0.03		0.96	14.01	3.15
30	280	" and Schist	1.0	0.20		6.42	93.42	23.36
31	"	" only	1.8'	0.10		3.22	46.71	21.02
32	"	" and Little Schist	0.5	2.50		80.50	1167.75	145.97
33	"	" Schist	1.4	0.18	0.10	5.85	186.08	65.13
34	"	" only	1.1	0.60	0.40	19.57	284.36	78.20
[illegible]	"	" " High Grade Pocket X		8.56	0.54	275.97	~~4063.91~~	
36	310	" "	1.5	0.36	0.34	11.80	171.64	64.36
37	"	" "	1.3	0.04	—	1.28	18.68	6.07
38	"	" "	0.6	0.20	0.20	6.56	95.47	14.32
39	"	" "	0.4	0.02	0.18	0.75	11.19	2.52

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SUNRISE SAMPLES PAGE 2

0.6	0.03	—	0.96	34	"	only	—
0.7	0.[illegible]	—	1.93	35	"	"	High Grade Po
0.6	0.50	0.30	16.28	36	310	"	
0.8	0.50	0.[illegible]	16.16	37	"	"	
0.4	0.52	0.08	16.79	38	"	"	
				39	"	"	

Taken from Phelps' Map of Sunrise Workings on Plane of Vein

SUNRISE MINE

VULTURE DIST. YAVAPAI Co. Az

m X) · 16.31

D → 20.95

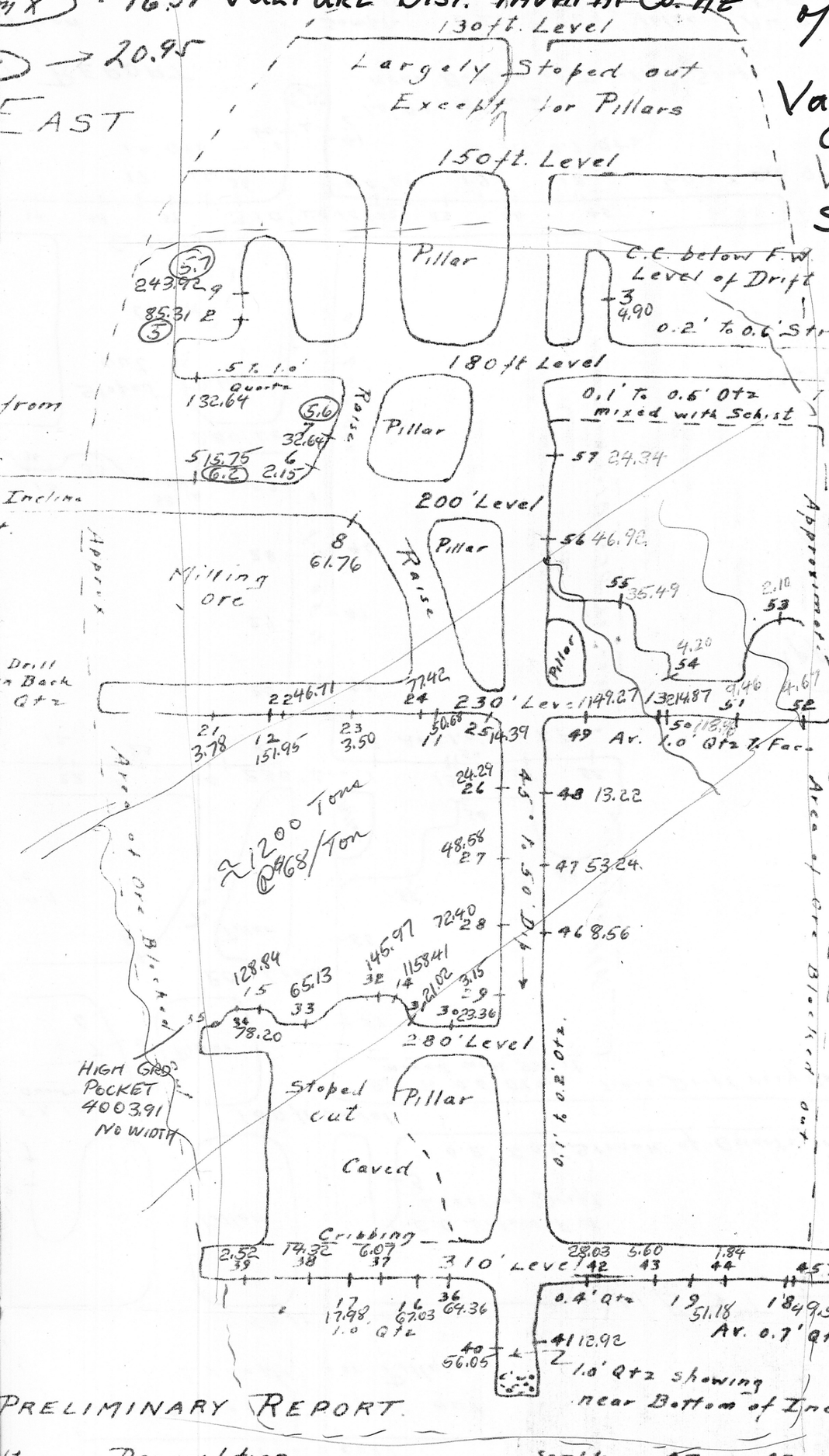
EAST

VALUES IN RED ARE GOLD $467.10 tr. oz

WEST

SILVER $10.25 tr. oz

JUNE 19, 1981



$44.60
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~$225,000

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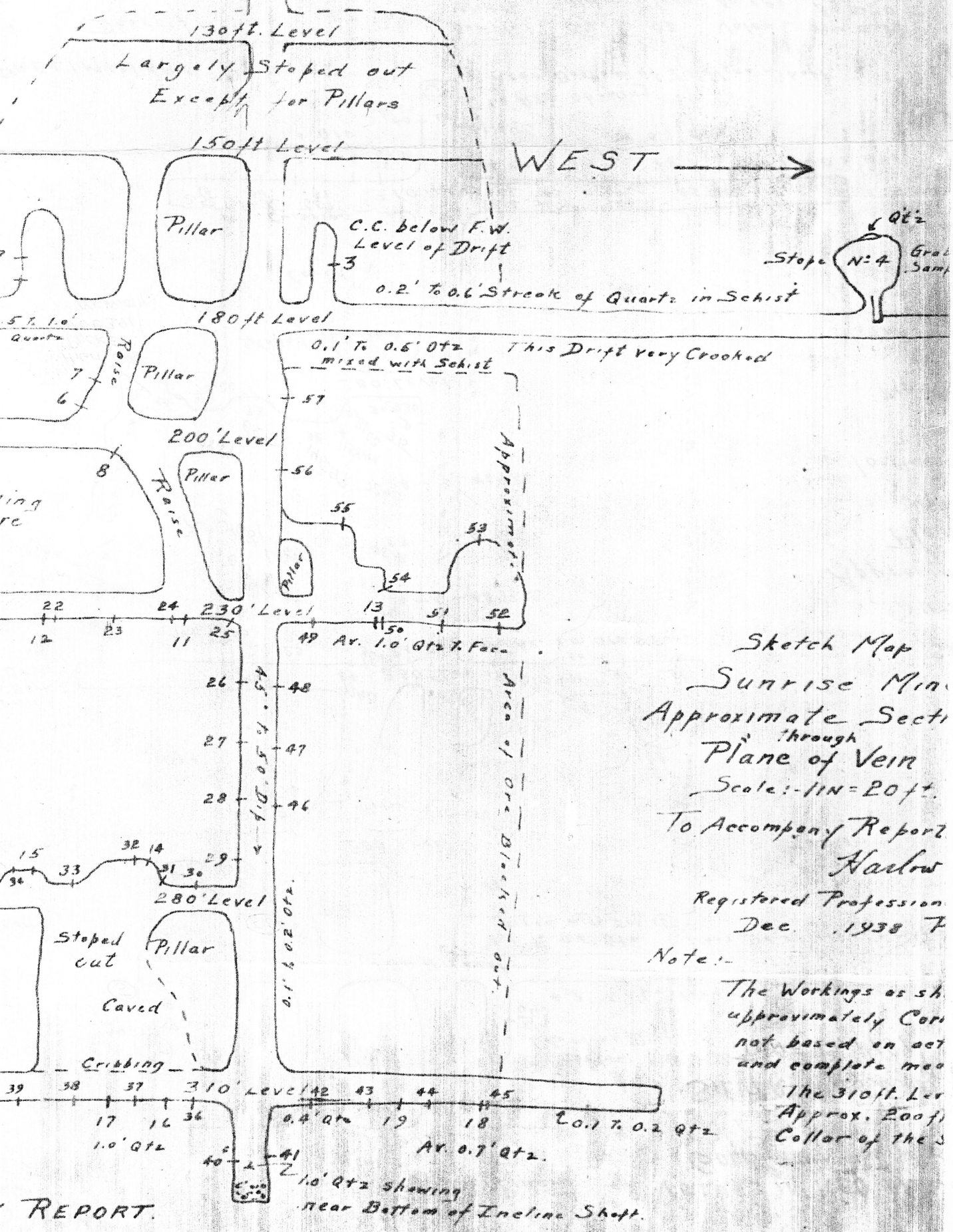
PRELIMINARY REPORT.

ft	Description	Sample Width	Oz. Gold	Oz. Silver	Value Au. & Ag.	Au. @ $32.00 Ag @ 0.62
	Quartz only	0.8'	0.34	0.04	10.96	
	Schist Banded with Qtz - Milling	5.0'	0.18	0.12	5.86	
	In Cross Cut - Qtz + Schist	2.1'	0.02	—	0.64	
	Grab Sample from Shute + Stope - Little Qtz	—	0.02	—	0.64	
	Apparent full width of ore - Qtz + Schist	6.2'	0.03	0.17	1.07	

7	0.06	–	1.93
6	0.50	0.30	16.28
8	0.50	0.10	16.16
4	0.52	0.08	16.79

35	"	"	"	High Grade Pocket X. 8.56
36	310	"	"	1.5 0.36
37	"	"	"	1.3 0.04
38	"	"	"	0.6 0.20
39	"	"	"	0.4 0.02



Sketch Map
Sunrise Min
Approximate Secti
Through
Plane of Vein
Scale:- 1IN = 20 ft.
To Accompany Report
Harlow
Registered Profession
Dec. 1938 F

Note:-
The Workings as sh
approximately Corr
not based on act
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The 310 ft. Lev
Approx. 200 f
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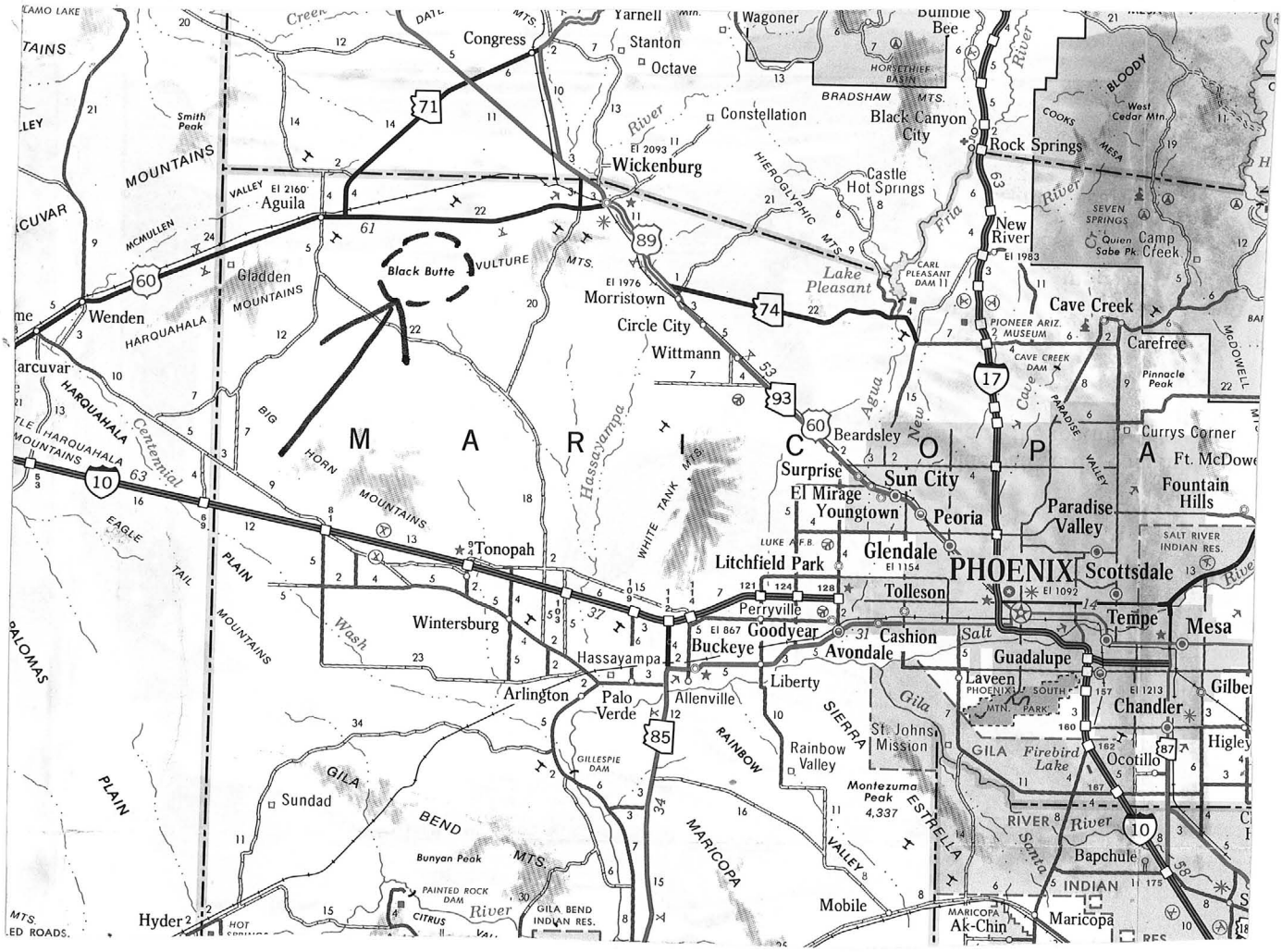
REPORT.

tion	Sample Width	Oz. Gold	Oz. Silver	Value Au. + Ag.	Au. @ 33.22 Ag @ 0.62
ly	0.8'	0.34	0.04	10.96	
nded with Qtz-Milling	5.0'	0.18	0.12	5.86	
Qtz + Schist	2.1'	0.02	—	0.64	
o Shute + Stope - Little Qtz		0.02	—	0.64	
dth of ore - Qtz + Schist	6.	0.03	0.17	1.07	
et - Qtz only	1.3'	0.01	0.19	0.44	

REGIONAL LOCATION

SUNRISE MINE

Vulture Mining District, Maricopa County, Arizona



VIS15.2

Arizona Department of Mines and Mineral Resources

VERBAL INFORMATION SUMMARY

May be Reproduced

1. Information from: **Hobart Randal & Hank Di Camillo dba RDH Ventures**
   Address: **102 Wall Street, Yarnell, Box 274 85362, Phone:427-3740**

2. Mine: **Sunrise**

3. ADMMR Mine File **Sunrise**

4. County: **Maricopa**

5. District

6. Operating Company: **RDH Ventures**

7. Summary of information received, comments, etc.:

Messrs Randal, Di Camillo and Walt Henke plan to start constructing a 150 X 50 leach pad on Feb. 5, 1990. A DEQ permit is in public comment period.

They hope to leach 2,500 - 5,000 tons to recover 400 oz Au. They will also consider mining 5,000 - 10,000 tons from underground. Three day column leach tests reported to have treated 0.177 Au head ore and resulted in 0.015 leached tails.

Plan to spend $30,000 - $40,000 to put the operation together. Plans hauling in some ore from around the Lucky Cuss mine area.

Steel tanks are on the property for solution storage.

Some drilling to intersect dipping vein noted since last visit. Four holes noted. Sketch map attached.

Date: **Feb. 2, 1990** Ken A. Phillips

Signature ADMMR

FVS18.1

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

FIELD VISIT
May be Reproduced

1. Information from: Hobart Rando
   Address: c/o RDH Ventures, 102 Wall Street
   P. O. Box 274, Yarnell, AZ 85362
2. Phone: 427-3740

3. Mine: Sunrise
4. ADMMR Mine File: Sunrise Mine

5. County: Maricopa

6. MILS Number: 347

7. Township: 7N Range: 7W Sec(s): NW¼, Sec. 33

9. USGS Topographic Map: Vulture Mountains 15 Min

10. Operating Company:

11. Pertinent People and/or Firm:

12. Commodities:

13. Operational Status:

14. Summary of information received, comments, etc.:

RDH Ventures plans to construct a 150′ x 50′ leach pad and heap leach dumps on the property using cyanide. They report there is 5,000 tons of dumps worth treating and 5 - 10,000 tons that can be produced from previous underground development.

They are currently completing ground water protection permits from the Arizona Department of Environmental Quality.

They reported Vancouver Ventures did some drilling on the property, but no data was available.

Date: January 1990

SUNRISE (F) YAVAPAI CH

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull Jacqueline E. Schafer, Director

REGISTERED MAIL-RETURN RECEIPT

January 14, 2000
REF#: EU00-0035

Sunrise Gold Company
Attention: Vera Zammit
1084 Ella Avenue
Mississauga, ONT, Canada L5E 1H5

RE: Sunrise Gold Mine - Notice Of Violation Closure
Inventory #102178

Dear Mrs. Zammit:

The purpose of this letter is to inform you that the Water Quality Enforcement Unit of the Arizona Department of Environmental Quality has closed the Notice of Violation (NOV) issued to the Sunrise Gold Mine (Permit #P102178) on November 17, 1999. Closure of the non-reporting NOV is in no way indicative of the overall compliance status of the facility. This closure is the result of meeting the requirements of the November 17, 1999, NOV by submitting a response in lieu of the delinquent Self-Monitoring Report Forms (SMRFs).

The SMRFs that you submitted for the fourth quarter 1999, were filled out correctly. If there is flow, then each line under each constituent is filled out as per the permit, such as daily, weekly, monthly or quarterly. In a NO FLOW situation, you need only write that on the top of each page along with the corresponding quarter, sign and date the forms and mail them in.

The reporting dates are listed in the permit under Part II. Specific Conditions Section E. Reporting Requirement. Refer to E.7; reports are due in the month following each quarter.

The Water Quality Enforcement Unit would like to thank you for resolving the past non-reporting violation. Please continue to submit all future SMRFs in a timely manner as required by the referenced permit.

If you have any questions, please feel free to contact Lynn Ott (602) 207-4816, or 1-800-234-5677 ext.4816 within Arizona.

Sincerely,

M. Reza Azizi

M. Reza Azizi, Manager
Water Quality Enforcement Unit

cc: Maricopa County Environmental Services
Ralph Costa, BLM, 222 N.Central Ave., Phoenix, AZ 85004-2203 RE: AZA 25797

bc:

BLM - Jim Hutchinson 2015 W. Deer Valley Rd. Phoenix, AZ 85027
AZ Dept. of Mine & Mineral Resources - Nyal Niemuth 1502 W. Washington Phoenix, AZ 85007
AZ State Mine Inspector 1700 W. Washington, Ste. 400 Phoenix, AZ 85007
AZ State Land Dept.- Steve Hildreth 1616 W. Adams Phoenix, AZ 85007
ADEQ - Eric Wilson, Manager, Mining Unit
ADEQ - WQEU Facility File
ADEQ - WQEU Reading File
lwo

SUNRIVE (4)

Report on the

Sunrise Mine

Sec. 33 T.7N R7W G&SR B&M
Maricopa County, Arizona

Prepared for

Vancouver Ventures, Ltd

Prepared by

H. Mason Coggin, PE & LS
Mining Engineer and Land Surveyor
317 E. Griswold
Phoenix, AZ 85020

March 18, 1988

3/20/89

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Conclusions and Recommendations

A small reserve of 10,000 tons (2000 pounds U.S.) at a grade of 0.07 troy ounces per ton (opt) has been identified in a vein configuration on this Arizona Property.

Economics of the deposit have not been determined.

There is a potential for the development of additional reserves in the adjacent area.

Scope of Work

The Scope of Work for the present program was defined by contract dated December 23, 1987, as follows:

1. Resample the available underground workings.
2. Plot the results of the sampling and surveying to a suitable scale in both plan and section.
3. Write a comprehensive report on the property.

Location

The property is located in Section 33, Township 7 North, Range 7 West of the Gila and Salt River Base and Meridian of Arizona. There are seven 20 acre lode claims covering three, shafts and all the workings along a vein which strikes about North 70 West and dips 40 to 50 degrees to the North. There has been some prospecting on all of the claims and there are apparently more than one vein on the property. The property is located on the attached Arizona State Map and the approximate positions of the seven claims are shown on the Claim Location Map.

Access to the property is over 2 miles of easy graded dirt road from US highway 60 & 60 about 12 miles West of Wickenburg. The claims all fall on the USGS Vulture Mountain 15 minute quadrangle.

From the work of Dietz and Associates, (land Status Map attached) and the Legal Opinion of Scott Donaldson, (also attached) it appears that the unpatented lode mining claims were held by Dottie R. Danielson of Glendale, AZ. until they were sold into Vancouver Ventures control.

History and Previous Production

The property has been the subject of several evaluations by a school of engineers over a period of 70 years. These examinations have included sampling, surveying and drilling. They have produced contradictory results and conclusions.

The reports available are as follows:

Smith, Chas. A, Memo 79 C. Sunrise Mine, Maricopa County, Ariz., Jan. 1st. 1932, from a field examination of August 15, 1931.

> Mr. Smith describes the main shaft as 264' deep on the slope. There were 1,096 feet of workings in all consisting of 464 feet in shafts, 565' in drifts, 17 raises, and 50 feet of crosscuts. In Addition where were various open cuts and pits on the outcrop.
>
> The deposit was described as a preCambrian schist, carrying irregular streaks and impregnations of quartz and of iron oxide. The ore shoot it is 20 ft. wide, strikes northeast and dips to the northwest at 40 to 45°.
>
> He claims reserves of 31,477 tons at 0.507 opt gold. This cannot be substantiated under the current program.

Kinnon, William, Reconnaissance of the A. B. Extension Claims in the Sunrise Mining District., Oct. 4, 1934.

> Mr. Kinnon made a detailed examination of the surrounding claims and found several small veins which may or may not become wider and richer at depth. None of these veins have the strike as the Sunrise.

Blackburn, A. G, Sunrise Prospect, about 1931,

> Mr. Blackburn states that the hanging wall is a monzonite and the footwall a very quartzy granite. He claims that the vein is from ten to fifteen feet wide and consists of three or more quartz lenses separated by schist layers.
>
> The ore shoot was described as being about 200 foot long and three to four feet wide. Blackburn reported the following samples:

Blackburn Samples

No.	Description	Width Width	Assay Gold opt
1	200 level Stringer Waste	3.5	0.12
2	200 Level Cut in back	5.2	0.40
3	200 level Drift at Raise	6.8	2.78
4	200 level Side Wall of x-cut	5.7	0.12
5	200 level Mixed Qtz, Por & Sch.	5.2	0.66
6	200 level composite sample	3.5	12.57
7	Number one Dump HG Qtz w Mn.		1.98
8	No. 1 dump LG Qtz w Sid		1.70
9	Dump sample of schist w sid.		0.14
10	Btm. Qtz with hem.		0.22

Number	Description	Location	Width	OPT Gold
1	No. 1 Shaft Right Wall	2	2.00	0.56
2	No. 1 Shaft Right Wall	12	3.50	0.08
3	No. 1 Shaft Right Wall	22	3.00	0.44
4	No. 1 Shaft Left Wall	42	4.00	0.14
5	No. 1 Shaft Left Wall	32	2.75	2.44
6	South Drift 52 feet	8	4.00	0.12
7	South Drift 52 feet	34	8.00	0.04
8	South Drift 52 feet	18	2.00	0.36
9	South Drift 52 feet	28	2.00	0.42
10	South Drift 52 feet	52	4.00	0.04
11	North Drift at 52 ft	7	5.50	0.12
12	North Drift at 52 ft	17	3.50	0.34
13	No. 1 Shaft Rt Wall	62	3.00	0.34
14	No. 1 Shaft Rt Wall	70	4.00	0.12
15	No. 1 Shaft Rt Wall	80	4.17	0.28
16	No. 1 Shaft Rt Wall	90	4.17	0.20
17	No. 1 Shaft Rt Wall	100	5.00	1.42
18	No. 1 Shaft Rt Wall	110	3.50	0.24
19	No. 1 Shaft Rt Wall	120	4.00	0.12
20	No. 1 Shaft Rt Wall	130	4.17	0.16
21	No. 1 Shaft Rt Wall	140	4.00	0.36
22	No. 1 Shaft Rt Wall	150	2.33	0.14
23	No. 1 Shaft Lt Wall	160	3.83	1.84
24	No. 1 Shaft Lt Wall	170	4.00	2.08
25	No. 1 Shaft Lt Wall	180	1.83	0.48

Blackburn Samples (Continued)

Number	Description	Location	Width	OPT Gold
26	No. 1 Shaft Lt Wall	190	3.50	0.16
27	No. 1 Shaft Rt Wall	200	4.33	0.40
28	No. 1 Shaft Rt Wall	210	3.50	0.24
29	No. 1 Shaft Rt Wall	220	6.33	0.04
30	No. 1 Shaft face Rt.	226	3.50	0.52
31	No. 1 Shaft Left Wall	220	5.50	1.64
32	No. 1 Shaft Left Wall	205	4.50	0.28
33	South Drift 175 Level	10	4.00	0.30
34	South Drift 175 Level	20	6.00	0.74
35	South Drift 175 Level	30	5.50	0.20
36	South Drift 175 Level	40	6.50	0.48
37	South Drift 175 Level	50	6.50	0.96
38	South Drift 175 Level	60	6.00	0.16
39	South Drift 175 Level	70	6.00	0.24
40	South Drift 175 Level	80	5.50	2.20
41	South Drift 175 Level	90	5.00	0.20
42	South Drift 175 Level	100	6.75	0.30
43	South Drift 175 Level	110	5.50	2.50
44	South Drift 175 Level	120	6.50	0.08
45	South Drift 175 Level	130	6.67	0.08
46	South Drift 175 Level	140	5.50	0.12
47	Cross Cut at 120 S. Lt.	120	0.33	0.08
48	Cross Cut at 120 S. Rt.	120	6.00	0.16
49	Cross Cut at 15 S. Lt.	15	5.50	1.14
50	Cross Cut at 15 S. Rt.	15	10.00	0.48
51	North drift 175 level Rt	10	5.00	0.34
52	North drift 175 level Lt	10	5.00	1.16
53	North drift 175 level Rt.	20	6.50	0.72
54	North drift 175 level Lt	20	2.00	2.56
55	North drift 175 level Rt	30	5.00	0.56
56	North drift 175 level Rt.	40	0.83	0.32
57	North drift 175 level face	42	0.83	0.40
58	North drift 175 level Lt	40	1.00	0.32
59	Raise	6	3.50	0.12
60	Raise	16	3.50	0.56

Blackburn Samples (Continued)

Number	Description	Location	Width	OPT Gold
61	North Drift Lower Section	face	7.00	2.92
62	North Drift Lower Section	10	5.50	0.24
63	North Drift Lower Section	20	7.00	0.36
64	North Drift Lower Section	30	6.00	0.20
65	North Drift Lower Section	40	5.50	0.20

Stotesbury, H. W, Letter to H. C. Carlisle, Feb 24, 1930 from Santa Monica, California with sample map of the mine.

Stotesbury made a complete evaluation of the property and claims that there was an extremely rich section of ore extending for a distance of 120 feet along strike with a 10 foot width and carrying over 5 opt in gold. A resampling program in 1932 by Edward Holderness was apparently aimed and confirming this reserve completely destroyed this claim.

Mitchell, C. W., Report on the Sunrise Mine Aguila, Arizona, Dec. 22nd, 1928, Los Angles California. and ...
Mitchell, C. W., Operation of Sunrise Gold Mine during 1934

In his 1928 report Mitchell made several recommendations based on and extended sampling and evaluation of the property. In this report he claimed to have 36,666 tons in sight grading 0.55 ounces of gold per ton. The recommendations included extending the main shaft and 400 foot of drifting. Apparently in 1934 he was allowed to operate the mine and Produced the following:

Michell's Shipments

Date	Tons Shipped	OPT Gold	Ounces
Feb 1934	100	1.40	140.00
Previous	100	1.25	125.00
Feb 200 W Rse	46	1.40	64.40
Feb 200 E Rse	250	0.75	187.50
Feb 150	73	0.60	44.15
Feb 260	85	1.15	97.75
Feb 330	240	1.20	288.00
Feb	50	1.95	97.38
Total	944	1.11	1044.18

After operating the mine for one year Mitchell claims to have left 10,000 tons of ore in sight in the mine which would grade 0.60 ounces per ton.

Colvocoresses, G. M, Letter to Mr. Philip R. Bradley, Feb. 7, 1933

Phelps, Harlow D., Sketch Map Sunrise Mine, Dec, 1938, Prescott, AZ

Apparently Mr. Phelps did a complete sampling and evaluation of the Sunrise Mine in 1938. Although his report was not available the map survives and is attached. It shows workings more or less as they are at the present time. The exceptions being a few small stopes that were mined after 1938 and additional caving which is making some of the stopes inaccessible.

Holderness, Edward, Sunrise Mine Aguila, Arizona June 27, 1932, an assay map of the underground workings.

Skyline Labs, Inc. & Copper State Analytical Lab, Inc., Assays on Drill Holes A to N. June and July 1985

Records were found from a series of Shipments to the ASARCO smelter in Hayden during the year 1940. They are as follows:

Shippments to ASARCO Smelter in Hayden, Arizona

Date	Car No.	Dry Wt. Tons	Gold OPT	Silver Opt	Silica %	Gold Ounces	Silver Ounces
5.10.40	125854	22.578	0.179	0.12	63	4.04	2.71
9.6.40	173199	42.817	1.025	0.00	87	43.89	0.00
4.10.40	853;5	34.573	0.235	0.00	60	8.12	0.00
5.1.40	81773	48.896	0.176	0.00	58	8.61	0.00
5.7.40	84522	53.425	0.215	0.05	59	11.49	2.67
Totals		202.288	0.376	0.03		76.14	5.38

Present Sampling Program

The following samples were taken and assayed in the current program. They tend to corroborate the results of the 1938 Sampling program of Harlow D. Phelps. More of the mine was available to Phelps. The following reserve estimate was developed from the current sample program and the 38 program of Phelps'.

SUNRISE SAMPLES COGGIN 1988

No.	Description	Dist. Ft	Width Ft	Gold OPT	Silver OPT	Remks
1	West Drift at 0+60 W	27	5.00	0.073	<.01	Vein
2	West Drift at 0+60 W	6	4.00	0.104	<.01	Vein
3	West Drift at 0+60 E	15	3.50	0.029	<.01	Vein
4	West Drift at 0+60 E	6	5.50	0.231	0.150	3.5' shear bal qtz
5	Main Shaft West	89	5.00	0.186	0.100	Vein
6	Main Shaft West	95	4.00	0.049	<.10	Shear
7	West Drift at 1+27	11	4.50	0.167	<.10	Btm
8	West Drift at 1+27	11	1.80	0.007	<.10	Top
9	West Drift at 1+27 face	27	5.00	1.458	0.120	Shear
10	East Drift at 1+92	8	4.00	0.251	<.10	Shear
11	West Drift at 1+92	36	3.50	0.212	<.10	Lt Side
12	West Drift at 1+92		4.00	0.057	<.10	@ raise
13	West Drift at 1+92	52	3.41	<.001	<.10	Top
14	West Drift at 1+92	52	2.90	0.010	<.10	Btm
15	West Drift at 1+92	119	5.01	<.010	<.10	Shear
16	West Drift at 1+92	119	5.50	<.010	<.10	Shear
17	West Drift at 1+92	176	5.00	0.011	<.10	Shear
18	West Drift at 1+92	149	5.00	0.278	<.10	Vein with Qtz.
19	West Drift at 1+92	156	5.10	0.570	0.180	Vein with Qtz.
20	West Drift at 1+92	160	4.50	1.009	<.10	Vein with Qtz.
21	West Drift at 1+92	37	3.30	0.080	<.10	shear
21B	West Drift at 1+92	37	4.00	0.466	<.10	Vein with Qtz.
22	East Drift at 2+20	66	3.50	0.050	<.10	shear
23	East Drift at 2+20	81	1.60	0.071	<.10	shear
24	East Drift at 2+20	99	1.80	0.019	<.10	shear
25	East Drift at 2+20	130	4.60	0.010	<.10	shear
26	East Drift at 2+20	155	2.00	<.01	<.10	shear
27	East Drift at 2+20	174	2.80	<.01	<.10	shear
28	East Drift at 2+20	205	1.80	<.01	<.10	shear
29	East Drift at 2+20	190	2.70	<.01	<.10	shear
30	East Drift at 2+20	270	4.30	0.049	<.10	shear
31	East Drift at 2+20	371	6.00	0.011	<.10	shear
32	East Drift at 3+00	250	5.00	<.01	<.10	Vein with Qtz
33	East Drift at 3+00	6	2.40	<.01	<.10	Vein with Qtz
34	East Drift at 3+00	12	5.00	0.069	<.10	Vein with Qtz
35	East Drift at 3+20	18	3.10	0.053	<.10	Vein with Qtz

SUNRISE SAMPLES COGGIN 1988 (CONTINUED)

No.	Description	Dist. Ft	Width Ft	Gold OPT	Silver OPT	Remks
36	East Drift at 3+20	49	5.00	0.176	<.10	Vein with Qtz
39	East Drift at 3+20	37	5.00	0.383	<.10	Vein with Qtz
40	Main Shaft	230	5.00	0.037	<.10	Vein with Qtz
42	Shaft No. 2		5.00	0.018	<.10	Vein with Qtz
43	Shaft No. 2		5.00	0.157	<.10	Vein with Qtz
45	Shaft No. 2		5.00	0.056	<.10	Vein with Qtz
46A	Shaft No. 2		5.00	0.010	<.10	Shear
46B	Shaft No. 2		5.00	0.038	<.10	Vein with Qtz
47	Shaft No. 2	47	5.00	0.012	<.10	Vein with Qtz
48	Shaft No. 2	79	5.00	0.060	<.10	Vein with Qtz
49	Shaft No. 2	71	1.50	0.105	<.10	Vein with Qtz
50	Shaft No. 2	53	5.00	0.010	<.10	Vein with Qtz
51	Shaft No. 2 Lt	12	3.20	0.036	<.10	Vein with Qtz
52	Shaft No. 2 Rt	12	3.30	0.018	<.10	Vein with Qtz
53	Shaft No. 3 Rt	4	2.30	0.097	<.10	PP pit
54	Shaft No. 3 Lt	4	3.81	0.816	<.10	PP pit
55	Vein West of Shaft 1	4	1.00	<.01	<.10	PP pit
56	Vein West of Shaft 1	5	2.60	<.01	<.10	PP pit
57	Vein West of Shaft 1	5	1.70	<.01	<.10	PP pit

Correlation with previous sampling programs

Although many of the previous samples were mined in the 1934 Mitchell program. The following sets of samples cover roughly the same areas:

Sample Comparison with Blackburn and Stotesbury

Coggin 1988		Blackburn 1933			Stotesbury 1930				
Opt Au	No. Description	Loc	W ft.	OPT Au	Width	OPT Au	No.	Width	No. Width
2	No. 1 Shaft Right Wall	12	3.50	0.08	2.00	0.65	1	6.00	0.07
7	South Drift 52 feet	34	8.00	0.04	5.50	0.06	2	4.00	0.10
8	South Drift 52 feet	18	2.00	0.36	5.50	0.06	3	5.00	0.07
10	South Drift 52 feet	52	4.00	0.04	5.50	0.06	4	3.50	0.03
11	North Drift at 52 ft	7	5.50	0.12	4.00	0.05	5	5.50	0.23
12	North Drift at 52 ft	17	3.50	0.34	2.50	0.77	6	5.00	0.19
33	South Drift 175 Level	10	4.00	0.30	5.00	5.58	7	4.50	0.05
34	South Drift 175 Level	20	6.00	0.74	5.00	1.36	8	1.80	0.01
36	South Drift 175 Level	40	6.50	0.48	7.00	0.85	9	2.50	1.46
37	South Drift 175 Level	50	6.50	0.96	7.50	6.30	12	3.50	0.21
38	South Drift 175 Level	60	6.00	0.16	5.50	1.96	13	2.90	0.04
39	South Drift 175 Level	70	6.00	0.24	6.43	0.89	21	3.30	0.08
40	South Drift 175 Level	80	5.50	2.20	6.50	2.75	21B	4.00	0.47
41	South Drift 175 Level	90	5.00	0.20	8.00	1.63	22	3.50	0.05
42	South Drift 175 Level	100	6.75	0.30	10.00	2.76	24	1.80	0.02
43	South Drift 175 Level	110	5.50	2.50	8.00	2.75	16	5.50	0.04
44	South Drift 175 Level	120	6.50	0.08	7.00	6.30	15	4.01	0.01
45	South Drift 175 Level	130	6.67	0.08	7.00	1.43	18	5.00	0.28
46	South Drift 175 Level	140	5.50	0.12	7.50	5.72	19	5.10	0.57
52	North drift 175 level Lt	10	5.00	1.16	4.00	3.06	10	4.00	0.25

Reserve Estimates

Most of the following reserves are still in place although some of the backs of the stopes have caved and left little room to sample:

Underground Reserves

Level Ounces	Block Designation	Area Sq. Ft.	Width	Gold Ft.	Gold OPT	Tons	Diluted Vein	Gold to 5 ft.
180	3	840	2.1	0.02		141	4200	2.82
	Pillar 1	368	1.6	0.40		46	1840	18.37
	9	511	5.7	0.52		233	233	121.15
	2	108	5.0	0.18		43	43	7.79
200	1 East	136	0.8	0.34		9	54	2.95
	7 East	135	5.5	0.04		59	59	2.38
	6 East	120	1.3	0.01		12	48	0.12
	5 East	14	6.1	0.03		7	7	0.20
	Pillar 2	16	1.6	0.40		2	78	0.78
	57 West	398	0.3	0.52		8	159	4.14
230	8 East	1065	3.1	0.16		266	426	42.61
	Pillar	195	1.6	0.40		24	974	9.73
	55,56,54,53	823	0.6	0.27		39	329	10.76
310	East Block	2737	1.4	0.82		306	1095	251.33
	West Block	3066	0.8	0.45		186	1226	83.88
Total		10,531	1.64	0.40		1,383	10,773	559.01
Average			5.0	0.05			10,773	559.01

After Phelps with sample checks by Coggin 1988

There is a potential for an additional 20,000 to 30,000 tons on this vein along the dip where it was intersected by a drilling program in 1985. This program intercepted the vein at a depth with the following results

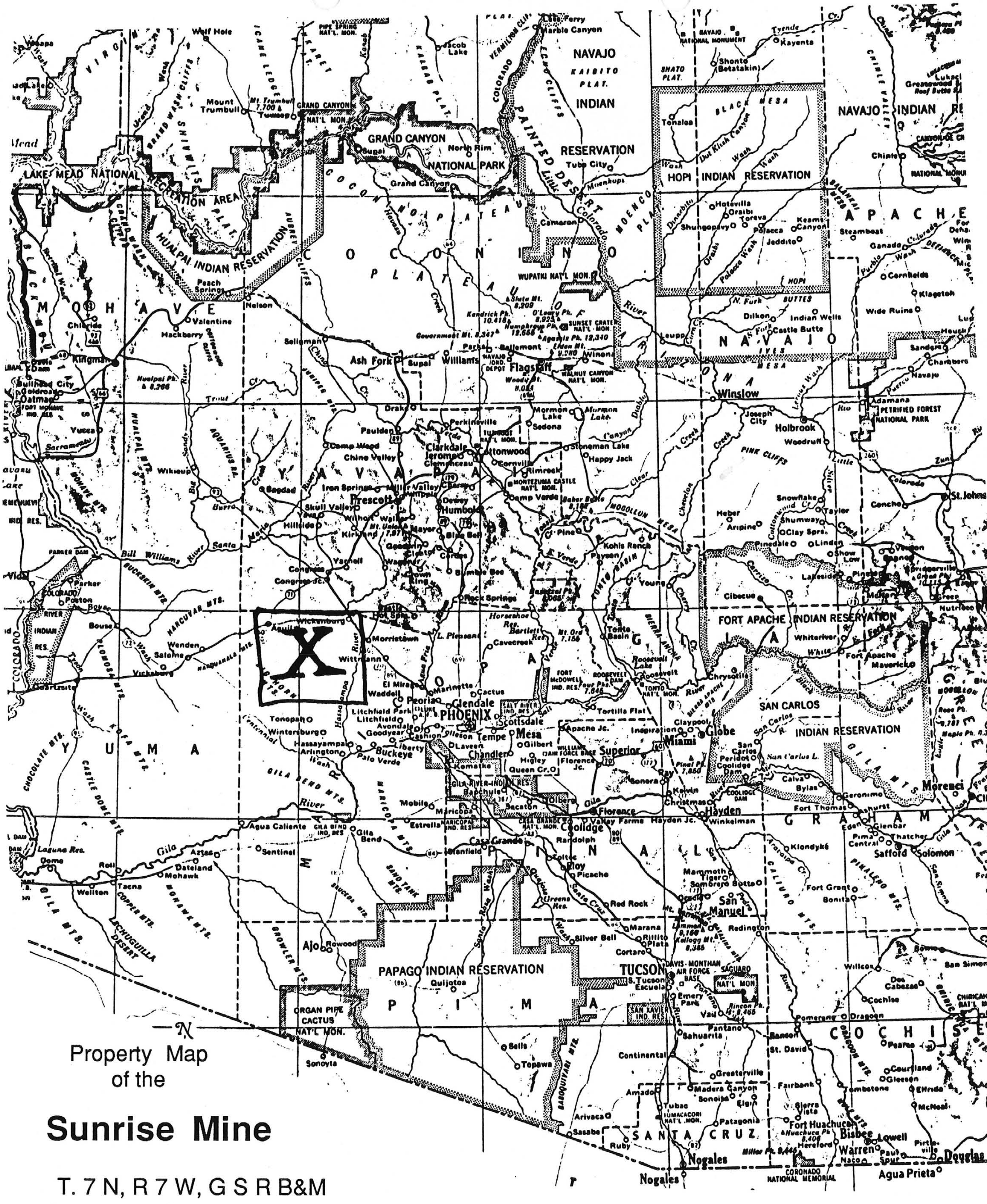
Drilling Program Results

Hole No.	Interval	Total ft	Gold PPM	Gold OPT
A	70 - 085	15	0.05	0.007
C	60 - 085	25	0.80	0.023
L	90 - 110	20	1.72	0.050
M	40 - 055	15	2.99	0.087
M	80 - 100	20	0.62	0.018
N	180 - 205	25	0.19	0.001

Surface Potential

A $10,000 to $20,000 program of drilling along the outcrop of the vein will be required to explore for reserves in this area. A portion of the vein has already been mined to a depth of about 6 feet. The results of this program are unknown.

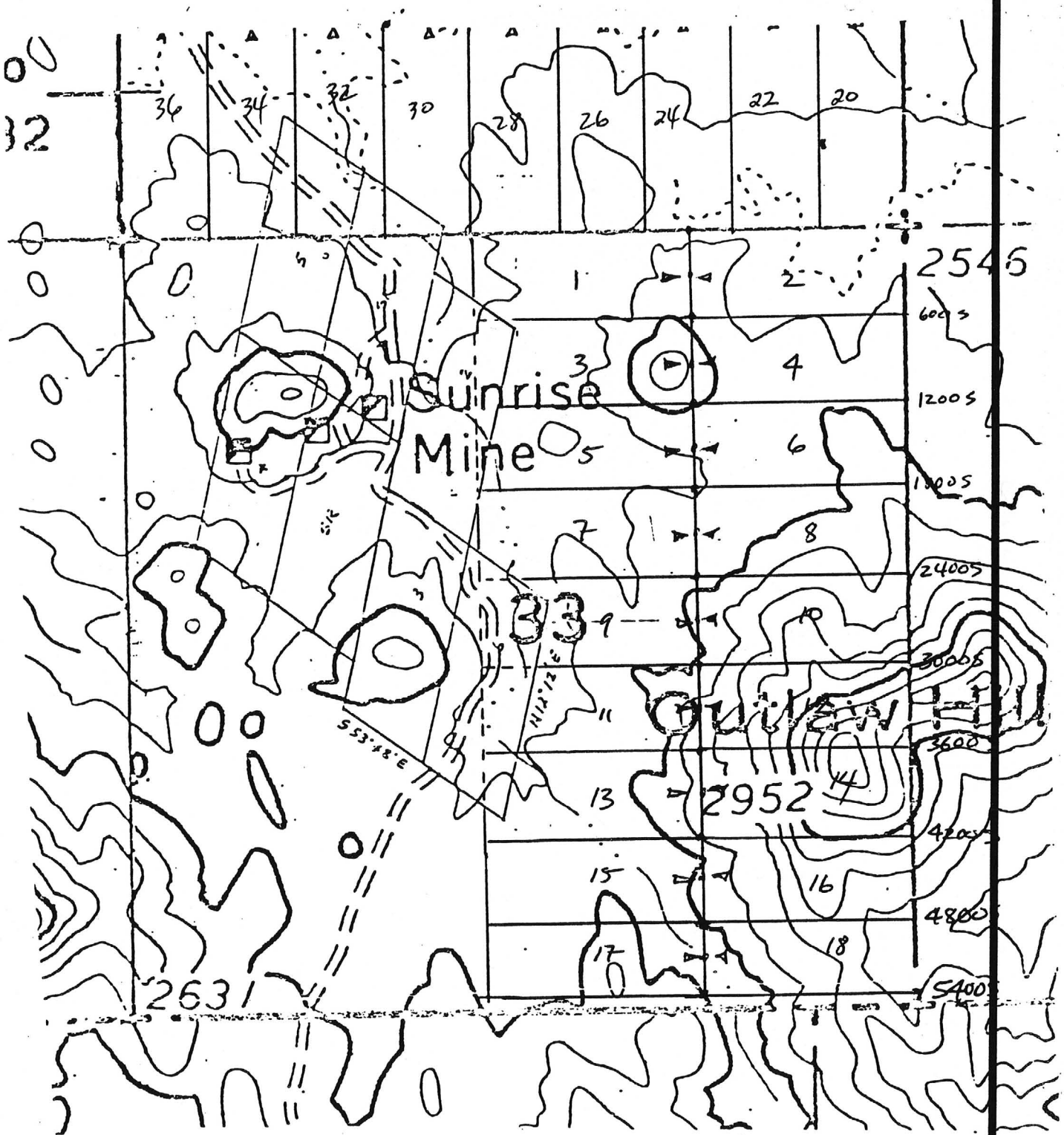
There is about 1500 tons of waste dump available at the collars of the respective shafts. Assays from this material range from 0.01 opt to 0.25. Under the present condition there is no accurate way to sample these dumps. There is too much waste material which is too large to give anything but a low value.



Property Map of the

Sunrise Mine

T. 7 N, R 7 W, G S R B&M
Maricopa County, Arizona



Property Map of the **Sunrise Mine** T. 7 N, R 7 W, G S R B&M
Maricopa County, Arizona

W. SCOTT DONALDSON
ATTORNEY-AT-LAW
2916 NORTH 7TH AVENUE, SUITE 100
PHOENIX, ARIZONA 85013
TELEPHONE: (602) 277-4441

February 26, 1988

H. Mason Coggin, P.E. & L.S.
317 East Griswold
Phoenix, Arizona 85020

Re: Sunset Road Mining Claims Title Opinion

Dear Mason:

You have asked me to give an opinion regarding title of unpatented mining claims more particularly described as follows:

Claim Name	MARICOPA COUNTY Recorder's Office Book	Page	B.L.M. (AMC) Number
Sunset Road	22	418	57683
Sunset Road No.1	22	418	57684
Sunset Road No.2	22	419	57685
Sunset Road No.3	22	419	57686
Sunset Road No.4	31	443	57687
Sunset Road No.5	31	442	57688
Sunset Road No.6	31	444	57689

The mining claims are located in Section 33, Township 7 North, Range 7 West, G.& S.R.B.& M., Maricopa County, State of Arizona.

It is my opinion that title to the above-referenced mining claims is vested in Dottie R. Danielson. This opinion is based upon a search of the Maricopa County Recorder's Office and Arizona State Office of the Bureau of Land Management records. It is also subject to: (1) paramount title of the United States of America, (2) any taxes or assessments that may be a lien, (3) the inadequacy of any evidence of labor that may appear of record, (4) adverse rights which may exist by reason of any encroachment of other mining claims onto the above-described mining claims or of any overlapping of the boundaries of the above-described mining claims onto other claims, (5) the inadequacy of any physical acts of labor or location and (6) valid mineral discovery.

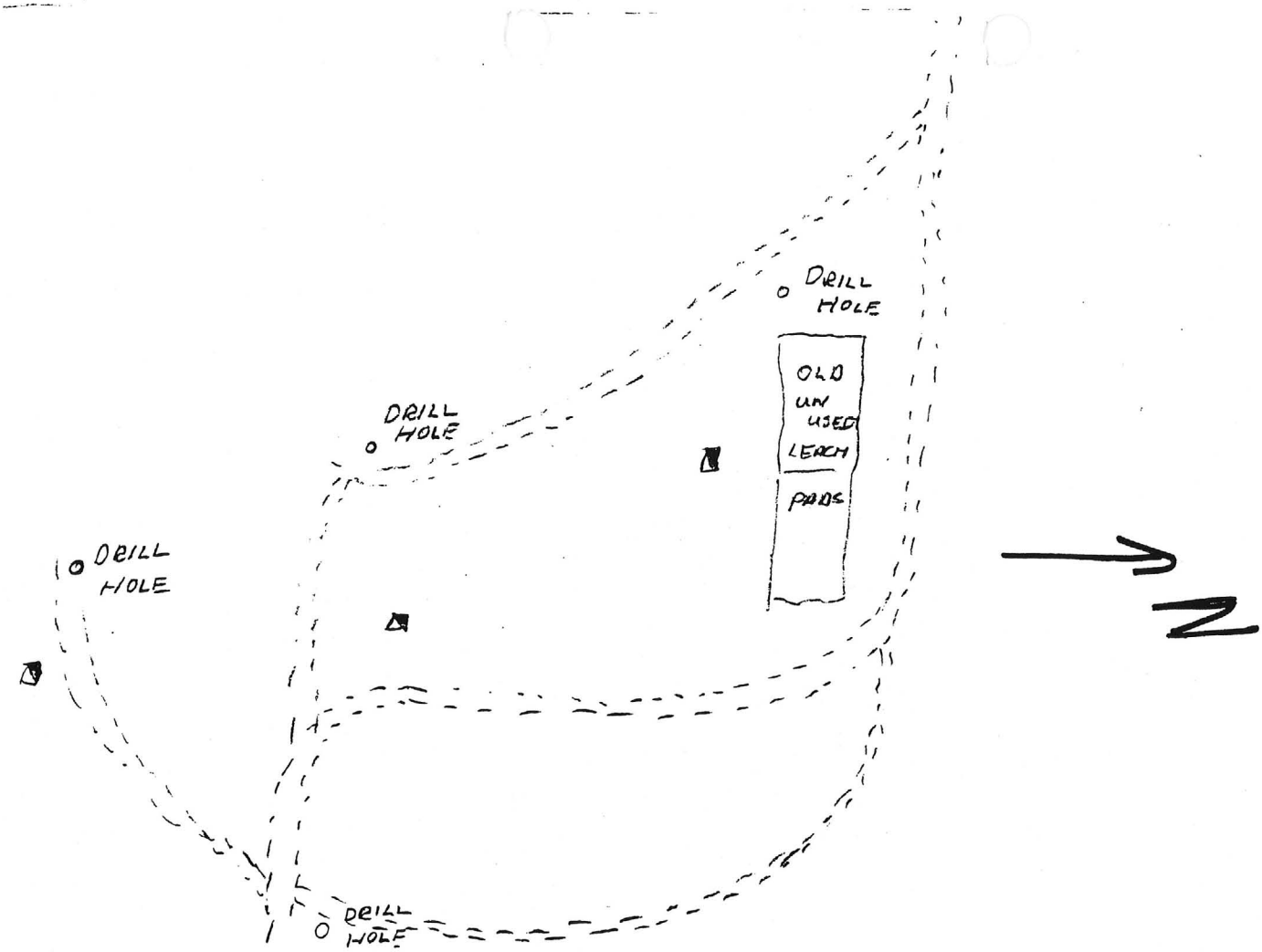
W. SCOTT DONALDSON
ATTORNEY-AT-LAW
2916 NORTH 7TH AVENUE, SUITE 100
PHOENIX, ARIZONA 85013
TELEPHONE: (602) 277-4441

This opinion is issued and accepted upon the understanding that the liability assumed hereby sahll not exceed $100.00.

Very truly yours,

W. Scott Donaldson, Esq.

WSD/dmm



SUNRISE MINE
MARICOPA COUNTY

Sketch of drill hole locations
2/2/1990

ATTORNEY - SOUTHERN CALIFORNIA: Mining claims, contracts, leases, legal matters, private disputes, BLM contests, developments. First conference free. ROBERT A. SANREGRET, 1800 North Broadway, Suite 105, Santa Ana, CA 92706. (714) 547-8451.

TWO DENVER MECHANICAL GOLD PANS, each $2,000; 125 cfm Gyroflo compressor, $2,500; 75 cfm compressor, $1,000; portable core drill, $2,000; new 4,000 watt alternator (110-220V) with 2 cyl. Onan engine, $500; jackleg drills, etc. at bargain prices. WINTERS, Box 657, Tombstone, AZ 85638; phone: (602) 457-2264.

PLACER MINE FOR SALE in Southern Oregon. 5 contiguous claims on Cow Creek, $12,500; Umpqua River, large deposit, 3 million+ yards grading at least $3 per yard. Au + Pt group, cash out, principals only. (503) 332-6945 or (206) 228-7696.

MOTHER LODE PLACER MINE: 94 acres, 34 acres deeded, 60 acres claims. Remote, view, El Dorado County, California. $125,000. Terms. For information: (916) 333-2052.

ROCKHOUND SPECIAL Mineralogical & Geological Color Slide programs. Program chairman send stamp for rental lists. GENE SCHENET, 8441 Bolsa, Midway City, CA 92655. (714) 894-3972.

SUNRISE (A) MARICOPA CO.

FOR SALE: Sunrise Gold Mine. Two underground shafts and leavings on top. Location, 12 miles west of Wickenberg, Arizona. 3 miles south of Fore Paugh turnoff. There are seven claims, 140 acres. Contact: DOTTIE or DICK DANIELSON, phone: (602) 582-6021; 3747 W. Irma Lane, Glendale, AZ 85308.

11/87

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In stock now, 36 inch width, unbacked, dark green color
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Up to 2 ft.	$1.75 per inch
3 to 5 ft.	$1.50 per inch
6 to 10 ft.	$1.30 per inch
11 to 19 ft.	$1.15 per inch
20 ft. (full re.)	$ .95 per inch
2 rolls = 40'	$210 per roll
3 rolls = 60'	$195 per roll
4 rolls = 80'	$185 per roll
5 rolls = 100'	$175 per roll

Handling chg. $3.00 + U.P.S. chgs. to continental U.S. Calif. residents add 6% sales tax.
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(209)667-6015

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caracoly. An alloy of gold, silver, and copper used first by the Caribs in making ornaments. *Standard, 1964.*

Sunrise

DATE: January 18, 1985

TO: Mr. F. J. Menzer, Chief Geologist

FROM: J. A. Waegli, Geologist

SUBJECT: Arizona Department of Mineral Resources
List of Flux Properties

In early October, 1984, Mr. John Robertson, Ore Buyer for Phelps Dodge Corporation, requested that the Arizona Department of Mineral Resources (ADMR) compile a list of properties in the state that could produce material grading +80% SiO_2 and +1/3 O/T Au. In response, Mr. Nyal Niemuth, Mineral Resources Specialist with the ADMR, compiled a list of 16 properties (attached) that he feels are capable of producing +70% SiO_2 with $100.00 metal credits. (He stated that he did not know of any mines capable of meeting Mr. Robertson's criteria.)

November 19-21 were spent in Phoenix examining ADMR files to obtain information on each of the mines. Mr. J. E. DuHamel of Western Exploration screened their files and compiled the resulting information in a memo dated November 27 (attached). Based on his memo, pertinent reports were copied from the Western Exploration files on December 3 and 4.

The following is a listing of these 16 properties arranged in order by quad number. A brief description of each property is given, with information on current activity and a summary of past work conducted by Phelps Dodge Corporation. Recommendations based on information compiled to date are also given. Table 1 summarizes information compiled in this report.

John Robertson about shipping flux to Phelps Dodge but did not like the terms of our standard flux contract.

The property was examined by E. V. Ciancanelli of Western Exploration in June, 1967. He recommended mapping and geochemical sampling of the area around the Red Rover with particular attention toward massive sulfide alteration and mineralization.

Later in June, 1967, J. Olaf Sund wrote a memo in response to Ciancanelli's recommendations. He concluded that there is little potential for massive sulfide mineralization in the area. Instead, mineralization would be confined to fissure zones such as the Red Rover. He recommended that activity at the Red Rover be monitored.

Data obtained on the Red Rover from the ADMR and Western Exploration are very limited. Neither the amount and grade of past production nor the present ore reserve potential are known. Therefore, it is recommended that either the owners, or the current lease holder be contacted to obtain more information. Following this contact, a field examination should be scheduled on a medium priority basis.

10. SUNRISE MINE (Figure 4): Maricopa County, T.7N., R.7W., Sec. 33, AZ 266

This deposit was worked mainly from 1927 through 1934. Mineralization is contained in a 10-20 foot wide stockwork vein with lenticular quartz veins, a few inches to a few feet wide thick, in schist. The vein strikes N20°E and dips 45°NW. Granitic porphyry occurs on the hanging wall and schist on the footwall (Wilson, et al, 1934).

Ore shoots occur where the vein flattens and is intersected by transverse fractures. Gangue minerals include quartz, limonite, hematite, and occasional pyrite. Gold is free and generally associated with iron oxides. The gold to silver ratio is reported to be 4:1 (Wilson, et al, 1934).

Production during three months of 1934 was reported to be 600 tons at $24.00/ton in gold (0.69 O/T). More recently, a lease has been taken on the property by Mr. Ted Housley of Wickenburg. A 1981 report by Ken Phillips of the ADMR lists underground reserves as 5,000 tons at $44.60/ton Au (0.1 O/T). During a February, 1984 visit by Ken Phillips, Mr. Housley was cyanide heap leaching dump material which he said averaged 0.1 O/T Au. Recoveries of 80% were expected.

As noted in J. E. DuHamel's memo, the property was sampled by L. E. Reber in 1931 for the United Verde Copper Company and by

John Hope of Western Exploration in 1951. Mr. Hope concluded that the ore shoot developed by the No. 1 shaft had been mined out. He also states that the cost of exploring for additional ore shoots would not be justified by the returns.

It appears then, that the Sunrise mine has almost no known reserves. Exploration for additional ore would be hindered by the fact that the vein is largely covered by detritus at the surface. Therefore, somewhat blind drilling would probably be required to further test the veins.

Sunrise ore would probably be a marginal flux because quartz occurs as stockwork in schist. This would decrease the SiO_2 and possibly make the Al_2O_3 unacceptably high.

Because of these drawbacks, a field examination does not seem justified.

11. QUEEN OF SHEBA (Figure 4): Maricopa County, T.6N., R.4W., Sec. 8, AZ 267

The Queen of Sheba is a gold property, where mineralization occurs in a major N70°E fault zone. Tertiary volcanics are down-dropped against Precambrian schist along the fault. Besides gold, mineralization includes specularite and copper oxides.

Past production from the Queen of Sheba is unknown. The property is currently held by Chuck May, who reported to the ADMR in 1980 that he had a contract to ship flux to Inspiration. He reported grades up to 1.25 O/T Au with vein widths up to 6 feet.

Herb Jacobson of Western Exploration examined the property in 1974. He reports that Queen of Sheba mining drilled four holes (160-foot maximum) near the fault zone that assayed 0.02 to 0.06% Cu. No precious metal grades are given.

It is felt that more data are needed before making further recommendations on this property. Gold grades reported by the present owner are interesting but are unsubstantiated. It is recommended that the owner be contacted to obtain more information and a field examination possibly be scheduled.

12. NEWSBOY (Figure 4): Maricopa County, T.6N., R.4W., Sec. 22, AZ 267

The Newsboy, which is also known as the Pitt mine, or El Grande-Newsboy, is located near the Hassayampa River, southeast of Wickenburg. Gold and silver mineralization occurs in a northwest trending vein that dips 55° to 65° northeast. The vein occupies a normal fault with rhyolite on the hanging wall and schist on the

MINE REPORT

To: John H. Jett, Director
From: Ken A. Phillips
Subject: Visit to Sunrise Mine
Date: March 11, 1986

ADMMR File: Sunrise Mine
Location: Sec. 33, T.7N.,R.7W.
USGS Quad: Vulture Mtn. 15'
District: Vulture Mining District
County: Maricopa
Commodities: Gold
Silver
Silicon (Smelter Flux)
MILS Number: Maricopa 347

A visit was made to the Sunrise mine (file), Maricopa County. This property had been operated by Ted Housley through early Spring of 1984. At the time of this visit on March 12, 1986 the operation was in a state of abandonment. The leach pit was partially overgrown with brush and a few pieces of junk equipment remained. A site for a 100 X 100 foot leach pad had been prepared but never used. The collar of the inclined shaft remains in very good condition.

Sunrise mine
Maricopa Co

COPPER STATE ANALYTICAL LAB, INC.

REGISTERED ASSAYER

D.A. SHAH
AZ Reg. #8888

710 E. EVANS • TUCSON, AZ 85713 PH: (602) 884-58

COMPLETE ANALYTICAL SERVICES CSA

Job No: 003744
Date Recvd.: 06/17/
Reported: 06/24/85
Project: N/A
Invoice#: C 4366

Den-Baars & Associates
6318 E Hayne ST
Tucson, Az. 85710

Attn.: Dr. Richardson

Sample No	Au ppm
Hole-A	
0-5	0.07
5-10	<0.01
10-15	0.03
15-20	0.06
20-25	0.08
25-30	0.02
30-35	<0.01
35-40	0.02
40-45	0.02
45-50	<0.01
50-55	<0.01
55-60	<0.01
60-65	0.01
65-70	0.02
70-75	0.10

ARIZONA DEPT. OF MINES & MINERAL RESOURCES
STATE OFFICE BUILDING
416 W. CONGRESS, ROOM 161
TUCSON, ARIZONA 85701

ARIZONA DEPT. OF MINES & MINERAL RESOURCES
STATE OFFICE BUILDING
416 W. CONGRESS, ROOM 161
TUCSON, ARIZONA 85701

COPPER STATE ANALYTICAL LAB, INC.
REGISTERED ASSAYER
D.A. SHAH
AZ Reg. #8888
710 E. EVANS • TUCSON, AZ 85713 PH: (602) 884-

Reported: 06/24/85
Job No: 003744
Project: N/A

Sample No	Au ppm
Hole-A	
75-80	0.01
80-85	0.04
85-90	<0.01
90-95	0.02
95-100	<0.01
100-105	<0.01
105-110	<0.01
Hole-B	
0-5	0.03
5-10	0.02
10-15	<0.01
15-20	<0.01
20-25	<0.01
25-30	0.01
30-35	<0.01
35-40	<0.01
40-45	<0.01
45-50	<0.01
50-55	<0.01

vein

COPPER STATE ANALYTICAL LAB, INC.
REGISTERED ASSAYER
D.A. SHAH
AZ Reg. #8888
710 E. EVANS • TUCSON, AZ 85713 PH: (602) 884-51

Reported: 06/24/85
Job No: 003744
Project: N/A

Sample No	Au ppm
Hole-B	
55-60	<0.01
60-65	<0.01
65-70	<0.01
70-75	<0.01
75-80	<0.01
80-85	0.03
85-90	<0.01
90-95	<0.01
95-100	<0.01
Hole-C	
0-5	<0.01
5-10	<0.01
10-15	<0.01
15-20	<0.01
20-25	<0.01
25-30	0.02
30-35	<0.01
35-40	<0.01
40-45	<0.01

COPPER STATE ANALYTICAL LAB, INC.
REGISTERED ASSAYER
D.A. SHAH
AZ Reg. #8888
710 E. EVANS • TUCSON, AZ 85713 PH: (602) 884-5

Reported: 06/24/85
Job No: 003744
Project: N/A

Sample No	Au ppm
Hole-C	
45-50	<0.01
50-55	<0.01
55-60	<0.01
60-65	1.18
65-70	2.38
70-75	0.18
75-80	0.12
80-85	0.14
85-90	0.02
90-95	<0.01
95-100	<0.01
100-105	<0.01
105-110	<0.01
Hole-D	
0-5	0.05
5-10	0.34
10-15	<0.01
15-20	<0.01
20-25	<0.01

30'

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COPPER STATE ANALYTICAL LAB, INC.
REGISTERED ASSAYER
D.A. SHAH
AZ Reg. #8888
710 E. EVANS • TUCSON, AZ 85713
PH: (602) 884-581

Reported: 06/24/85
Job No: 003744
Project: N/A

Sample No	Au ppm
Hole-D	
25-30	0.01
30-35	0.20
35-40	0.03
40-45	<0.01
45-50	<0.01
50-55	0.01
55-60	0.05
60-65	<0.01
65-70	<0.01
70-75	<0.01
75-80	<0.01
80-85	0.02
85-90	0.02
90-95	<0.01
95-100	<0.01

6-24-85

COPPER STATE ANALYTICAL LAB, INC.
REGISTERED ASSAYER
D.A. SHAH
AZ Reg. #8888
710 E. EVANS • TUCSON, AZ 85713 PH: (602) 884-581

Job No: 003752
Date Recvd.: 06/21/85
Reported: 06/28/85
Project: N/A
Invoice#: C 4392

Den-Baars & Associates
6318 E Hayne ST
Tucson, Az. 85710

Attn.: Dr. Richardson

Sample No	Au ppm
K-0-5	<0.01
K-5-10	<0.01
K-10-15	<0.01
K-15-20	<0.01
K-20-25	<0.01
K-25-30	<0.01
K-30-35	<0.01
K-35-40	<0.01
K-40-45	<0.01
K-45-50	<0.01
K-50-55	<0.01
K-55-60	<0.01
K-60-65	<0.01
K-65-70	<0.01
K-70-75	<0.01
K-75-80	<0.01

COPPER STATE ANALYTICAL LAB, INC.
REGISTERED ASSAYER
D.A. SHAH
AZ Reg. #8888
710 E. EVANS • TUCSON, AZ 85713
PH: (602) 884-5

Reported: 06/28/85
Job No: 003752
Project: N/A

Sample No	Au ppm
K-80-85	<0.01
K-85-90	0.03
K-90-95	0.07
K-95-100	0.01
L-0-5	<0.01
L-5-10	<0.01
L-10-15	<0.01
L-15-20	<0.01
L-20-25	<0.01
L-25-30	<0.01
L-30-35	<0.01
L-35-40	0.01
L-40-45	0.01
L-45-50	0.02
L-50-55	<0.01
L-55-60	<0.01
L-60-65	<0.01
L-65-70	<0.01
L-70-75	<0.01
L-75-80	<0.01

COPPER STATE ANALYTICAL LAB, INC.

REGISTERED ASSAYER

D.A. SHAH
AZ Reg. #8888

710 E. EVANS • TUCSON, AZ 85713 PH: (602) 884-581

COMPLETE ANALYTICAL SERVICES CSA

Reported: 06/28/85
Job No: 003752
Project: N/A

Sample No	Au ppm
L-80-85	<0.01
L-85-90	<0.01
L-90-95	6.21
L-95-100	0.05
L-100-105	0.26
L-105-110	0.35

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REGISTERED ASSAYER CERTIFICATE No. 8888 Arizona U.S.A.

6-28-85

COPPER STATE ANALYTICAL LAB, INC.

REGISTERED ASSAYER

D.A. SHAH
AZ Reg. #8888

710 E. EVANS • TUCSON, AZ 85713 PH: (602) 884-58

Job No: 003756
Date Recvd.: 06/21/85
Reported: 07/05/85
Project: N/A
Invoice#: C 4404

Den-Baars & Associates
6318 E Hayne ST
Tucson, Az. 85710

Attn.: Dr. H. C. Robinson

Sample No	Au ppm
M-0-5	<0.01
M-5-10	<0.01
M-10-15	<0.01
M-15-20	<0.01
M-20-25	<0.01
M-25-30	<0.01
M-30-35	<0.01
M-35-40	<0.01
M-40-45	7.62
M-45-50	1.24
M-50-55	0.11
M-55-60	<0.01
M-60-65	0.02
M-65-70	<0.01
M-70-75	<0.01
M-75-80	<0.01

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COPPER STATE ANALYTICAL LAB, INC.
REGISTERED ASSAYER
D.A. SHAH
AZ REG. #8888
710 E. EVANS • TUCSON, AZ 85713 PH: (602) 884-5811

COMPLETE ANALYTICAL SERVICES CSA

HOLES M + P

Reported: 07/05/85
Job No: 003756
Project: N/A

ample	Au ppm
-80-85	0.18
-85-90	1.61
-90-95	0.64
-95-100	0.04
-0-5	<0.01
-5-10	<0.01
-10-15	<0.01
-15-20	<0.01
-20-25	<0.01
-25-30	<0.01
-30-35	<0.01
-35-40	<0.01
-40-45	<0.01
-45-50	<0.01
-50-55	<0.01
-55-60	<0.01
-60-65	<0.01
-65-70	<0.01
-70-75	<0.01
-75-80	<0.01

vein

M

P

COPPER STATE ANALYTICAL LAB, INC.
REGISTERED ASSAYER
D.A. SHAH
AZ Reg. #8888
710 E. EVANS • TUCSON, AZ 85713 PH: (602) 884-581

Reported: 07/05/85
Job No: 003756
Project: N/A

Sample No	Au ppm
P-80-85	<0.01
P-85-90	<0.01
P-90-95	<0.01
P-95-100	<0.01
P-100-105	<0.01
P-105-110	<0.01
P-110-115	0.02
P-115-120	<0.01
P-120-125	<0.01
P-125-130	<0.01
P-130-135	<0.01
P-135-140	<0.01
P-140-145	<0.01
P-145-150	<0.01
P-150-155	.02
P-155-160	<0.01
P-160-165	<0.01
P-165-170	<0.01
P-170-175	<0.01
P-175-180	<0.01

COPPER STATE ANALYTICAL LAB, INC.
REGISTERED ASSAYER
D.A. SHA
AZ Reg. #88
710 E. EVANS • TUCSON, AZ 85713
PH: (602) 88

Reported: 07/05/85
Job No: 003756
Project: N/A

Sample No	Au ppm
P-180-185	<0.01
P-185-190	<0.01
P-190-195	<0.01
P-195-200	0.22
P-200-205	<0.01
P-205-210	<0.01
P-210-215	<0.01
P-215-220	<0.01
P-220-225	.01
P-225-230	.02
P-230-235	<0.01
P-235-240	<0.01
P-240-245	<0.01
P-245-250	<0.01
P-250-255	<.01
P-255-260	.01
P-260-265	<0.01
P-265-270	<0.01
P-270-275	<0.01
P-275-280	<0.01

COPPER STATE ANALYTICAL LAB, INC.
REGISTERED ASSAYER
D.A. SH
AZ Reg. #8
710 E. EVANS • TUCSON, AZ 85713 PH: (602) 8

Reported: 07/05/85
Job No: 003756
Project: N/A

Sample No	Au ppm
P-280-285	<0.01
P-285-290	<0.01
P-290-295	<0.01
P-295-300	<0.01
P-300-305	.04
P-305-310	.01
P-310-315	.01
P-315-320	<0.01
P-320-325	<0.01
P-325-330	<0.01
P-330-335	<0.01
P-335-340	<0.01
P-340-345	<0.01
P-345-350	<0.01
P-350-355	<0.01
P-355-360	.01
P-360-365	<0.01
P-365-370	<0.01
P-370-375	<0.01
P-375-380	<0.01

COPPER STATE ANALYTICAL LAB, INC.

REGISTERED ASSAYER

D.A. SHAH
AZ Reg #8888

710 E. EVANS • TUCSON, AZ 85713 PH: (602) 884-5

Reported: 07/05/85
Job No: 003756
Project: N/A

Sample No	Au ppm
P-380-385	<0.01
P-385-390	<0.01
P-390-395	.01
P-395-400	<0.01

REGISTERED ASSAYER CERTIFICATE 8888 Dhirendra A. Shah DATE SIGNED Arizona U.S.A.

7-5-85

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

REPORT OF ANALYSIS

JOB NO. TLY 044
June 27, 1985
E 0-5/J 95-100

DEN-BAARS & ASSOCIATES
Attn: Dr. H.C. Robinson, Jr.
6318 E. Hayne Street
Tucson, Arizona 85710

Analysis of 120 Cutting Samples

ITEM	SAMPLE NUMBER	Au (ppm)
1	E 0-5	<.02
2	E 5-10	.05
3	E 10-15	.22
4	E 15-20	.03
5	E 20-25	<.02
6	E 25-30	<.02
7	E 30-35	<.02
8	E 35-40	<.02
9	E 40-45	<.02
10	E 45-50	<.02
11	E 50-55	<.02
12	E 55-60	<.02
13	E 60-65	<.02
14	E 65-70	<.02
15	E 70-75	<.02
16	E 75-80	<.02
17	E 80-85	<.02
18	E 85-90	<.02
19	E 90-95	<.02
20	E 95-100	<.02
21	F 0-5	.10
22	F 5-10	<.02
23	F 10-15	<.02
24	F 15-20	<.02
25	F 20-25	<.02

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

JOB NO. TLY 044
June 27, 1985

ITEM	SAMPLE NUMBER	Au (ppm)
26	F 25-30	<.02
27	F 30-35	<.02
28	F 35-40	<.02
29	F 40-45	<.02
30	F 45-50	<.02
31	F 50-55	<.02
32	F 55-60	<.02
33	F 60-65	<.02
34	F 65-70	<.02
35	F 70-75	<.02
36	F 75-80	<.02
37	F 80-85	<.02
38	F 85-90	<.02
39	F 90-95	<.02
40	F 95-100	<.02
41	G 0-5	.16
42	G 5-10	<.02
43	G 10-15	.60
44	G 15-20	.03
45	G 20-25	<.02
46	G 25-30	<.02
47	G 30-35	<.02
48	G 35-40	<.02
49	G 40-45	<.02
50	G 45-50	<.02

SKYLINE LABS, INC.
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Tucson, Arizona 85703
(602) 622-4836

ITEM	SAMPLE NUMBER	Au (ppm)
51	G 50-55	<.02
52	G 55-60	<.02
53	G 60-65	<.02
54	G 65-70	<.02
55	G 70-75	<.02
56	G 75-80	<.02
57	G 80-85	<.02
58	G 85-90	<.02
59	G 90-95	<.02
60	G 95-100	<.02
61	H 0-5	.03
62	H 5-10	<.02
63	H 10-15	<.02
64	H 15-20	<.02
65	H 20-25	<.02
66	H 25-30	<.02
67	H 30-35	<.02
68	H 35-40	<.02
69	H 40-45	<.02
70	H 45-50	<.02
71	H 50-55	<.02
72	H 55-60	<.02
73	H 60-65	<.02
74	H 65-70	<.02
75	H 70-75	<.02

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ITEM	SAMPLE NUMBER	Au (ppm)
76	H 75-80	<.02
77	H 80-85	<.02
78	H 85-90	<.02
79	H 90-95	<.02
80	H 95-100	<.02
81	I 0-5	<.02
82	I 5-10	<.02
83	I 10-15	<.02
84	I 15-20	<.02
85	I 20-25	<.02
86	I 25-30	<.02
87	I 30-35	<.02
88	I 35-40	<.02
89	I 40-45	<.02
90	I 45-50	<.02
91	I 50-55	<.02
92	I 55-60	<.02
93	I 60-65	<.02
94	I 65-70	<.02
95	I 70-75	<.02
96	I 75-80	<.02
97	I 80-85	<.02
98	I 85-90	<.02
99	I 90-95	<.02
100	I 95-100	<.02

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

JOB NO. TLY 044
June 27, 1985

ITEM	SAMPLE NUMBER	Au (ppm)
101	J 0-5	<.02
102	J 5-10	<.02
103	J 10-15	<.02
104	J 15-20	<.02
105	J 20-25	<.02
106	J 25-30	<.02
107	J 30-35	<.02
108	J 35-40	<.02
109	J 40-45	<.02
110	J 45-50	<.02
111	J 50-55	<.02
112	J 55-60	<.02
113	J 60-65	.18
114	J 65-70	.08
115	J 70-75	<.02
116	J 75-80	<.02
117	J 80-85	<.02
118	J 85-90	<.02
119	J 90-95	<.02
120	J 95-100	<.02

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

REPORT OF ANALYSIS

JOB NO. TLY 045
July 2, 1985
P 400-405 TO N 335-340

DEN-BAARS & ASSOCIATES
Attn: Dr. H.C. Robinson, Jr.
6318 E. Hayne Street
Tucson, Arizona 85710

Analysis of 88 Rock Chip Samples

ITEM	SAMPLE NUMBER	Au (ppm)
1	P 400-405	<.02
2	P 405-410	<.02
3	P 410-415	<.02
4	P 415-420	<.02
5	P 420-425	<.02
6	P 425-430	<.02
7	P 430-435	<.02
8	P 435-440	<.02
9	P 440-445	<.02
10	P 445-450	<.02
11	P 450-455	<.02
12	P 455-460	<.02
13	P 460-465	<.02
14	P 465-470	<.02
15	P 470-475	<.02
16	P 475-480	<.02
17	P 480-485	<.02
18	P 485-490	<.02
19	P 490-495	<.02
20	P 495-500	<.02
21	N 0-5	<.02
22	N 5-10	<.02
23	N 10-15	<.02
24	N 15-20	<.02
25	N 20-25	<.02

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

ITEM	SAMPLE NUMBER	Au (ppm)
26	N 25-30	<.02
27	N 30-35	<.02
28	N 35-40	<.02
29	N 40-45	<.02
30	N 45-50	<.02
31	N 50-55	<.02
32	N 55-60	<.02
33	N 60-65	<.02
34	N 65-70	<.02
35	N 70-75	<.02
36	N 75-80	<.02
37	N 80-85	<.02
38	N 85-90	<.02
39	N 90-95	<.02
40	N 95-100	<.02
41	N 100-105	.03
42	N 105-110	<.02
43	N 110-115	<.02
44	N 115-120	<.02
45	N 120-125	<.02
46	N 125-130	<.02
47	N 130-135	<.02
48	N 135-140	<.02
49	N 140-145	<.02
50	N 145-150	<.02

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

ITEM	SAMPLE NUMBER	Au (ppm)	
51	N 150-155	<.02	
52	N 155-160	<.02	
53	N 160-165	<.02	
54	N 165-170	<.02	
55	N 170-175	<.02	
56	N 175-180	<.02	
57	N 180-185	.08	Vein
58	N 185-190	.03	
59	N 190-195	.10	
60	N 195-200	.66	
61	N 200-205	.06	
62	N 205-210	<.02	
63	N 210-215	<.02	
64	N 215-220	<.02	
65	N 220-225	<.02	
66	N 225-230	<.02	
67	N 230-235	<.02	
68	N 235-240	<.02	
69	N 240-245	<.02	
70	N 245-250	<.02	
71	N 250-255	<.02	
72	N 255-260	<.02	
73	N 260-265	<.02	
74	N 265-270	<.02	
75	N 270-275	<.02	

SK LINE LABS, INC.
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Tucson, Arizona 85703
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ITEM	SAMPLE NUMBER	Au (ppm)
76	N 275-280	<.02
77	N 280-285	<.02
78	N 285-290	<.02
79	N 290-295	<.02
80	N 295-300	<.02
81	N 300-305	<.02
82	N 305-310	<.02
83	N 310-315	<.02
84	N 315-320	<.02
85	N 320-325	<.02
86	N 325-330	<.02
87	N 330-335	.10
88	N 335-340	<.02

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 1112

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

REPORT OF ANALYSIS

JOB NO. TLY 046
July 2, 1985
N 340-345/N 495-500

DEN-BAARS & ASSOCIATES
Attn: Mr. H.C. Robinson
6318 E. Hayne Street
Tucson, Arizona 85710

Analysis of 32 Rock Chip Samples

ITEM	SAMPLE NUMBER	Au (ppm)
1	N 340-345	<.02
2	N 345-350	<.02
3	N 350-355	.04
4	N 355-360	<.02
5	N 360-365	<.02
6	N 365-370	<.02
7	N 370-375	<.02
8	N 375-380	<.02
9	N 380-385	.06
10	N 385-390	.02
11	N 390-395	<.02
12	N 395-400	<.02
13	N 400-405	<.02
14	N 405-410	.04
15	N 410-415	<.02
16	N 415-420	<.02
17	N 420-425	<.02
18	N 425-430	<.02
19	N 430-435	<.02
20	N 435-440	<.02
21	N 440-445	<.02
22	N 445-450	<.02
23	N 450-455	<.02
24	N 455-460	<.02
25	N 460-465	<.02

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

JOB NO. TLY 046
July 2, 1985

ITEM	SAMPLE NUMBER	Au (ppm)
26	N 465-470	<.02
27	N 470-475	<.02
28	N 475-480	<.02
29	N 480-485	<.02
30	N 485-490	<.02
31	N 490-495	<.02
32	N 495-500	<.02

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

SK LINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

REPORT OF ANALYSIS

JOB NO. TLY 047
July 12, 1985
A 65-70/M 90-95

DEN-BAARS & ASSOCIATES
Attn: Dr. H.C. Robinson Jr.
6318 E. Hayne Street
Tucson, Arizona 85710

Analysis of 26 Drill Cutting Samples

ITEM	SAMPLE NUMBER	Au (ppm)	
1	A 65-70	.03	
2	A 70-75	.09	
3	A 75-80	.04	
4	A 80-85	.04	
5	A 85-90	.23	
6	A 90-95	<.02	
7	C 25-30	<.02	
8	C 30-35	<.02	
9	C 35-40	<.02	
10	C 40-45	<.02	
11	C 45-50	<.02	
12	C 50-55 **	0.00 **	
13	C 55-60	.02	
14	C 60-65	1.20	Vein
15	C 65-70	2.90	
16	C 70-75	.23	
17	C 75-80	.09	
18	C 80-85	.13	
19	L 90-95	.02	
20	L 95-100	>10.00 *	

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No.

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

ITEM	SAMPLE NUMBER	Au (ppm)	
21	L 100-105	.82	vein
22	L 105-110	.31	
23	M 40-45	>10.00*	vein
24	M 45-50	3.50	
25	M 80-85	.16	vein
26	M 85-90	1.90	
27	M 90-95	.53	

*NOTE: Greater than normal geochemical range.
Please advise if fire assay is needed.

**NOTE: Item 12 Sample No. C 50-55 was not received.

Sunset

ARIZONA TESTING LABORATORIES

A DIVISION OF CLAUDE E. McLEAN & SON LABORATORIES, INC.
817 WEST MADISON ST. PHOENIX, ARIZONA 85007 PHONE 254-6181

For Triangular Mining Company
3131 North 33rd Street
Phoenix, Arizona 85018

Date June 12, 1974

Sample of Ore

Received: 6-10-74

Submitted by: Mr. Hart

ASSAY CERTIFICATE

Gold figured at $ 200.00 per ounce

Silver figured at $ 5.00 per ounce

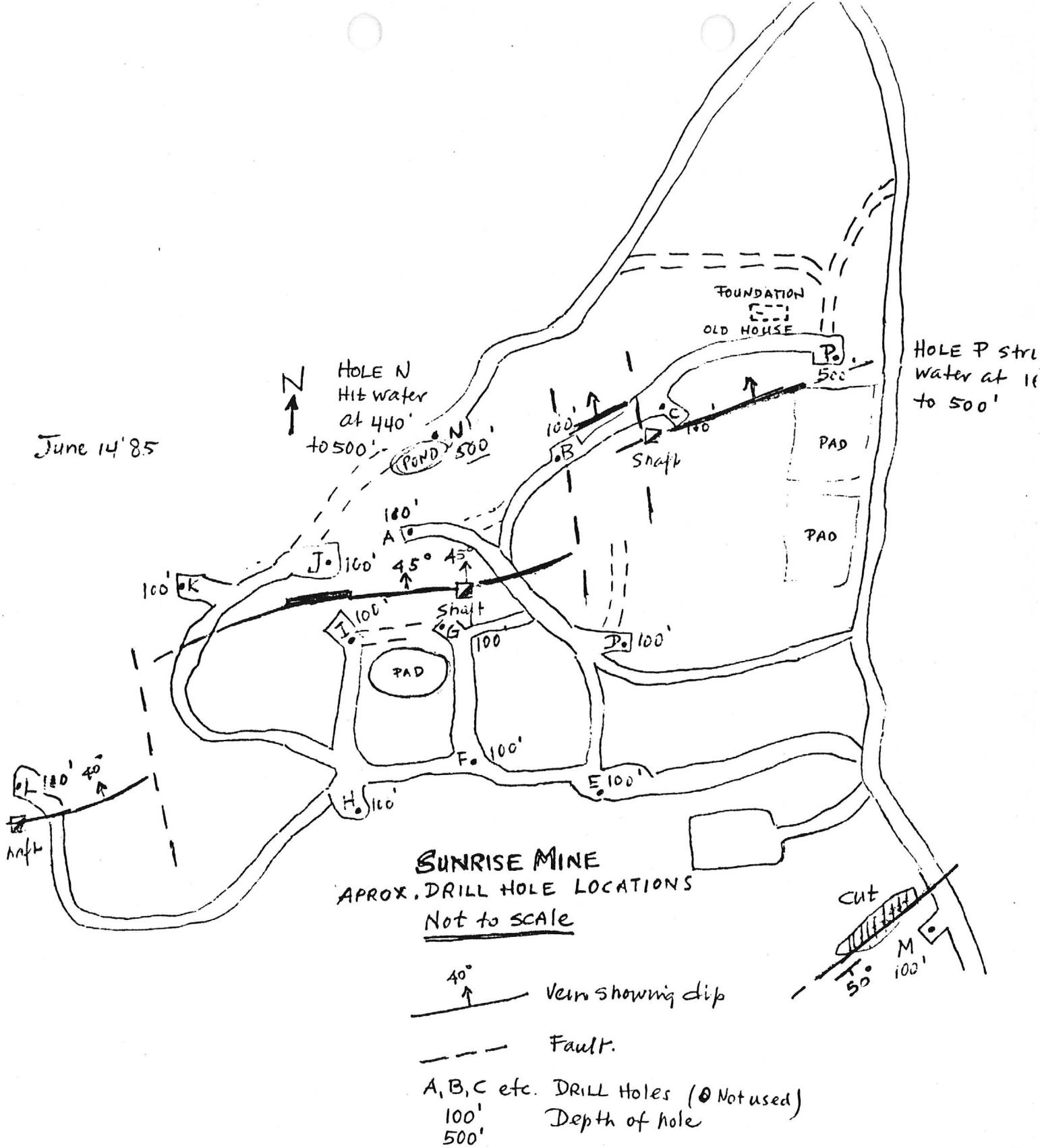
LAB. NO.	IDENTIFICATION	GOLD		SILVER		PERCENTAGES	
		OZ. PER TON	VALUE	OZ. PER TON	VALUE		
7068	#1 Composite of Dump	0.10	$ 20.00				
	#2 Long Cut	0.04	$ 8.00				
	#3 Shaft back of hill (pile at shaft)	trace					
	#4 First stope left of shaft as you back down	0.01	2.00				
	#5 Random quartz from dump	0.22	44.00				
	#6 Right & Left of first level working in main shaft.	3.95	790.00				

Respectfully submitted,

ARIZONA TESTING LABORATORIES

Claude E. McLean

Claude E. McLean, Jr.



ARIZONA DEPT. OF MINES & MINERAL RESOURCES
STATE OFFICE BUILDING
416 W. CONGRESS, ROOM 161
TUCSON, ARIZONA 85701

IRON KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 247 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329

REGISTERED ASSAYER
CERTIFICATE NO. 2978
WALTER G. STATLER
Date Signed 7/11/51
ARIZONA, U.S.A.

ASSAY MADE FOR Ted Housley
Box 227
Wickenburg, Az. 85358

June 27, 1951

SAMPLE DESCRIPTION		Oz/Ton Au.	Oz/Ton Ag.	% WO_3
6-15-1	Powellite #1			Nil
-2	" #2			Nil
-3	Rocks	Tr	0.16	
-4	Random Lge. Rock	Tr	0.06	
-5	1½ Vertical Cut	~~0.156~~ ~~Tr~~	~~Nil~~ ~~0.16~~	
-6	Small Dump - 3 cuts	0.046	0.18	
-7	South Dump - N Shaft	0.062	0.04	
-8	North " " "	0.072	0.15	
-9	CN Tailing	0.082	0.06	
-10	Top of Vertical Cut	0.176	0.04	
-11	Trash Can	Tr	Tr	Placer Samples
-12	Upper Wash Placer	Tr	Tr	
-13	Lower " "	Tr	Tr	
6-15-5A	Vertical Cut +18	0.162	0.18	
-5B	" " -18	0.052	0.17	

CHARGES _____ ASSAYER _____

Collar

FINAL REPORT

6-19-1981

Nº	Level	Description	Width ft	oz. per Ton Gold	Silver	Value	Au 467.10 Ag 10.25	OVER 41
40	Shaft	Quartz Only	0.8	0.60	–	19.32	280.26	56.05
41	"		0.5	0.22	0.06	7.12	103.38	12.92
42	310		0.8	0.30	–	9.66	140.13	28.03
43	"	"	0.6	0.08	–	2.57	37.37	5.60
44	"	"	0.5	0.03	0.07	0.98	14.73	1.84
45	"	"	0.6	1.00	0.10	32.26	468.12	70.22
46	Shaft	"	0.6	0.12	0.10	3.92	57.02	8.56
47	"	"	0.9	0.50	0.30	16.28	236.62	53.24
48	"	"	0.7	0.16	0.08	5.20	75.56	13.22
49	230	"	0.7	1.82	0.28	58.77	852.99	149.27
50	"	"	1.1	0.92	0.28	29.89	432.60	118.96
51	"	"	0.9	0.09	–	2.89	42.04	9.46
52	"	"	0.8	0.05	–	1.62	23.36	4.67
53	"	"	0.6	0.03	–	0.96	14.01	2.10
54	"	"	0.7	0.06	–	1.93	28.02	4.20
55	"	"	0.6	0.50	0.30	16.28	236.62	35.49
56	Shaft	"	0.8	0.50	0.10	16.16	234.58	46.92
57	"	"	0.4	0.52	0.08	16.79	243.71	24.37
							12,411.98	2,453.63

Av. without (item X) - 16.31

Av. with (Item X) → 20.95

← EAST

130

Largely

Excep

SUNRISE SAMPLES PAGE 3

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine: Sunrise — Date: Feb. 15, 1984

District: Vulture — Engineer: Ken A. Phillips

County: Maricopa

Subject: Cyanide heap leaching operation - Mine Visit.

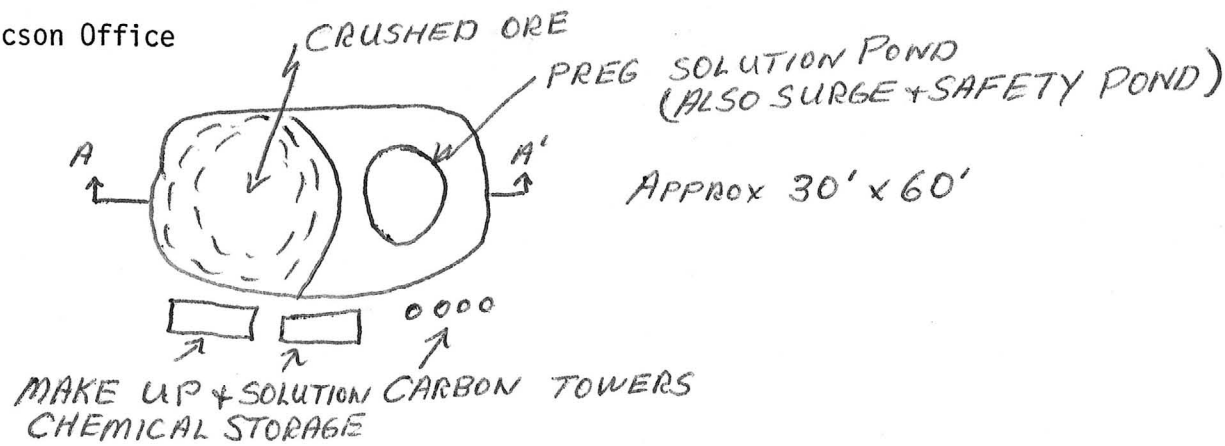
AWN

Ted Housley, P.O. Box 2296, Wickenburg, AZ. 85358 has set up a small cyanide heap leaching operation to run dump material at the Sunrise Mine (file).

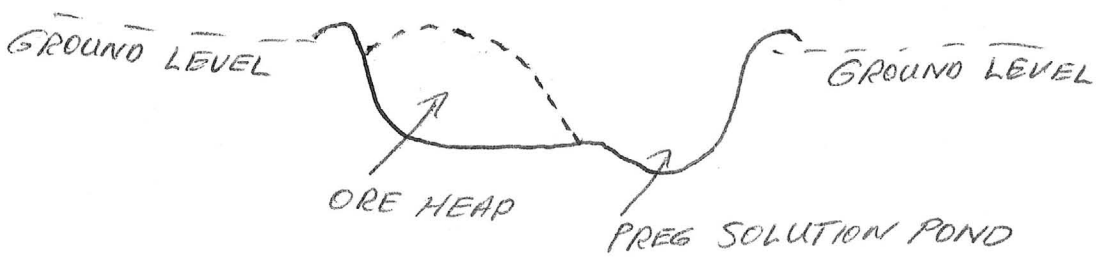
Old dump material has been crushed to minus 5/8" and heaped at one end of a plastic lined pit. The other end is used as a pregnant solution pond and incidentally as a surge pond and protection impoundment. Approximately 300 tons have been heaped for the first go round. Material averages 0.1 tr. oz gold/ton. Recovery has been about 30% thus far and leaching is continuing on the heap. Leach solution is distributed by PVC lines and PVC sprinklers. Leach solution perculates through the heap and drains to the sump at the lower end of the pit. The solution is then pumped through a sand filter and through a four stage carbon tower arrangement. Make up solution tanks are above ground at the rim of the pit. A sketch of the pit is given below. Mr. Housley reports that he expects a recovery of 80% based on small pilot heap tests.

KAP/ah

cc: Tucson Office



A - A'



DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Sunrise

Date May 12, 1981

District Vulture, Maricopa County

Engineer Ken A. Phillips
Dick Beard

Subject: Visit to Sunrise Mine by Ken Phillips and Dick Beard on the above date. Accompanied by Ted Housley who reported he is leasing the property.

Principal Minerals: Gold

Location: NW¼, Sec. 33, T7N, R7W. (see attached copy from Vulture Mountain 15' Quadrangle)

Altitude: 2600'

Topographic Quadrangle: Vulture Mountains 15' and Aguila 15'

Current Activity: Evaluation, dump sampling, underground refurbishment and underground sampling.

Type of Operation: Underground

References: Wilson, E. D.; Cunningham, J. B. and Butler, G. M.; 1934; Arizona Lode Gold Mines and Gold Mining; Arizona Bureau of Geology and Mineral Technology Bulletin 137, p. 162-163.

Metzer, O. H.; 1938 Gold Mining and Milling in the Wickenburg Area, Maricopa and Yavapai Counties, Arizona; U. S. Bureau of Mines Inf. Circ. 6991.

Land Position: Unpatented claim on public lands: Sunset Road Mine and Sunset Road #1 thru Sunset Road #6; seven claims in all. AMC 57683 through AMC 57689.

Access: West from Wickenburg on U. S. Highways 60 & 70 for 16 miles, then south on dirt 2½ miles. See attached copies of maps.

Terrain: Desert hills.

Ownership: Dottie R. Danielson, 2650 W. Union Hills, Phoenix, Arizona 85027 is listed by the Bureau of Land Management as the owner of record for the unpatented claim group. Ted Housley, P.O. Box 2296, Wickenburg, Arizona 85358 reports he has a lease on the property.

History: Claims staked in 1915 and 1926. Older history of the ownership, development and operation are given in both references. Considerable work appears to have been done in 1979-1980 to sample dumps, clean out and repair underground workings and carry out small scale pilot studies for "some sort of exotic gold extraction machine."

Past Production: Approximately 400 ounces gold. Details and a brief description of the metallurgy are contained in Metzger, et.al 1938.

Geologic Setting: Precambrian schist intruded by granitic porphyry. The vein strikes S20°W, dips 45°-55°N and occurs within a fault zone. The geology is further described in Wilson et.al 1934. Vein is buried by alluvium to the east.

Mineralization: The ore consists of coarse, locally honeycombed to platy, brecciated white quartz with abundant limonite and hematite. In isolated places a little pyrite is present. Most of the gold occurs as mediumly fine to coarse grain and flakes, mainly with pinkish-red hematite and limonite in fractures and cavities. The honeycombed and platy quartz with the hematite and limonite is reported to be of particularly high grade. According to C. W. Mitchell (operator of the mine in 1933-1934) the ore contains less than 0.25 ounce of silver per ounce of gold.

Wall-rock alteration along this vein consists of sericitization, silification, and carbonatization. (Wilson et.al 1934)

Dimension and Value of Ore Body: See attached copy of Sketch Map, Sunrise Mine - Approximate Section through Plane of Vein. A supplement to that map showing the same working with June 19, 1981 values for the ore averaged over a 4' working width has been made.

Reserves: Approximately 1200 tons of $68.00 gold ore (see supplement map mentioned above) and approximately 5,000 tons of $44.60 ore (including the 1200 tons) determined by averaging values on sketch map over a 4' working width and using a log-normal average of values without compensating for variations in the area of influence of individual samples.

Exploration could greatly expand the deposits potential.

Workings: For the purpose of discussion the workings are described as:: (1) West Shaft; (2) Main Shaft (center shaft); and (3) East Shaft.

The West Shaft might better be described as a 20°-30° inclined slusher crosscut which cuts the vein about 10' below the surface. Here the vein strike E-W and dips about 55°N and ranges from 2 to 4' wide. No production from this working.

About 30' east is a shallow pit on the vein.

The Main Shaft and associated drifts and stopes are shown on the "Sketch Map of Sunrise Mine - Approximate Section Through Plane of Vein" by Harlow D. Phelps, 1938. The main shaft is 330' deep on the vein. Drifts from which stopes were accessed are the 130', 150', 180', 200', 230', 280', and 310' levels. Drifts aggregate about 800'. There has been some stoping off each level.

A steel ladder has been installed in the main shaft to 140' below the collar. The shaft has been cleaned out and timber replaced to about the 200' level; both about 1979-1980. The sample points shown on the Phelps' map can be located in the workings visited.

Stopes to the east at the 130' level are partly filled by a muck run, but accessible stopes to the east below (but accessed by) the 130' level are

open and in good shape with stulls 4'-20' apart.

Stopes at 140' to the west are open to the shaft (no shaft pillar); stulls 2'-8' apart. Shaft inclines 40° at 140'. The ground is stable but the hanging walls must slab readily, thus necessitating the close spacing of stulls.

The dump at the main shaft contains around 1500 tons of material. The dump has been extensively sampled, pitted and cut. There appears to have been some attempt to reprocess dump material.

A small head frame with a winch and electric motor are in place at the collar of the main shaft. A very small "tool skip" is hoisted by the winch.

The East shaft is reported to be 220' deep and inclined on the vein. It is connected by a drift on the 200' level to the main shaft. The collar is in fair shape. There is good air flow between the east and main shafts (probably through the 200' level.) The dump at the east shaft contains around 1200-1500 tons of material and has been sampled in only 2 or 3 places.

Sample Data: Underground; shown on sketch map by Phelps. No underground samples taken during visit but previous sample points are locatable. Values for samples on Phelps map have been recalculated using June 19, 1981 values and have been averaged over a 4' narrow stoping width. The values have been plotted on a Xerox copy of a portion of the map.

Dumps; recently sampled and surveyed at the main shaft. Sample points are locatable and splits are stored at property. Data was not available.

Current Plans: Mr. Housley plans to resample dump to determine if there are sufficient values to justify heap leaching at his existing operation at the Pay Dirt mine. He also plans further assessment of underground ore developed and possibly additional underground exploration.

Suggestions for Additional Work: Sample drifts beyond those points shown on Phelps map in an effort to extend ore along strike.

Drilling to determine extent of mineralized structure beyond present workings both down dip and along the strike.

Total tons milled, September 1936 = 7,200.

		Per ton	
Mining:			
Delivery according to contract			$0.200
Milling:			
Labor	$1,425.00	$0.198	
Compensation and insurance	62.42	.009	
Reagents	490.00	.068	
Power (fuel and lubricating oil)	120.00	.017	
Total milling	2,097.42		.292
Water supply:			
Labor	285.00	.040	
Compensation and insurance	12.50	.002	
Fuel and lubricating oil for main pump	90.00	.0125	
Gasoline for starting engine	45.00	.0062	
Gasoline for pump at tailings pond	45.00	.0063	
Total water supply	477.50		.067
Total operating costs	2,574.92		.559

It is said that on account of shut downs and high labor costs for repairing the frequent pump-rod breakage at the well, the water costs are about the same as the milling costs. According to this, 22 cents would have to be added to the water-supply costs, making the total operating costs 78 cents a ton.

Freight and smelter costs, based on a ratio of concentration of 36 to 1, disregarding discounts on price of metals.

Total tons concentrates = $\frac{7,200}{36}$ = 200.

Freight, 200 x $4.75 = $950.00, or $0.132 per ton.
Treatment, 200 x $5.00 = $1,000.00 or $0.139 per ton.
Total marketing = $1,950.00, or $0.271 per ton.
Total operating and marketing, $1.05 per ton.

Sunrise Mine

Situation

The Sunrise mine is in the Vulture mining district, 2-1/2 miles south of the village of Aguila, on the Santa Fe railroad. There are seven unpatented claims owned by the Sunrise Mining Co. and held under bond and lease by the Palo Verde Mining Co., C. W. Mitchell, president, Wickenburg.

From U.S. Bureau of Mines I.C. 6991 Gold Mining and Milling in the Wickenburg Area, Maricopa and Yavapai Counties, Ariz. by O. H. Metzger 1938

Geology

The country rock is granite and schist. The vein is in a band of schist and bears approximately east and west and dips to the north at 35° to 40°. The mineralization consists of free gold in limonite and hematite. There are a great many open cuts on all parts of the property, from which ore can be taken that will pan free gold.

Development

Development consists of two incline shafts, one 330 feet deep on the dip of the vein and one 200 feet deep on the dip of the vein. The shafts are about 400 feet apart and are connected by a drift on the 200-foot level. There are six levels at intervals of 50 to 60 feet, 1,000 feet of drifting and crosscutting, and 500 feet of raising.

An ore shoot on the 200-foot level runs from $8 to $12 a ton in gold, is 160 feet long, and ranges in width from 2 to 4 feet. The same ore shoot is opened on the 330-foot level for a distance of 135 feet, with both drift faces still in ore.

Production

During 1934, 800 tons of ore were shipped to the smelter and 400 tons were milled in a small amalgamation plant in Wickenburg. The average value of the ore milled was $20 a ton, but the milling venture was not successful. Data are available covering only 570 of the 800 tons that were sent to the smelter. This 570 tons was produced from February 21, 1934, to May 17, 1934, and was shipped to the El Paso plant of the American Smelting and Refining Co. The highest grade was $33.95 a ton and the lowest $13.51 a ton. The gross value was $12,330, or $21.70 a ton, and the net value $6,438, or $11.10 a ton. Smelter and freight rates per ton of ore were as follows:

Smelter base,	$3.70 + $0.49 for copper deficiency.
Freight,	5.70
Trucking,	1.00
Total	10.40 + .49

Gold was paid for at $32.32 per ounce.

Mining Methods

No systematic mining method has been developed. The ore was mined from low overhead open stopes that were not high enough to present any difficulty. The ore was shot from the back and shoveled from the floor of the drift. Very few stulls were required to hold up the hanging wall, but if mining is every very extensive, more timber or back filling will have to be used. The vein is not steep enough for the ore to run, and when the stopes get high, the ore will have to be either shoveled by hand or moved mechanically. The costs, including development, were $6 a ton for all of the ore produced.

Labor

The mine has been idle since 1934. Never more than from 10 to 15 men were employed, and these were mostly underground. Miners were paid $4 a day and common laborers $3.25 a day, with $1 a day deducted for board and lodging.

Equipment

Equipment consists of a 25-horsepower gasoline hoist, a compressor of 110 cubic feet capacity, a small jaw crusher operated by an 8-horsepower gasoline engine, an ore bin of 35 to 40 tons capacity, and several rock drills.

The nearest commercial power is at Wickenburg, 25 miles to the east.

Pump Mine

Situation

The Pump mine is in the Big Horn mining district 14 miles due south of the village of Aguila, the nearest railroad shipping point. The property consists of 17 claims held by location. Nine of the claims belong to the Fortunate Fields Mining Co., which is operating the property, and eight are leased from T. B. Atkins of Aguila. Bailey Grigsby, of Phoenix, is the president of the company.

Topography and Geology

The property is in a comparatively level country with a few low ridges of schist and granite. The elevation at the collar of the shaft is about 2,800 feet. The vein bears approximately east and west and dips to the north at about 46°. The country rock is granite with bands of schist running approximately parallel with the vein. The ore in the upper levels has been oxidized to a considerable extent, although it contains some gold-bearing sulphide minerals. The ore in the lower levels is oxidized very little and the gold is associated almost entirely with sulphides of iron, copper, lead, and zinc.

Water Supply

The water supply is from a well 10 inches in diameter and 500 feet deep. The collar of the well is 360 feet below the mine and a distance of 4-1/2 miles to the northwest. The water is pumped into storage tanks at the well by a 15-horsepower gasoline pump. From the storage tanks at the well to the storage tanks at the mine it is pumped through a 4-inch welded pipe line by a triplex pump powered by a 25-horsepower gasoline engine.

Sunrise Mining Company

SUNRISE MINE

1992

VERA ZAMMIT
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MISSISSAUGA
ONT CANADA L5E 1H5
1-905-274-6908

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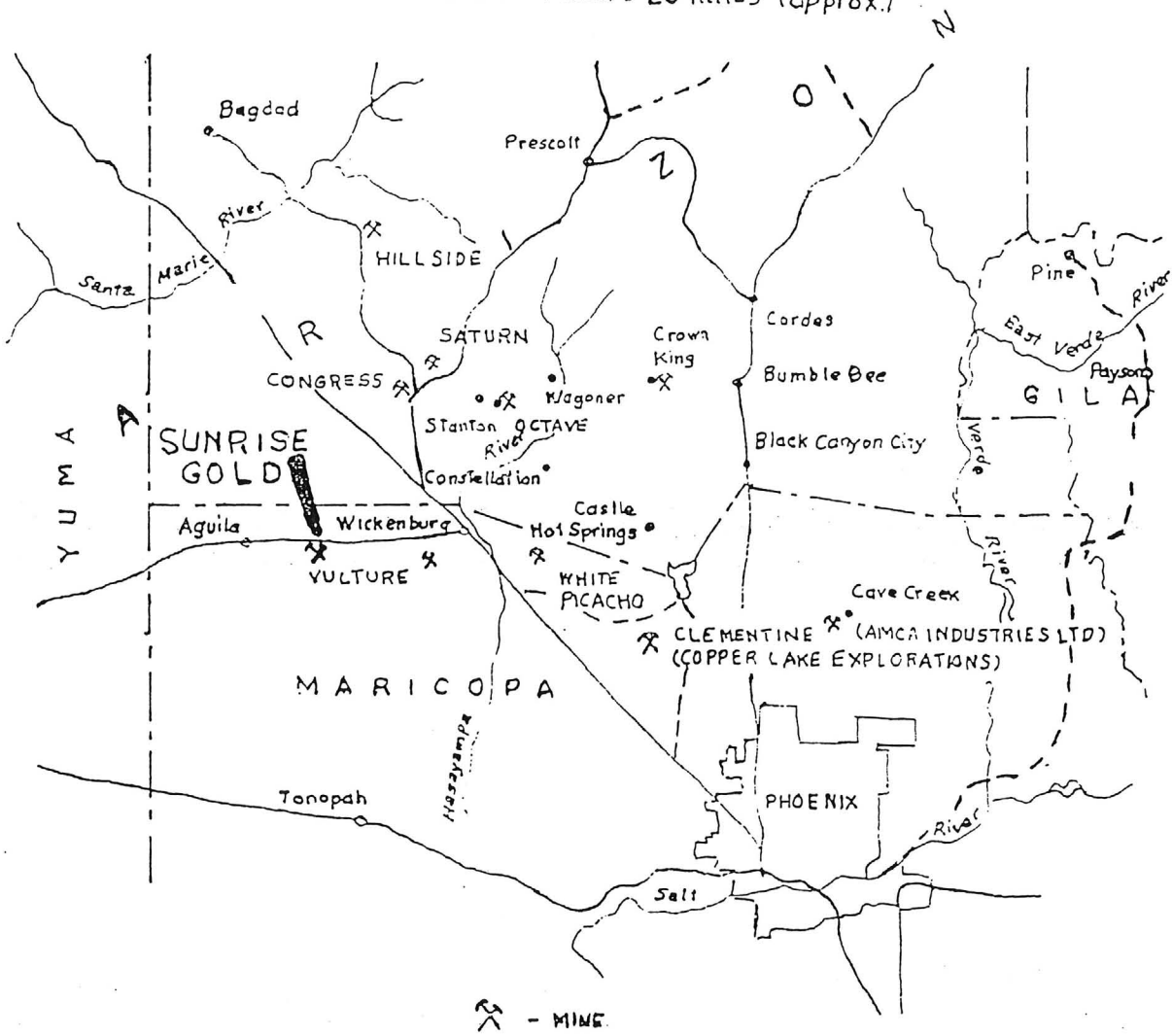
SUNRISE GOLD

GENERAL LOCATION MAP

Scale: 1 inch = 20 miles (approx.)



Summary

On eight mining claims in Maricopa County, Arizona, Sunrise Mining Company has an operating leach plant and gold reserves. The geology is pre-cambrian granite rocks invaded by Mesozoic basic intrusives and, in Miocene, by acid intrusives and eruptives, the magmas of which probably were mineralizing, mostly rhyolite and dacite.

Reserves are estimated as follows:

In a domed sill

Proved 17,600 tons at .22

Indicated 150,00 tons at .22

In rhyolite and granite

Proved Insufficient exploration for this category

Indicated 100,00 tons at .2 opt, including 10,000 tons at .31 opt

Inferred 1,300,000 tons at .08 opt

At the mine, dump and ore material, which will be a little over 2000 tons after grizzling out a coarse fraction, should run in the range of .08 to .12. All of this material requires agglomeration and part requires crushing in order to leach properly.

Property and Ownership

The Sunrise mine property consists of eight claims: Sunset Road and Sunset road Nos 1 through 6, plus a claim, BEZ, staked adjacent to these, totaling about 160 acres.

Location and Access

The mine is in Section 33,, T7N, R7W, Maricopa County, Arizona, about 16 miles west of Wickenburg along highway 60 and two miles south by dirt road easily passable by passenger car in all weather - or nearly all.

Physiography

The property is off the northwest flank of the Vulture Mountains. Valley and flats are from about 2500 to 2600 feet in elevation and tops of rhyolite plugs and lava-capped mesas are at nearly 3000 feet.

The area is part of the Basin and Range Physiographic Province at its transition to Plateau Province.

The alignment of rhyolite intrusives and of fault blocks is determined largely by northeasterly and northwesterly trending faults.

Climate is arid, the area classed as desert, although dry washes are subject to flash floods. Vegetation is dominantly creosote bush, mesquite and paloverde, cacti, including saguaro on the slopes, and grasses.

Fauna include mule deer, coyotes, rodents, and rabbits, owls (who seem to appreciate mine openings) hawks, buzzards and some fifteen species of songbird. Also the occasional rattlesnake.

History and Previous Work

Records show that Dottie R. Danielson of Glendale, Arizona, owned the Sunset Road claims and sold control to Vancouver Ventures, with Goldstone being the latest owners.

I don't know when work started here, but in a report dated Dec. 22, 1928, C.W. Mitchell claimed to have some 36,000 tons at .55 in sight and recommended deepening the main shaft and drifting. In 1934 he operated the mine and according to his report produced and shipped 944 tons at 1.11 opt, mainly from the 200 and 330 levels.

The most recent known study prior to that of the present operators was by H. Mason Coggin of 317 E. Griswold, Phoenix, in March, 1988, for Vancouver Ventures, Ltd. Coggin's sampling in general checks a thorough study by Harlow D. Phelps done 1938. Occasionally it does not, as in the west drift on the 192 level, but Coggin's samples here get into hanging wall, above mineral.

My spot checks of Coggin's sampling were largely in agreement. I disagree entirely with his "Underground Reserves" in which he calculates 10,773 tons at .05, presumably using Phelp's blocks and his samples as checked by Coggin. Through errors in arithmetic he has 5600 diluted tons too many. Also the dilution is not realistic in that, for example, he takes a 0.8 foot sample running .45 opt and dilutes it to 5 feet for mining thickness assuming the remaining 4.2 feet is absolutely barren. There is no evidence that is likely to be the case. In one instance - Coggin's

sample #7, 11' west in 192 level - an extension, because it appeared mineralized, of the sample cut by coggin ran 1.09 opt where his 4.5 feet ran .167. However, another sample taken near Coggin's #10, which was 4 feet at .251, was 7 feet at .077. This illustrates the fact that grade can rapidly in a space of feet. It should be mentioned that with free gold making up much of the gold content in the ore, taking a one assay ton aliquot of a sample for analysis in expectation of learning the sample's true is akin to expecting to win at Reno.

Because one can only guess at tenor in unsampled rock, it appears better first simply to calculate the average thickness, tonnage and grade of the ore grade blocks concerned, on the basis of samples taken:

LEVEL	BLOCK	SQ.FT.	FEET THICK	OPT	TONNAGE	OUNCES	DILUTION TO 4.5' TONNAGE	OUNCES ASSUME .02 OPT
180	Pillar 1	368	1.6	.40	46	18.37	85	1.7
	9	511	5.7	.52	233	121.15		
	2	108	5.0	.18	43	7.79		
200	1 E	136	.8	.34	9	2.95	40	.8
	7 E	136	5.5	.04	59	2.38		
	Pillar 2	16	1.6	.40	2	.78	4	.08
	57 W	398	.3	.52	8	4.14	134	2.68
230	8 E	1065	3.1	.16	266	42.61	119	2.38
	Pillar	195	1.6	.40	24	9.73	45	.9
	53-56	823	.6	.27	39	10.76	257	5.14
310	Eblock	2737	1.4	.82	306	251.33	679	13.57
	Wblock	3066	.8	.45	186	83.88	907	18.15
					1211 @.455	555.87	2270	45.4

This gives a realistic figure for that which actually is sampled. In this case, the #1 decline from next to the bottom level, 310, up to the 180 level can be taken to have 1221 tons at .455. If it were mined 4.5'thick or 6.3+ high - which is a little excessive - with .02 opt in the diluting material, then there would be 3491 tons with 601 oz, or .172 opt.

A.G. Blackburn did a study on the deposit as it appeared apparently before Mitchell mined, being in the decline and levels which he calls 52, 175, 200 and lower level.

Where Blackburn sampled upper workings, not mined since, his and Coggin's and my checks correspond generally. On the upper level, their overall results agree although the individual samples do not. In the lower workings, where Mitchell mined, Blackburn's assays seem high, but in as much Mitchell mined high-grade, probably that could be expected. His overall results, with 65 samples was an average 4.4 feet thick at a weighted average of .638 opt. When one considers that Mitchell must have done some sorting, and that Blackburn's results in the upper 60 feet are 3.77 feet, averaged, at .317 opt, then his results for the lower zone where the mining was done look very reasonable when compared with the production.

In 1940, five shipments totaling 202 tons containing 76.14 oz gold were shipped from the mine to the ASARCO smelter in Hayden. It is unclear from where in the mine this ore came. Grade ranged from the low of .176 opt to the high of 1.025 opt.

My estimate of the reserves left in the #1 shoot from just below the lower level up to surface is about 6500 tons at .32 opt. This is based mostly on Harlow Phelp's work, confirmed by Coggin in part and, mainly in the upper half, on Blackburn and Coggin and my spot checks.

West of #2 decline, sampling on surface indicated that a wedge of the #1 shoot remains in the east (upthrown) block, separated from the main body of the shoot by a northeasterly trending normal fault. We have mined about 200 tons at .2 from it. and have ore over and beside the raise.

Using Coggin's data pertaining to the shoot at the #1 decline and omitting those samples taken outside the host rock, such as in the hanging wall (because the hanging wall often is sheared much like the schist, it can be difficult to distinguish) or in the East Drift 220 - which follows a post-mineral fault and joins #1 with #2 at a point below the level of the ore wedge near #2 decline at surface:

No.	Level	Thick	opt	optXft
1	60	5	.073	0.65
2		4	.104	0.416
4		5.5	.231	1.271
5	shaft 89	5	.186	0.930
6	95	4	.049	0.193
7	127	4.5	.167	0.752
9		5	1.458	7.290
10	192	4	.25	1.004
11		3.5	.212	0.742
12		4	.057	0.228
13		5	.278	1.390
19		5.1	.570	2.907
20		4.5	1.009	4.540
21		3.3	.08	0.264
21B		4	.466	1.864
22	220	3.5	.050	0.175
23		1.6	.071	0.114
36		5	.176	0.880
39		5	.383	1.915
40	shaft 230	5	.037	0.185
		86.5		27.428
	avg.	4.325	avg.	0.317

This is similar grade to the average of the last ore shipped and to the average I found in calculating reserves.

This is similar grade to the average of the last ore shipped and to the average I found in calculating reserves.

Walter Henke, staying on at ease on the property and Hobart Randal of Yarnell were partners in building the leach pad and plant, with which they cyanide-leached dump material from #1, lumps and all. Henke reports a recovery from about two months leaching time of 116 ounces of gold from about 2000 tons.

I have done a rough sampling of this leached material with results of from less .01 opt in the fraction over 3" to .25 in some of the -1/2" material. Our plan is: grizzly out the +2", crush the remainder to nominal 1/4", agglomerate and return that fraction to the leach pad.

Regional Geology

This part of Arizona is underlain by pre-Cambrian granites, schists and quartzites. Late Mesozoic intrusives and volcanism probably related to subduction added their influence, followed by Laramide orogeny.

Early Tertiary crustal extension, probably related to rifting, opened the way to acidic to intermediate intrusives and volcanism in the Miocene.

A northwest-southeast trend due to Basin and Range tectonics is apparent in alignment of ridges and valleys. A less strong northeasterly trend and a weak northerly trend contribute to the pattern of erosion.

Detailed Geology

At the mine the surface rock is pre-Cambrian granites, cut by a sill metasomatized to schist. Northeast of the mine there is weak evidence of a few roof pendants. Southwest of the

schist sill as a dome.

Normal, down-to-west faults, one set striking about N15 E and the other about N35 W cut across this structure with dips of about 40 to 55 degrees.

Near the mine rhyolite has fractures trending near that if the northwesterly faulting, but vertical, and two other sets striking about N75 E and with dips of 45 N and 60 S respectively.

S14 E 1500 feet from the mine is a rhyolite plug, its top eroded. On the same line at 6400 feet is a very strongly altered rhyolite plug, densely fractured and with hydrated colloform silica in the fractures. S53 E 6800 feet is a vent breccia plug with a little of this silica. Both peaks have a remnant of lava on top at about 2900 feet. These two peaks form the southern corners of a thick-based U of rhyolite, the sides of which run northwesterly to northeast and southwest of the mine. The volcanism represented by these plugs and other rhyolite intrusives indicates a likely epithermal origin for the gold mineralization seen in and near the mine.

Alteration to clays is seen commonly in the footwall of the sill - the lower part of which is not ore, where we have seen it - and sometimes occurs just under high grade veins of hematite within the schist.

Although quartz lenses are common in the schist and can carry gold, these lenses can also be barren even within an ore shoot.

My impression is that the gold, together with manganiferous hematite as well as traces of copper and arsenopyrite, came in after the quartz, sometimes into fractures and vugs in the quartz and sometimes into fractures in the schist. Also into small fractures in the granite and rhyolite.

The sill appears to have presented a well-defined and continuous zone of fracturing preferred as conduits by vapours and fluids moving silica and, later, metals.

Probably the sill originally was a basic intrusives in the gabbro to diabase range. It is metasomatized to schist. A great deal of sliding movement has taken place within the sill. In addition, it is cut by relatively recent normal faults, with throws up to about 150 feet.

Besides the #1 and #2 declines, which descend northerly down the approximate dip of the sill at about 40 , there is decline #3 more flat and irregular, dropping westerly from about 650 feet west of #1 collar. To date I understand neither why the sill is barren in this decline nor why the adjacent drill hole L cuts ore-grade.

South of #3 portal about 450 feet, digging was begun on a decline where the sill is dipping down to the west at 48 . A general grab sample over the dump here ran .02 opt, considerably better than the damp at #3, but the excavation was pursued only some 15 feet and there is no drilling downdip.

Southeast 900 feet from #1 portal is drill hole M, which cut 5 feet of .22 opt to 45 feet and 5 feet of .105 to 50 feet. Also 10 feet of .036 opt from 85 to 95 feet in granite. Just west of the drill hole a pit exposes granite over the sill dipping 38 easterly, the top two feet of which near-surface schist runs .026 opt. Considering the ore grade nearby downdip, this suggests significance in the .02 opt from surface schist in the aborted decline just mentioned, which is 1300 feet west of this pit.

Southwest of M hole 500-600 feet, four veins from 11/2" to 5" thick have been exposed in granite. Grade is from 1.2 to 4.6 opt. The three eastern veins dip about 15 northwesterly, while the western, and thicker, vein dips 55 easterly. Assays of the granite samples from between these veins and under the steeper one indicate a total thickness of about 10 feet at .3 opt.

Oldtimers had dug pits here long ago. One depression had a six-foot paloverde in it and another sported a large cactus. I rediscovered the area through a reconnaissance over a 3000-foot long area of flat running northeasterly through the mine area, along with the bounding slopes, taking 8 lb samples of the granite or rhyolite and soil and caliche and panning for colors. Usually the results were from 0 to 2 colors per bag; however, an anomaly appeared on the west side of the plant in a diversion ditch there, then south of the plant, on south on the rhyolite ridge on the southeast side of the flat and finally in the granite between the ridge and the plug.

The high-grade veins are over a saddle in the rhyolite surface between ridge and plug and pitching down to the northeast. This occurrence has not been tested downdip. Chip samples of rhyolite on the nose of the ridge, about 200 feet north of the pit by M hole, ran .2 on the northeast end and .067 about forty feet back to the southwest. Rhyolite samples on this ridge north of the high-grade ran .31 at the contact, .032 a little higher on the ridge and, back to the southwest, .025.

A sample of the plug revealed no colors. Discounting coincidence as explanation, gold mineraliztion appears to occur in the granite, and in the rhyolite as well, in areas where the surface of the rhyolite approaches horizontal - as in a saddle or cupola. (To the north, at about

the middle of the north edge of Sec. 33 the rhyolite side of the contact is anomalous based on panning. The contact with the granite here also appears to be closer to horizontal than to vertical.)

One can only speculate about how far the mineralizing solutions or vapors might rise above the rhyolite-granite interface, or about how far below the interface they might be trapped in rhyolite. It might be only tens of feet as appears to be the case north and southwest of M hole, which shows low-grade in granite at the bottom of the hole, without reaching rhyolite. It also might have much more vertical extent. as indicated by the known consistent good grade over 200 feet vertically in the #1 shoot.

A tongue of granite extends some 1500 feet from M hole southwest, underlain by rhyolite and dacite. A chip sample over forty feet on a granite outcrop here ran .011; a second sample over the same outcrop but covering about 25 feet and including a fracture zone ran .107 and must have included a high grade zone. Similarly, two samples of boulders extending upstream to near the dacite contact ran .050 and .011. Downstream north of this granite outcrop about 500 feet is another granite outcrop also next to dacite. A general chip sample of this granite ran .061. Near the plug and adjacent to the contact, a few hundred feet southeast of the high grade veins granite went .035.

A topographic trough leads south from this area 4000 feet to the strongly altered plug. A grab sample of the altered material ran less than .01(the assayer not giving the exact amount) but panning the pulp revealed a color.

This and the observed gold mineralization in rhyolite close to the mine and in granite near rhyolite leaves no doubt that the magma feeding the rhyolite intrusion also subsequently infused gold into a relatively large overlaying zone, probably concentrated along the plumbing provided by the more open fracture systems available at the time.

DRILL HOLES

HOLE DESIGNATION AND ASSAYS DEPTH	INTERCEPTS IN FEET	GRADE IN OPT			
A 95	65-85	.0015	N 500	100-105	.001
	85-90	.007		180-205	.006 sill in part
	0-5	.002		330-335	.003
	15-25	.002		350-355	.001
				380-385	.002
B 100	C-5	.001		405-410	.001
	80-85	.001			
			P 400	195-200	.0066
C 85	60-65	.036		300-310	.0007
	65-70	.087			
	70-85	.005			
	75-85	.003			
D 100	0-10	.006			
	30-35	.006			
E 100	5-20	.003			
F 100	0-5	.001			
G 100	0-5	.005			
	10-15	.018			
H 100	0-5	.001			
I 100		nil			
J 100	60-70	.004			
K 100	85-95	.0015			
L 110	95-100	.18			
	100-105	.025			
M 100	40-45	.22			
	45-50	.105			
SKY	85-95	.022			
CSA	85-95	.034			
	95-100	.001			

Reserves in Sill

Proved

In the #1 ore shoot from just below the lower level to surface I estimate about 6500 tons at .32 proved by sampling of workings. Beyond that, in the sill, if 10,000 sq. ft is assigned to the intercepts in holes M and L, then they would represent 3700 tons at .22 or 7400 tons at .16 and 3700 tons at .18 respectively, or about 17,600 tons at .22 opt total.

Indicated

Drill holes and other tests in the sill suggest that about 15% of the sill can be expected to be ore grade. If we assume that if extends 500 feet down dip from surface, is 5 feet thick and averages the same grade as the proved then with a circumference of 4500 feet, there should be about 125,000 tons at .22 indicated.

Inferred

By going downdip another 500 feet around the dome another 125,00 tons can be inferred.

Reserves in Granite and Rhyolite

There is not enough work done to allow estimates of proved ore in the country rock.

Indicated

Based on grade over ten feet in the zone of high grade (.31) and the same grade in rhyolite at the contact to the north, from an area of 60 by 220 feet ten feet thick there would be 10,000 tons. Going the other way, parallel to the rhyolite ridge, the area indicated by sampling is about 200 feet wide and 700 feet long. Grades at the northeast end are .196, .068 and .036- average .1, and at the end, .3. Using the average yields about 100,000 tons at .2 opt. This w

would include the 10,000 tons just outlined.

Inferred

There has been insufficient work to allow talking with assurance about the habit of deposition in the rhyolite and granite. We know that there is anomalous gold content in rhyolite to the north beyond the property discussed and anomalous gold content in the granite to the south and to the southeast, including values up to .1 opt.

In order to arrive at some idea of potential from what is known, I think it is not unreasonable to assign a width of some 500 feet to a zone running north-south through the middle of Section 33, defined as a long flat over granite, with rhyolite at the ends, along the east side and in part along the west side. Within or very close to that zone are values in granite of .03, .035, .036, .06, .061, and, omitting high grade veins, .12. Values in rhyolite are .196 and .068. For a length I would take from the north edge of the Section, where the rhyolite-granite contact is anomalous, south 3500 feet to the dacite-granite contact where the granite is mineralized. If one assumes an average grade from the values we have and a thickness of 10 feet, inferred tonnage is about 1,300,000 tons at .08 opt.

SUNRISE MINE
ASSAY RESULTS
DECEMBER 1991

	AU ASSAY	AU CYANIDE	
SM-1:	0.016	0.015	• 5' chip, hematite stained, sheared dike • 127' level @ Coggins #009 • Gene sampled @ face, 20' W
SM-2:	0.013	---	• small grab sample, hematite staining • 192' level, 200'W of shaft
SM-3:	0.089	---	• 3' chip, includes 1' fault breccia • hematitic clay gouge, cross fault • 280' level, E of main shaft
SM-4:	0.626	0.374 0.368 0.369	• 4' chip, open cut, 40' E of #2 shaft • Mod-strg Hematite in sheared dike • 3' of dike, 1' qtz, HW = granite
SM-5:	0.065	---	• 5' chip, hematitic dike • 69' level, = 70' W of shaft
SM-6:	0.322	0.251	• 2' chip, select hematite and qtz • 69' level, E side of shaft @ Coggins 004
SM-7:	1.092	0.922	• @ Coggins 007 • 127' level, 10' W of shaft
SM-8:	0.077 .077	0.082 -0.085 -0.071	• 7' chip, hematite-qtz in sheared dike • 192' level, 10' E of shaft @ Coggins 10
SM-9:	0.016	0.017	• 6' chip, slt hematite, sheared dike, qtz surface cut • = 200' W of # 1 shaft, 10' E of C#55 • 105' qtz vein, 405' hem shearing
SM-10:	0.003	---	• 305' chip, surface cut, above C#57 • start above qtz, sampled hematitic dike
SM-11:	0.004	---	• 3' chip, = 100' W of SM 10, small surface cut, qtz stringers in hem dike
SM-12:	0.020	---	• grab sample, adjacent to #1, qtz with strong rd-bk hem minor CO3
SM-13:	0.009	---	• grab sample, #3 dump, co3 qtz stringers, dike

This information is from Jed Thomas, Missoula, consulting geologist and friend and associate of Gene Enyart. What he here calls dike I call sill.

CURRICULUM VITAE

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EDUCATION: B. S. in geological engineering, 1951, Michigan Tech
Courses in computer programming and in sedimentation

PROFESSIONAL PUBLICATION: Hydrologic Characteristics of the Bandelier Tuff as Determined Through an Injection Well System (LA-11511-MS)

EXPERIENCE:

1977-1991 Consulting for various companies on uranium and gold in Guinea, gold in Mali, uranium, gold and copper in Colombia, gold in Costa Rica, gold and antimony in Guatemala, lead-zinc-gold-silver and tungsten in Montana; Study of the Water Supply Problems of Managua, Nicaragua, for the Nicaraguan government.

1975-1977 Manager of exploration, BurWest (Burlington Northern/Westinghouse) This was mostly uranium exploration, Washington to Michigan.

1971-1975 Consulting geologist for M. P. Grace, in the Grants Belt. Discovered one major ore body, one small one and several good prospects.

1966-1971 Geologist for Four Corners Exploration Co., Grants, NM, doing mine geology and exploration.

1965-1966 Hydrologist for USGS, Albuquerque, groundwater studies.
1961-1965 Hydrologist for State Engineer of New Mexico, groundwater studies.

1957-1961 In Guatemala, 2 years consulting in various metals; 2 years as a partner of René Abularach (now president of Minas de Guatemala) responsible for all field activities to the railhead, exploring for and mining lead-zinc-silver.

1954-1957 Partner in consulting geology firm in Grants, NM. We did mostly evaluation of uranium prospects on the Colorado Plateau, Arizona and Texas.

1951-1954 Computer for Keystone Exploration Co., doing seismic exploration for The Texas Company. At is time I also collaborated with Dr John Moseley in the invention of a petroleum detection device using radio frequency.

REFERENCES: Irving "Rusty" Rapaport, President, Four Corners Exploration Co. Grants, NM 505-287-4722; Albuquerque, 505-268-7624

Corinne Grace, President, Grace Oil Co.
Carlsbad, NM, 505-887-5581

William G. Tuill, Manager, Mackay and Schnellmann, Ltd
Tel., 071 831 2478; Fax 071 831 2478 (in London).

Gene Enyart

Gene Enyart

GENE EHYART

REPUBLIC GOLDFIELDS
CONGRSS MINE
ASSAY REPORT

SAMP. #	DESCRIPTION	Au (GOLD)	Ag (SILVER)	DATE	CHARGES
GE 60	ROCK	.0987		5/21	$12.50
61	"	.874			"
62	CARBON	17.496			"
B-5 1/3	SOLUTION	.0146			$10.00
P-4 28-30	"	.0263			10.00
P 519	"	.0260			"
P5/ 1-3	"	.0187			"

Total Charges $77.50

Paid 5/21/92

Signed _____

GENE ENGART
SUNRISE GOLD
PO BOX 20934
WICKENBURG

REPUBLIC GOLDFIELDS
CONGRSS MINE
ASSAY REPORT

SAMP. #	DESCRIPTION	Au (GOLD)	Ag (SILVER)	DATE	CHARGES
GE-40	GENE ENGART	.040		4-1	
41		.089			
42		.035			
43		.025			
44		<.01			

Total Charges 62.50

Signed [illegible]

IRON KING LABORATORY

Page 1 8-November-91

LAB JOB #: MSC711

Client Name: Gene Enyart No. Samples: 9

Billing Address: 5131 Jenie Rd.
Albuquerque, NM 87121

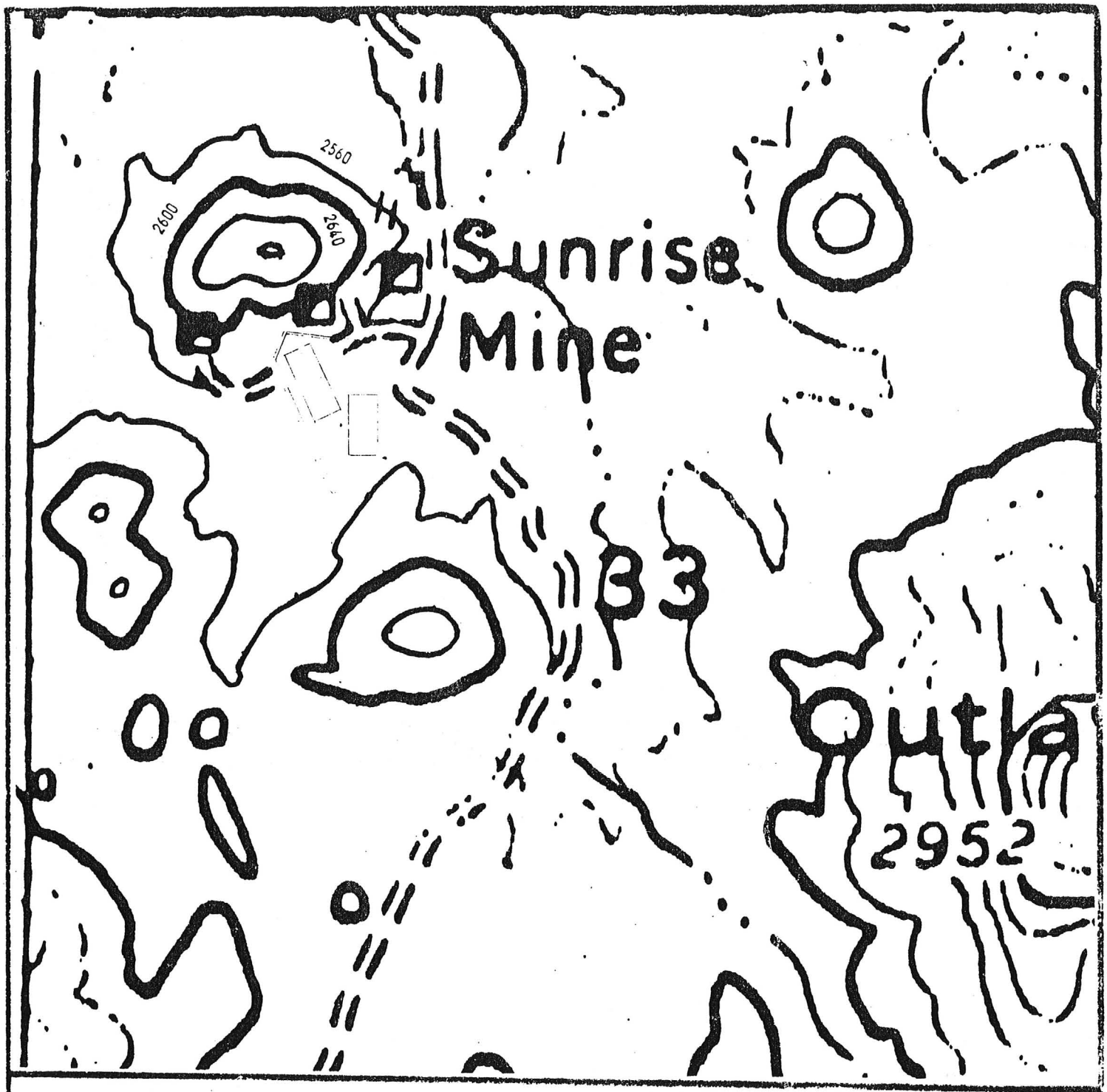
PAID CASH-THANK YOU

ANALYTICAL REPORT

Client I.D. MSC711	Lab I.D.	FA Au oz/ton		opt
#2	711-1	.008	15	.012
5	2	.181	16	.022
			17	.012
6	3	.003	18	.020
7	4	.038	19	.032
			20	.036
8	5	.213	21	.026
9	6	.002		
11	7	.004		
13	8	.058		
14	9	.004		

P.O. BOX 66 • HUMBOLDT, AZ 86329 • (602) 632-7410

REJECTS KEPT 30 DAYS, PULPS KEPT 90 DAYS, UNLESS PRIOR ARRANGEMENTS MADE.

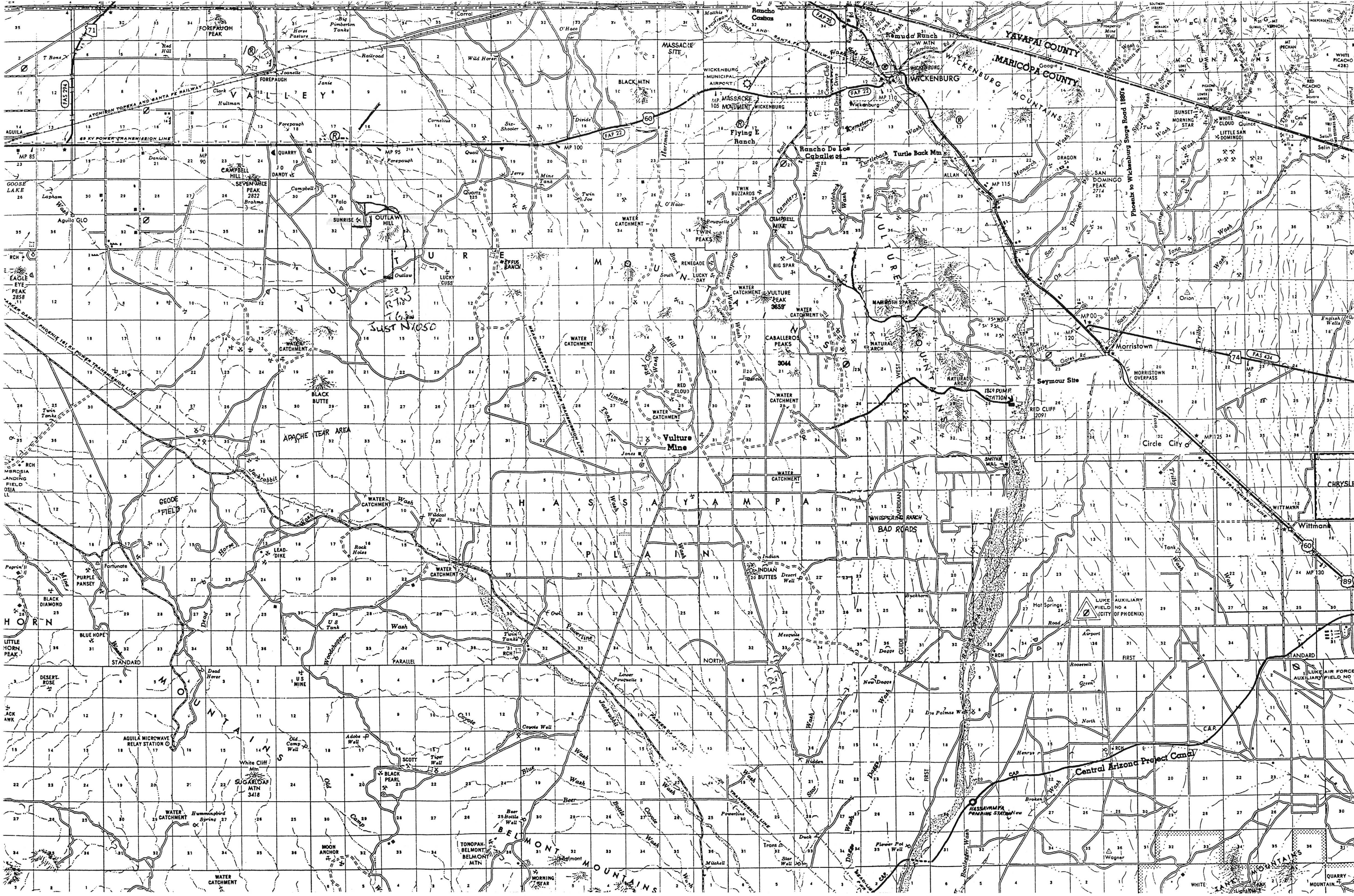


SUNRISE MINE PLANT SITE PLAT

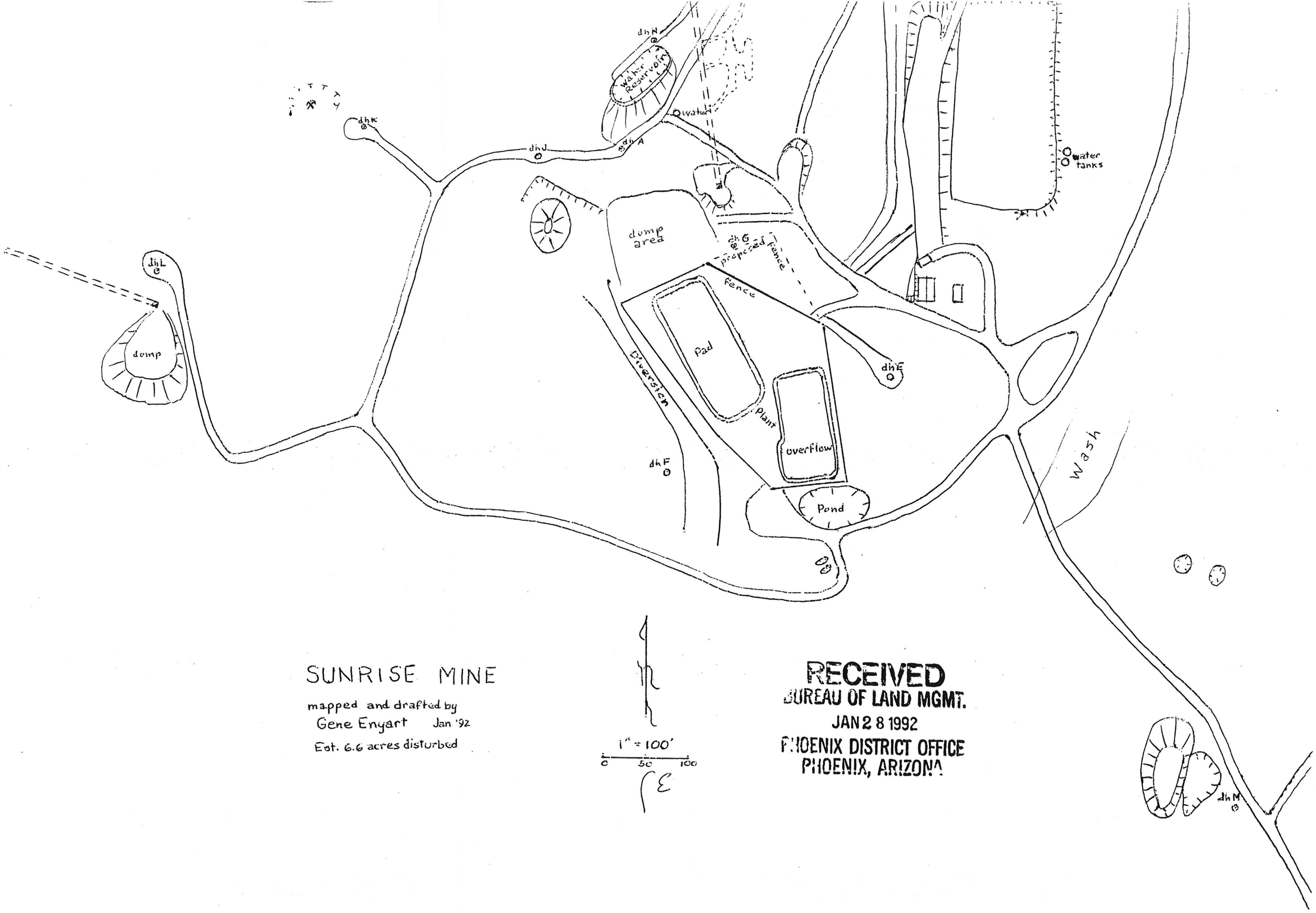
TWP. 7 N, RGE. 7 W, GSRB&M
MARICOPA COUNTY, ARIZONA

Scale: 1" = approx. 660'

PLATE No. 1



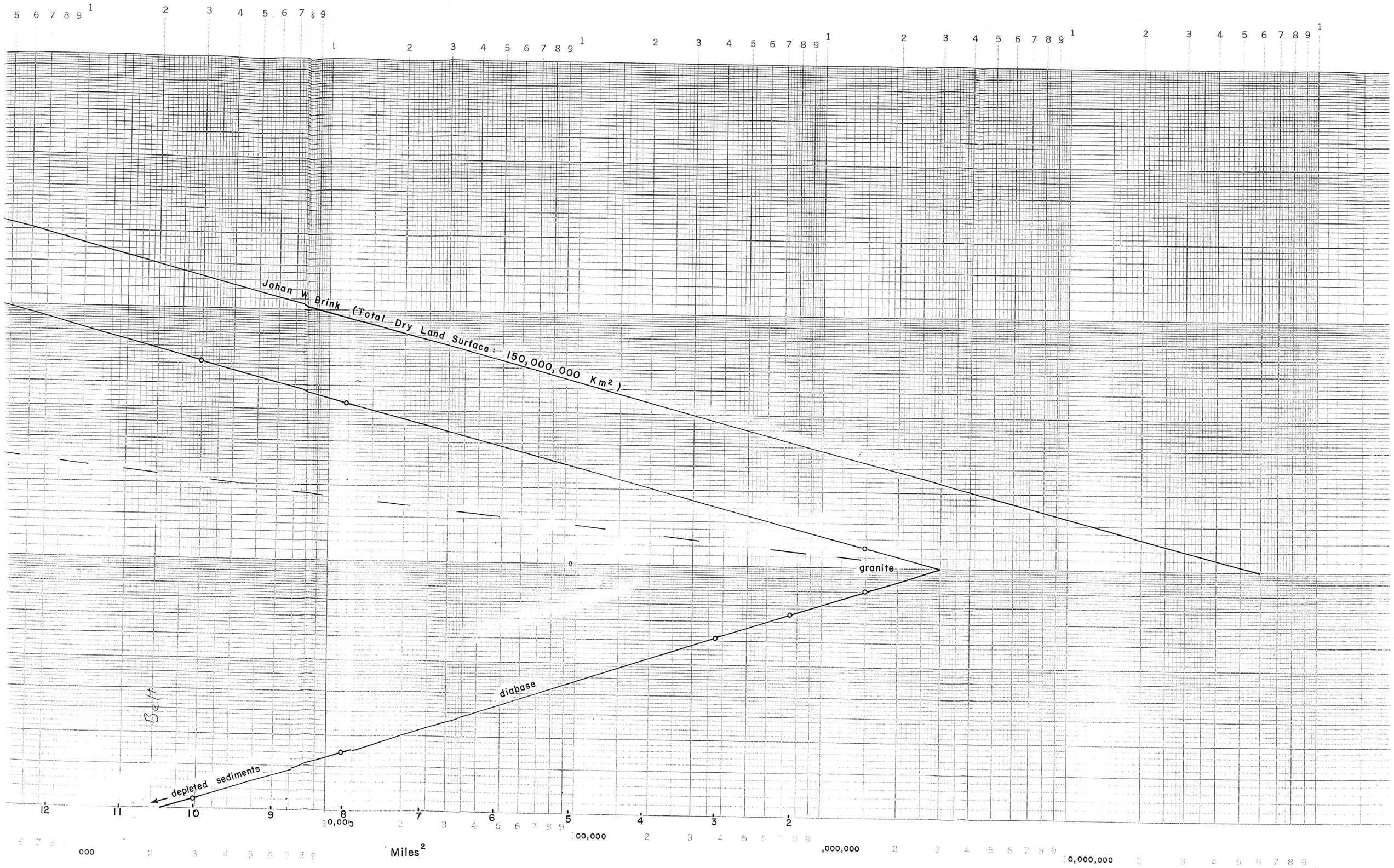
FOREPAUGH PEAK
Big Pimberton Tanks
Horse Pasture
Corral
O'Haco
Matthie
Rancho Castius
ATCHISON TOPEKA AND SANTA FE RAILWAY
Remuda Ranch
W MTN
Constellation
Rd
Blue Tank
Wash
Rincon
Calamity
YAVAPAI COUNTY
MARICOPA COUNTY
WICKENBURG MOUNTAINS
Prosperity Mine Well
Red Hill
T Bone
Railroad
Wild Horse
MASSACRE SITE
Sols Wash
WICKENBURG
Google
FAS 294
Joanette
FOREPAUGH
Janie
Clark
VALLEY
Hultman
BLACK MTN
WICKENBURG MUNICIPAL AIRPORT
MASSACRE MONUMENT
MP 105
Country Club
FAP 22
MP 110
Wickenburg
Ocotillo Drive
CL
Cemetery
AGUILA
Forepaugh
Cornelius
Six-Shooter
Divide
Flying E Ranch
69 KV POWER TRANSMISSION LINE
MP 85
Daniels
MP 90
QUARRY
MP 95
Quail
MP 100
Hartman
Rancho De Los Caballeros
Turtleback
Turtle Back Mtn
GOOSE LAKE
CAMPBELL HILL
SEVEN MILE PEAK 2822
Brahma
JO DANDY
Campbell
Palo
Quartz
Jerry
Mine Tank
Twin Joe
TWIN BUZZARDS
Vulture Mine Road
ALLAH
MP 115
Monarch
DRAGON
SAN DOMINGO PEAK 2714
Phoenix to Wickenburg Stage Road 1880's
Lapham
Aguila GLO
SUNRISE
OUTLAW HILL
WATER CATCHMENT
Pouquette
TWIN PEAKS
CAMPBELL MINE
VULTURE MOUNTAINS
Domingo
SUNSET MORNING STAR
WHITE CLOUD
Quince
LITTLE SAN DOMINGO
Selin
Castle
RED PICACHO
Square Rock
WHITE PICACHO 4283
MT PECHAN
MT VERNON
CLIMAX
INDEPENDENCE
Ruby
Mitchell Wash
Tub Spring Wash
Eddie Wash
LONE WOLF
PICACHO VIEW
LOWER JUMBO
RCH
EAGLE EYE PEAK 2858
Outlaw
LUCKY CUSS
EFFUS RANCH
South
RENEGADE
LUCKY DAY
Box
Syndicate Wash
BIG SPAR
VULTURE PEAK 3659
MAMMOTH SPAR
San Domingo Wash
Iona
Wash
Orion
QUAR
English Wells
PARKER DAM - PHOENIX 161 KV POWER TRANSMISSION LINE
MEAD-LIBERTY 345 KV POWER TRANSMISSION LINE
Red Cloud Wash
Mill
CABALLEROS PEAKS 3044
NATURAL ARCH
WEST
WOLF
MP 120
Little
San Hol
Castle
Morristown
Gates Rd
Seymour Site
MORRISTOWN OVERPASS
74
FAS 434
MP 5
Trilby
Twin Tanks
BLACK BUTTE
Jimmie
Tank
RED CLOUD
Garcia
1869 PUMP STATION
RED CLIFF 2091
APACHE TEAR AREA
Vulture Mine
Jones
MP 125
Circle City
69 KV POWER TRANSMISSION LINE
AMBROSIA LANDING FIELD
Jackrabbit
SMITHS MILL
RIVER
CHRYSLER
GEODE FIELD
Wildcat Well
HASSAYAMPA PLAIN
MERIDIAN
WHISPERING RANCH
BAD ROADS
WITTMANN
Wittmann
60
Horse
LEAD-DIKE
Rock Holes
Indian
INDIAN BUTTES
Desert Well
Tank
Pegrin
Mine
PURPLE PANSEY
Fortunate
BLACK DIAMOND
Buckhorn
Hot Springs
LUKE AUXILIARY FIELD NO 4 (CITY OF PHOENIX)
MP 130
89
93
HORN
Dead
US Tank
Owl
Powerline
Road
Airport
BLUE HOPE
LITTLE HORN PEAK
STANDARD
Woodchopper
PARALLEL
RCH
NORTH
Mesquite
Dagga
GUIDE
FIRST
LUKE AIR FORCE AUXILIARY FIELD NO 1
DESERT ROSE
Dead Horse
MOUNTAINS
US MINE
Lower Pouquette
New Dagga
Roosevelt
Green
BLACK HAWK
Coyote
Coyote Well
PARKER DAM
Dos Palmas Well
North
C.A.P.
AGUILA MICROWAVE RELAY STATION
Old Camp Well
Adobe Well
SCOTT
Tiger Well
Hidden
Henrys
Central Arizona Project Canal
White Cliff Mtn
SUGARLOAF MTN 3418
BLACK PEARL
Blue
Wash
Old
Star
Broken
Beer
Bottle
HASSAYAMPA PUMPING STATION
New
WATER CATCHMENT
Hummingbird Spring
Camp
Beer Bottle Well
Powerline
TRANSMISSION LINE
MOON ANCHOR
TONOPAH-BELMONT
BELMONT MTN
BELMONT MOUNTAINS
Belmont
Trans
Duck
Star Well
Flower Pot Well
Bootlegger Wash
Wagner
MORNING STAR
Mitchell
MEAD-LIB PWR
CAP
WHITE TANK MOUNTAINS
QUARRY MOUNTAIN

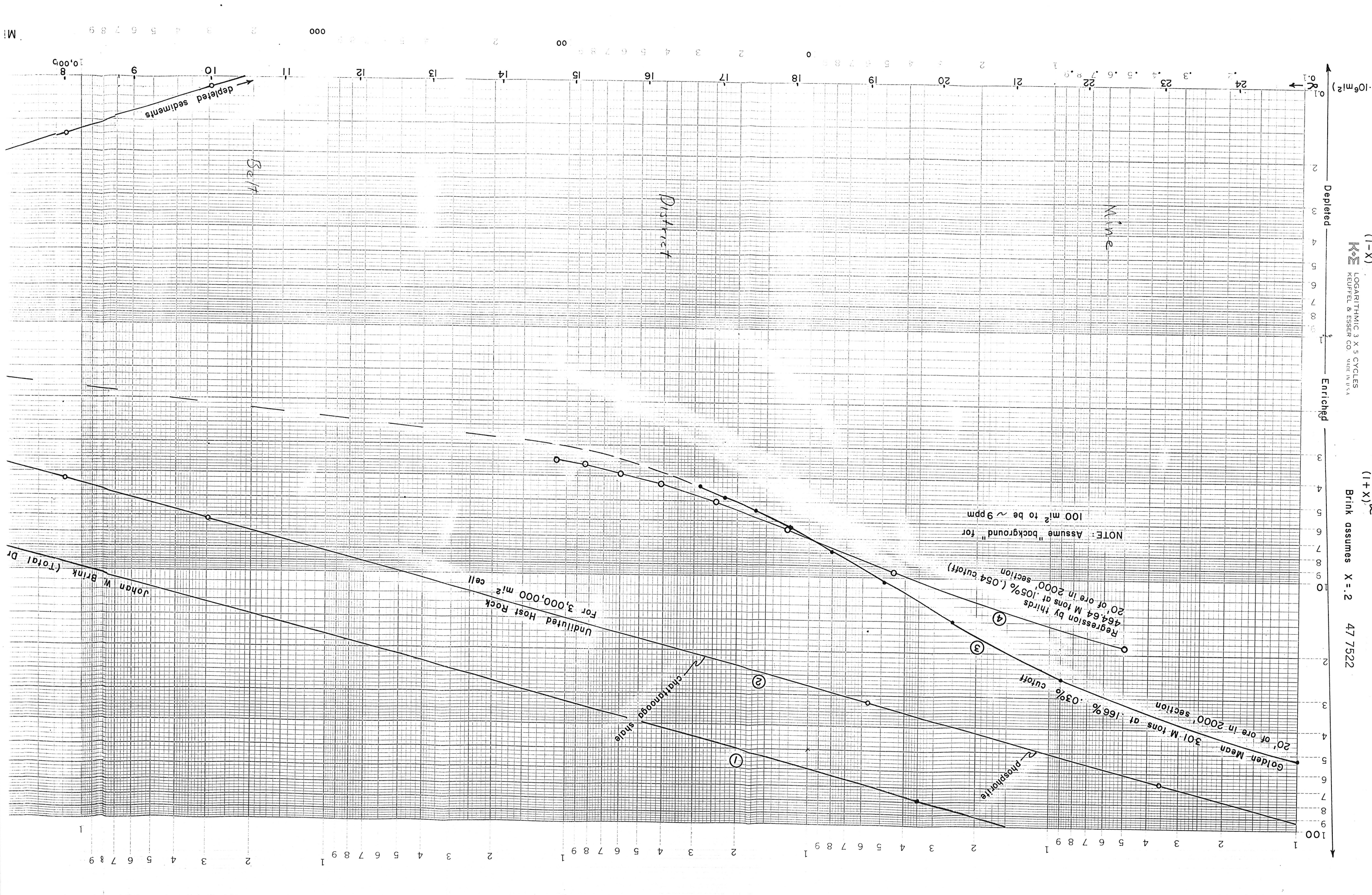


SUNRISE MINE

mapped and drafted by
Gene Enyart Jan '92
Est. 6.6 acres disturbed

RECEIVED
BUREAU OF LAND MGMT.
JAN 28 1992
PHOENIX DISTRICT OFFICE
PHOENIX, ARIZONA


Johan W. Brink (Total Dry Land Surface: 150,000,000 Km²)
granite
diabase
depleted sediments
Miles²
Belt

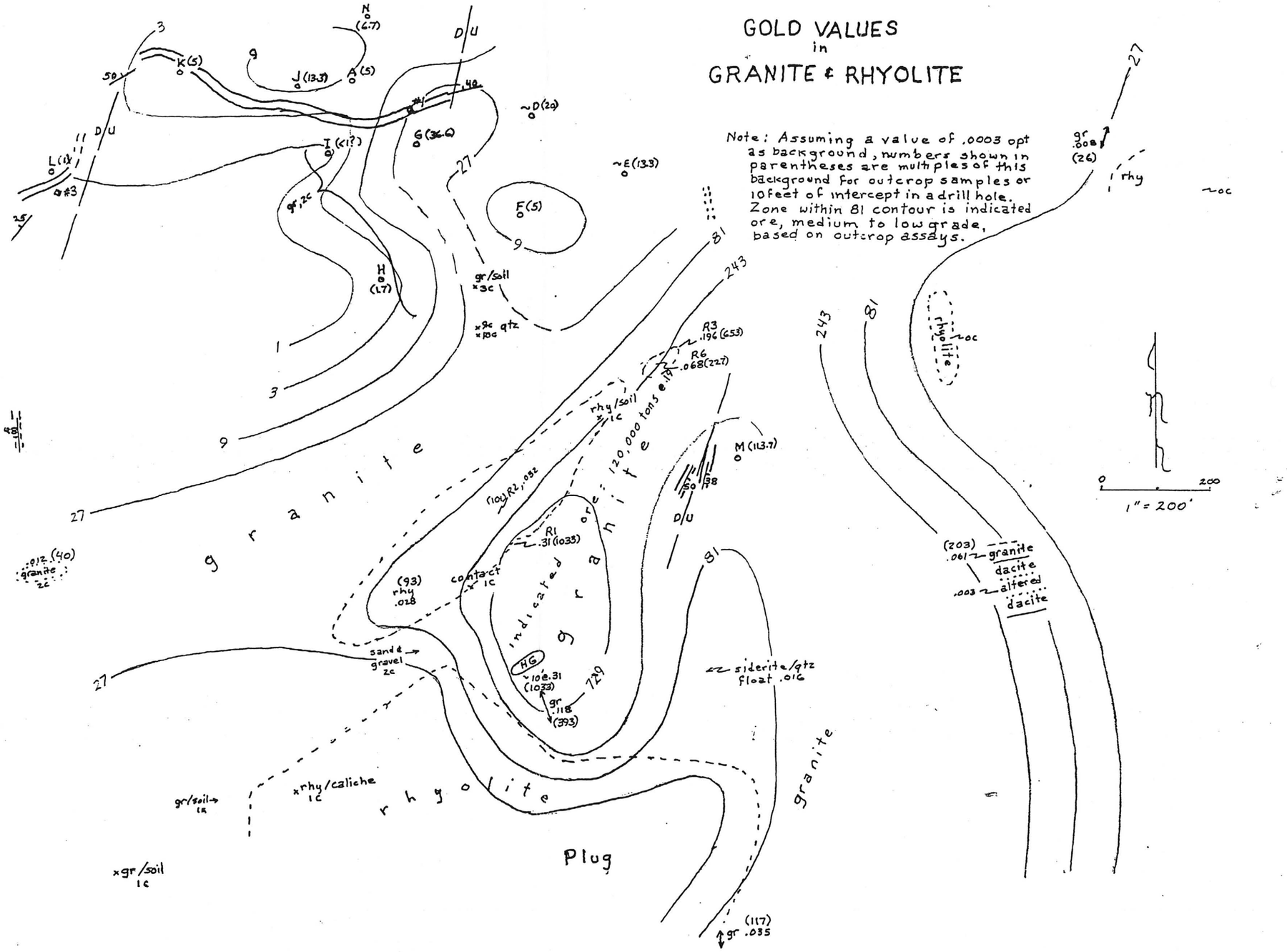

Brink assumes X = .2
47 7522
LOGARITHMIC 3 X 5 CYCLES
KEUFFEL & ESSER CO.
Depleted
Enriched
Golden Mean 301 M tons at .166% .03% cutoff
20' of ore in 2000' section
Regression by thirds
464.64 M tons at .105% (.054 cutoff)
20' of ore in 2000' section
NOTE: Assume "background" for
100 mi² to be ~ 9 ppm
Undiluted Host Rock
For 3,000,000 mi² cell
Chattanooga shale
phosphorite
John W. Brink (Total Dr
depleted sediments
Maine
District
Belt

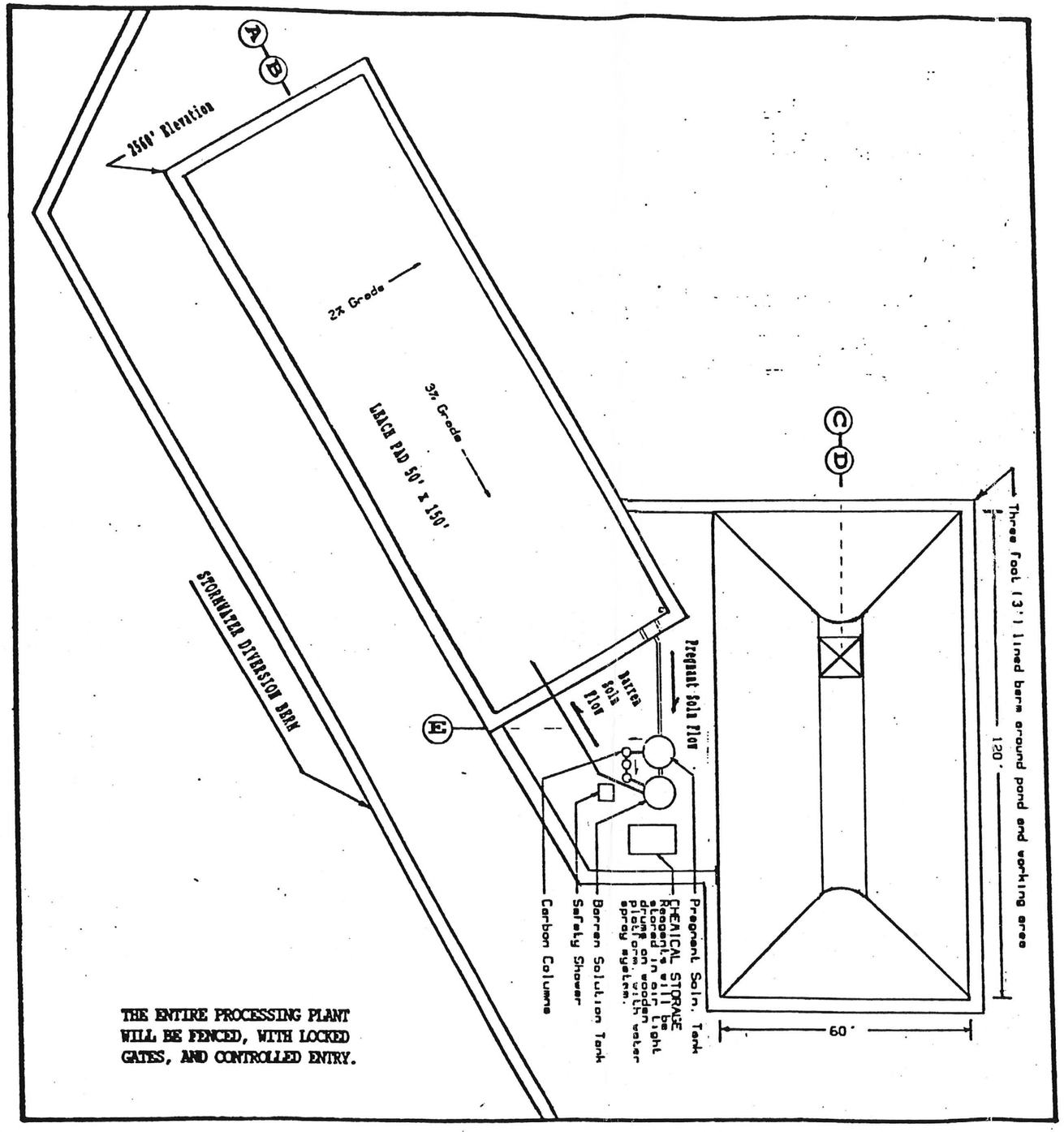
SUNRISE MINE LEACH PLANT

REVISED: 12/11/89

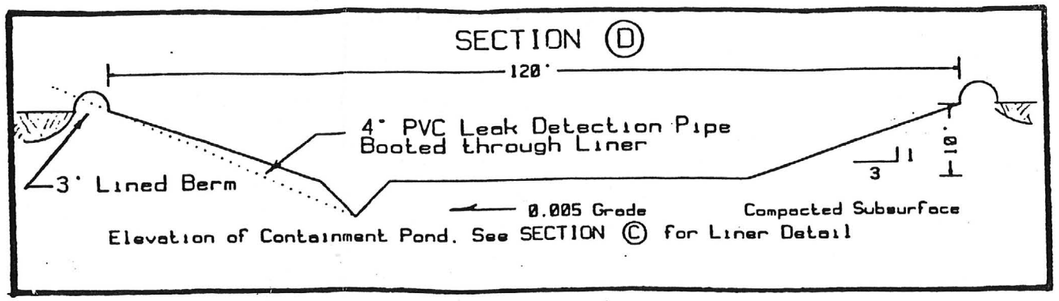
GOLD VALUES in GRANITE & RHYOLITE

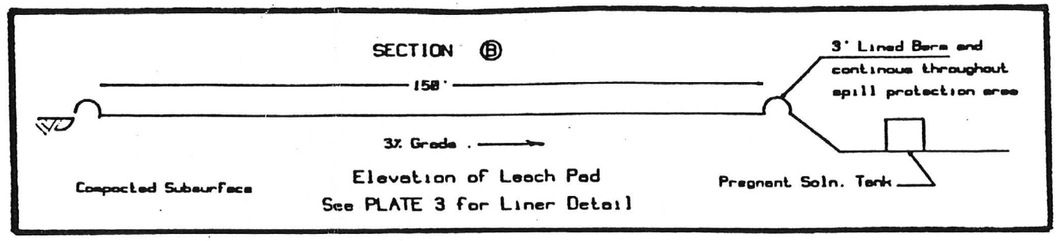
Note: Assuming a value of .0003 opt as background, numbers shown in parentheses are multiples of this background for outcrop samples or 10 feet of intercept in a drill hole. Zone within 81 contour is indicated ore, medium to low grade, based on outcrop assays.

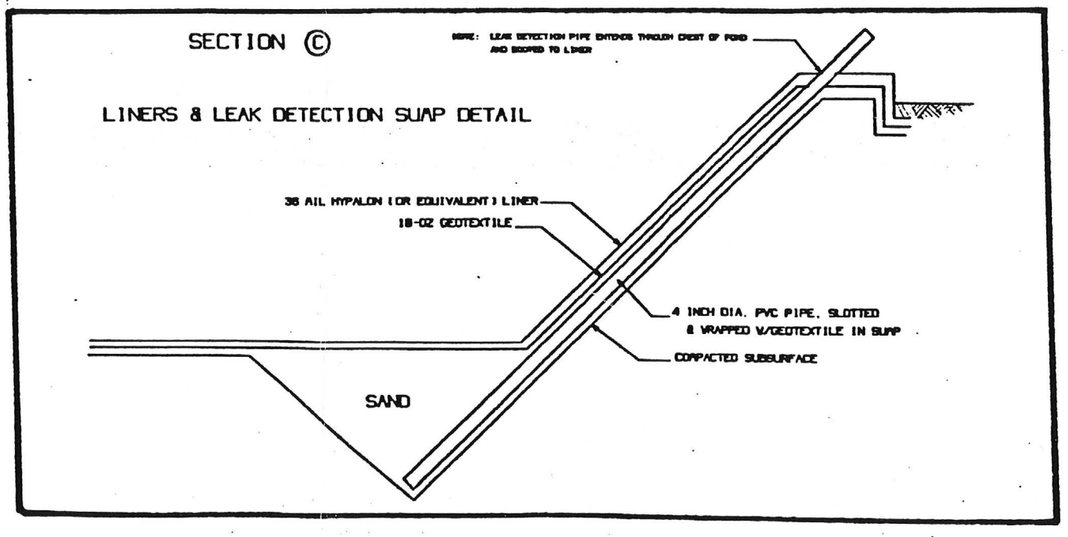




THE ENTIRE PROCESSING PLANT WILL BE FENCED, WITH LOCKED GATES, AND CONTROLLED ENTRY.







RDH VENTURES			
SCALE: PER DRAWINGS	APPROVED BY: WLH	DRAWN BY: BHC	
DATE: 10/3/89		REVISED: 11/27/89	
SUNRISE MINE PROJECT		Revised: 12/11/89	
PLANT SITE DETAIL		DRAWING NUMBER: PLATE No. 2	

1" = 20'

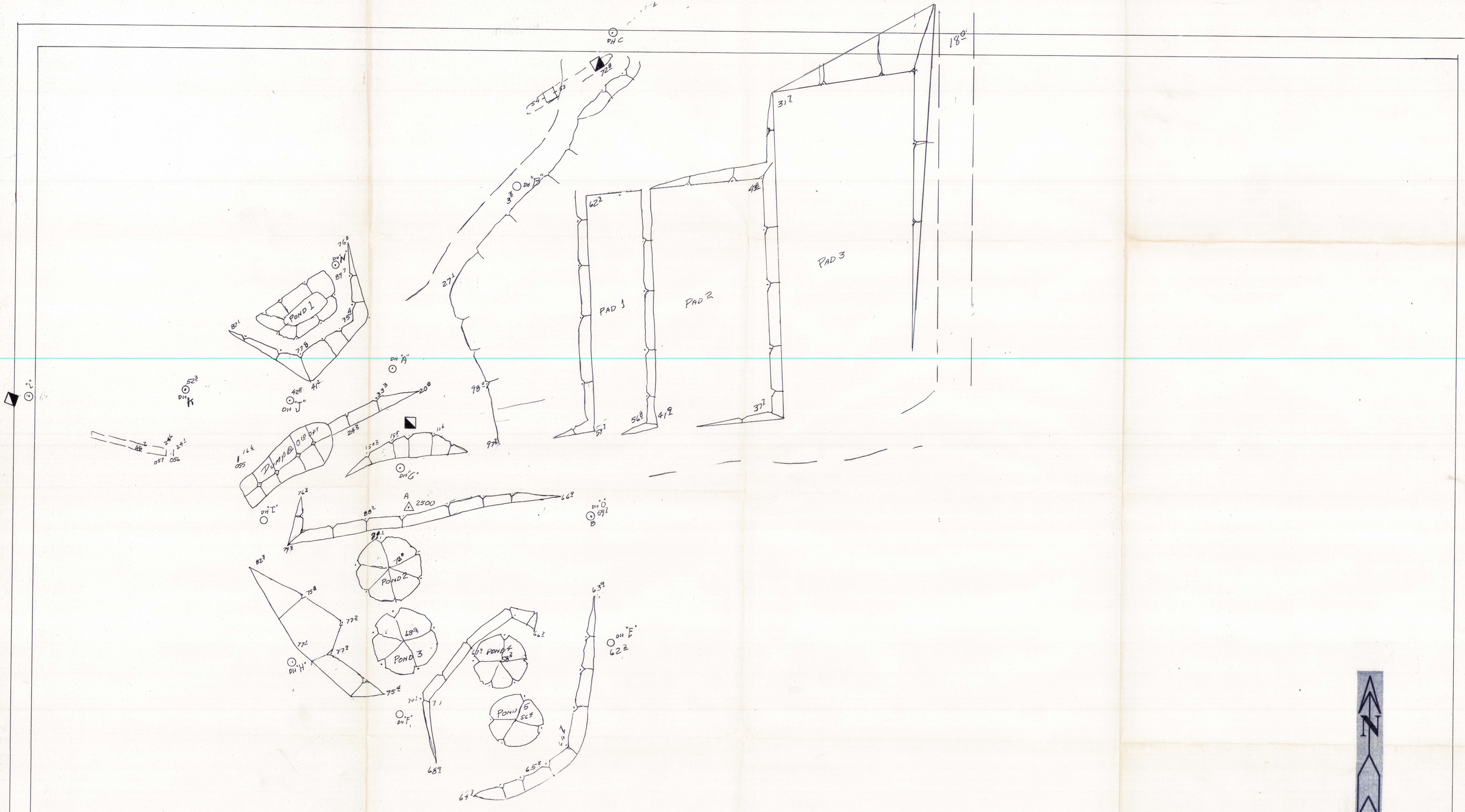
H. Mason Coggin PE & LS
317 East Grisowld Phoenix, Az 85020
(602) 944-3763

Vancouver Ventures, Ltd.

Sunrise Mine

Maricopa County, AZ

Sample Plan 1"=40' H. M. C. 3.15.88



1" = 40'

H. Mason Coggin PE & LS
317 East Grisowld Phoenix, Az 85020
(602) 944-3763

Vancouver Ventures, Ltd.

Sunrise Mine

Maricopa County, AZ

Site Plan 1"=40' H. M. C. 3.15.88