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PRINTED: 03-12-2009

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: BLACK CANYON PLACERS

ALTERNATE NAMES:

TURKEY CREEK CLAIMS  
BUMBLEBEE CREEK

YAVAPAI COUNTY MILS NUMBER: 301

LOCATION: TOWNSHIP 9.5N RANGE 2 E SECTION 32 QUARTER SE  
LATITUDE: N 34DEG 09MIN 47SEC LONGITUDE: W 112DEG 10MIN 34SEC  
TOPO MAP NAME: BUMBLE BEE - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

GOLD PLACER

BIBLIOGRAPHY:

ADMMR BLACK CANYON PLACERS FILE  
WILSON, E.D. GOLD PLACERS AND PLACERING IN AZ  
AZBM BULL 168 1978 P 56  
AZBM BULL. 160 P. 56



WILD HORSE	YAVAPAI
TURKEY (4 claims)	YAVAPAI
gold, silver, lead, zinc	
MARY ETHEL	YAVAPAI
MARI	YAVAPAI
CAROLINE	YAVAPAI
BLUE TURKEY (6 claims)	YAVAPAI
gold, silver, lead, zinc	
JOEHANNA #1	YAVAPAI
JOHANNA	YAVAPAI
Nezona, Inc. ( <del>      </del> ) Yavapai - <del>                    </del>	

SEE: NEZONA REPORT

BLACK CANYON PLACERS

YAVAPAI COUNTY

NJN WR 9/18/87: Provided information to Guy Webster of the Arizona Republic on Davage Oil and Gas Company (card). Mr. Webster reports that they are processing the tailings at Larry Turgin's placer property south of Bumblebee. They claim they are getting 8 times more gold from the tailings than Mr. Turgin got from the head ore.

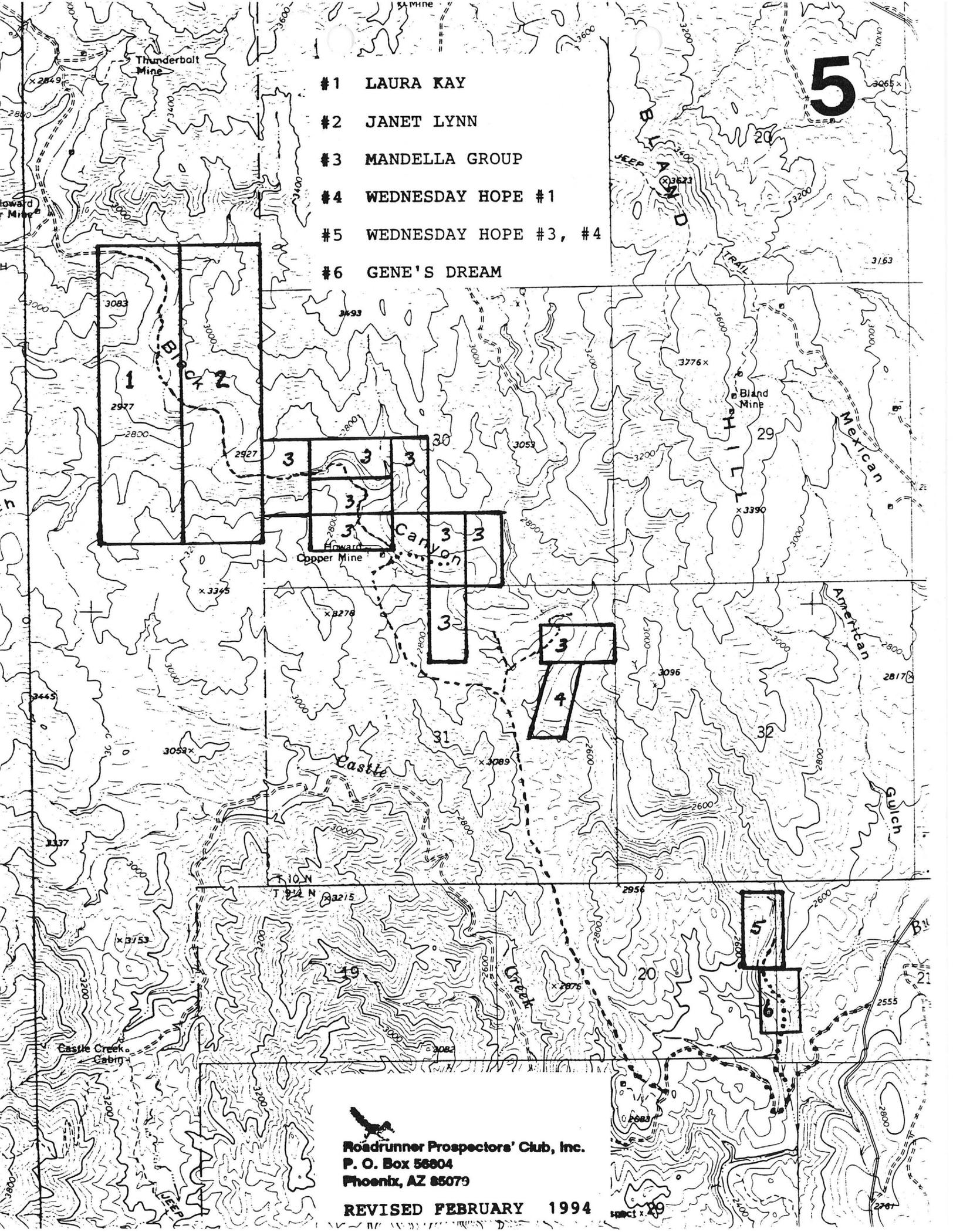
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KAP WR 3/18/88: Received a copy of a Notice of Application for Permit for a placer mining operation on a portion of Black Canyon Creek in Secs 8 and 17, T9N R2E, Yavapai County. The application is by GFW Enterprises. GFW stands for Grey, Fiscus and Whelen (see Dale Fiscus - card) P O Box 1949, Glendale, Arizona 85311 and whose contact person is James A. Hitchison. A copy of the application has been made for the Black Canyon Placer Area file (USGS Bull 1355 #59).

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5

- #1 LAURA KAY
- #2 JANET LYNN
- #3 MANDELLA GROUP
- #4 WEDNESDAY HOPE #1
- #5 WEDNESDAY HOPE #3, #4
- #6 GENE'S DREAM



 Roadrunner Prospectors' Club, Inc.  
 P. O. Box 56804  
 Phoenix, AZ 85079

REVISED FEBRUARY 1994

# ROADRUNNER PROSPECTORS' CLUB, INC.



MAP NUMBER

5

QUADRANGLE

Bumble Bee

Revised February 1994

## CLAIM NAMES AND TOPO MAP REFERENCE NUMBERS

Black Canyon Claims

Mandela Group, Gene's Dream

Janet Lynn, Laura Kay, Wednesday Hope #1, #3, & #4

Altitude 2,500'

## GENERAL DIRECTIONS/LOCATION

From Phoenix take I-17 North to Bumble Bee Exit, follow road down hill, turn Right to Forest Road #684 (approximately 4 miles), turn Left to Black Canyon Wash (approximately .5 miles) follow trail map to claims. Upper claims can be reached by going through Cleator.

## PROSPECTING INFORMATION

**ROADS:** From Forest Road #684, very rough.

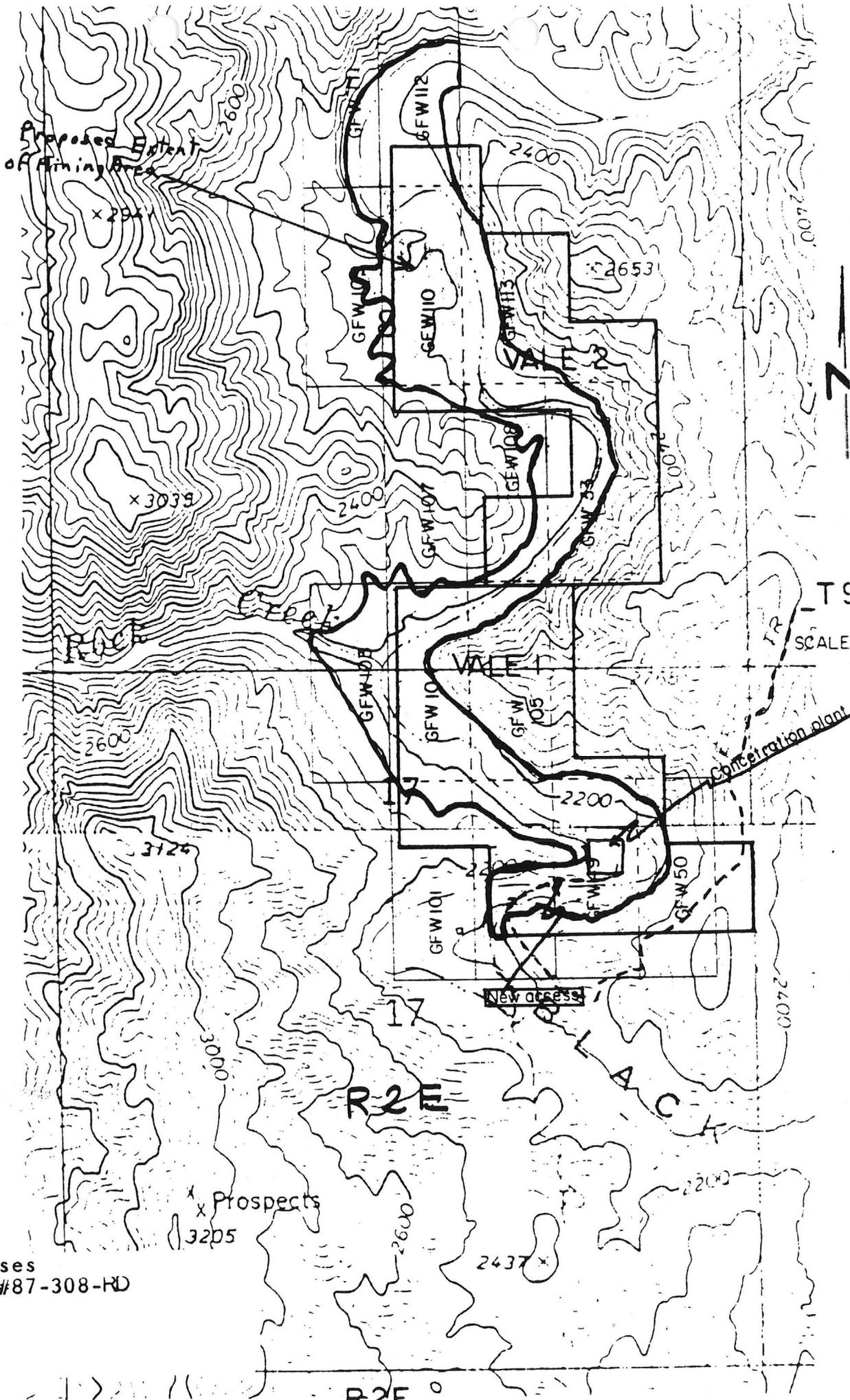
**VEHICLE:** High clearance and/or 4X4, some claims require 4X4.

**CAMPING:** Good, limited firewood

**METHODS:** Metal Detecting, dredging, hi-banking, dry washing.

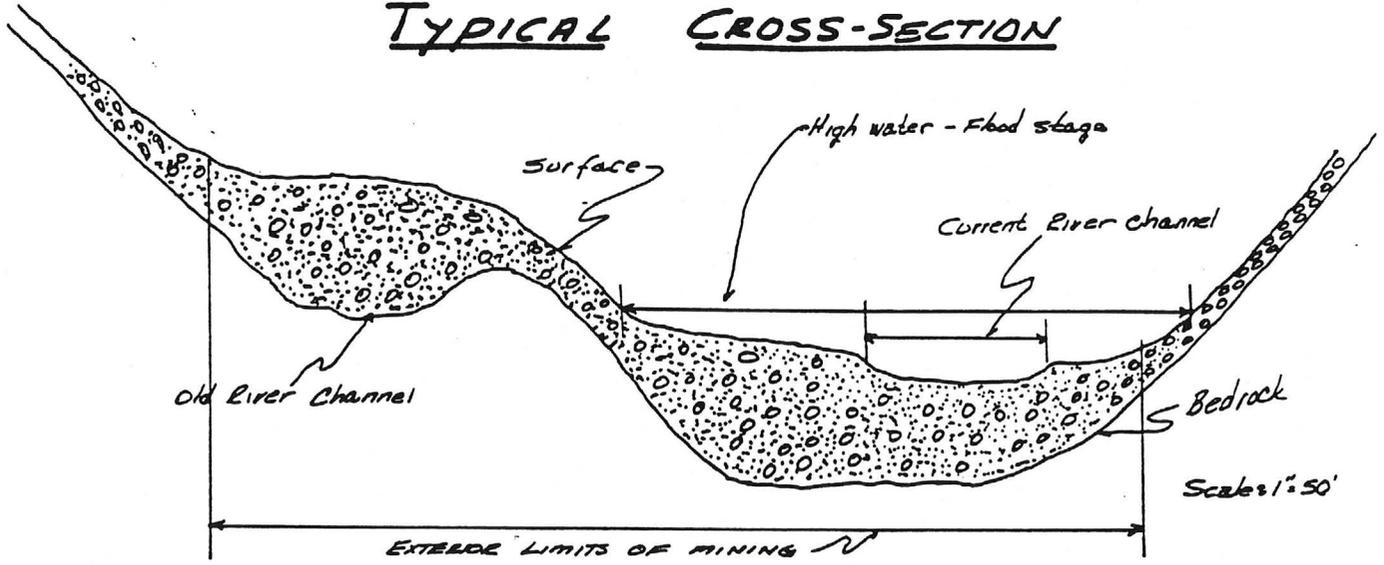
**MISC:**



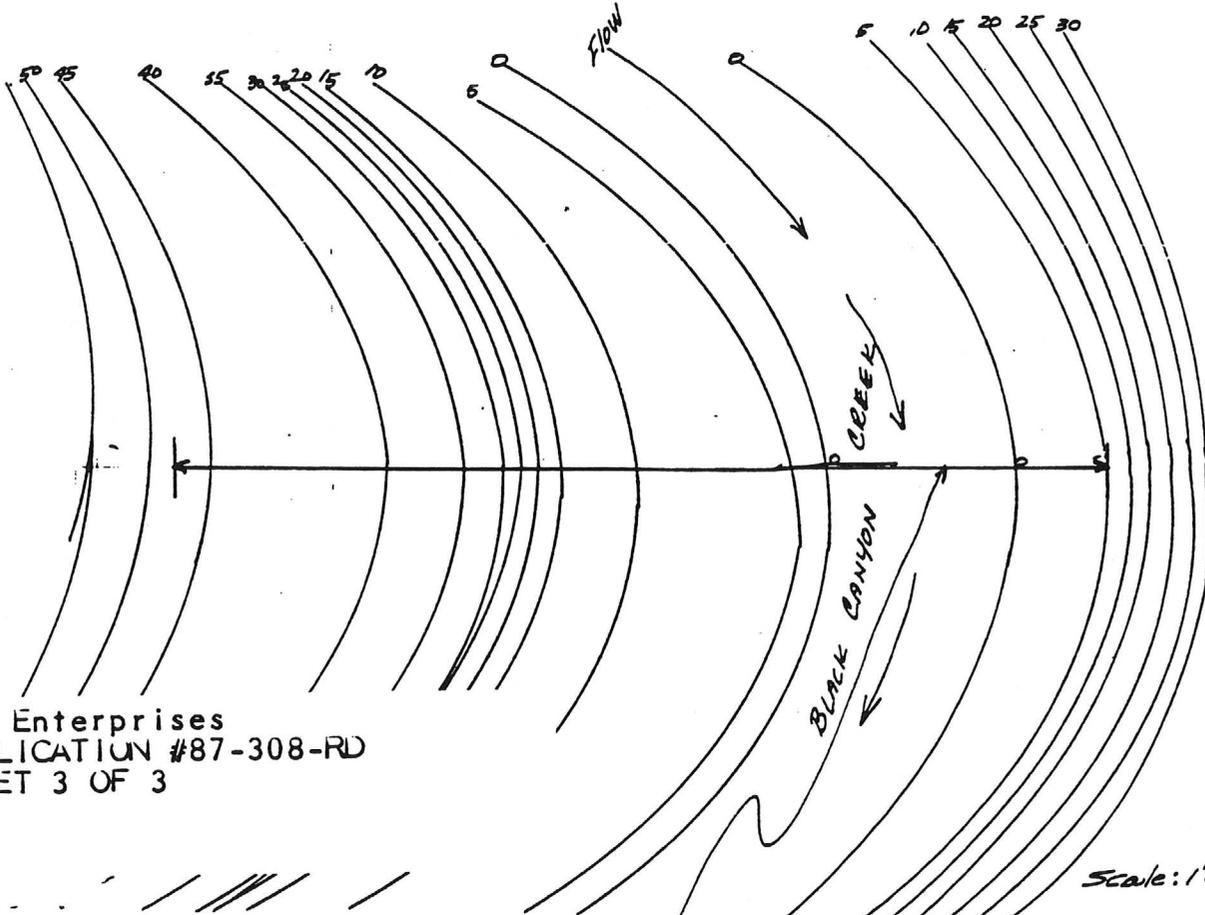


GFW Enterprises  
 APPLICATION #87-308-RD  
 SHEET 1 OF 3

# TYPICAL CROSS-SECTION



# TOP VIEW



GFW Enterprises  
APPLICATION #87-308-RD  
SHEET 3 OF 3

Comments - Report of  
Jay Wilson, Ph.D. ~~Aug. 8, 1973.~~ Aug. 8, 1973.

1. Where is all of the geology information that he says he is going to give and then doesn't? Where is data on what the elemental material is composed of? age of deposit? posture from dips? depth? Is he saying all values in the figures come from the masses he mentioned???
2. His assay reports - Where did he get each sample? How deep were any pits made? Did he take exact amounts of material for each sample - for example - a cubic foot? Are the 5g given for 1 cu ft or 1 sq. ft.

Report of Mrs. E. Gray Ph.D.  
written Apr. 12, 1971?

How does he perceive at all of the Reserve Tonnage? Enough to run a 250 T. mill for 8 years? He should go into a lot of detail on how he measured the ore bodies - otherwise no mining oriented man will accept such wild guesses.  
How does he know that there is high grade ore in veins that turn down vertically?  
Without drilling, this is inferred ore, or one presumed and he should state it. When he talks about ore veins 92 inches - even

Must make sure low - low - ?  
will not fully a phase operation

3. When he says the mining project will be successful. Why ???

4. What is a map showing the sampling operation ?

Note - Atin report is almost worthless -

Jones

think the value here to be discounted down to a manageable with (5 feet) and he should know enough to explain these

from Rep. Jones  
3 down cord ? 22"  
= 15 on Howard group  
Kinnon's

48

48

Geology Reconnaissance  
Report.

NEZONA, INC., MINES AND CLAIMS IN  
VICINITY OF CLEATER, AZ.

jones

DONATED BY MEL JONES ESTATE

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA  
FIELD ENGINEER REPORT

Mine Silver Cord - Ag, Au, Pb, Cu Date June 12, 1961  
District Black Canyon, Greenlee Co. - Yavapai County Engineer Travis P. Lane  
Subject Visit to property May 23, 1961

Property: The property, comprising 10 unpatented mining claims, is located on the east side of Turkey Creek about 1 mile due south of the Golden Turkey Mine and about 5 miles southwesterly by road from Cordes.

Star Route - Bumble Bee, Arizona

Owner: The property is owned by Tom Cleator of Cleator, Arizona, and is leased with option to purchase to A.R. Potts whose operating partners are the Montague Brothers. At the time of visit only Lynn Montague was still active in the group and he and Tom Cleator were working in the mine developing and stoping near the end of the main adit workings.

Description of Mine: The country rock is schist cut by numerous basic dikes. A particularly large black dike coursing in a north northwest direction is traceable on the surface to and beyond the St. John mine and, it is said, through the Iron King property. This dike and other smaller ones appear to be associated with the better ore in the mine. The vein strikes practically E-W and dips south about 20°. The vein is from an inch to 3 ft. wide and seldom more, and its persistent croppings are discernable for a length of several thousand feet. The mine was an early day producer of high grade silver-lead ore with some gold and copper content. No authentic record is available re either its production record nor its history. At one time a small mill operated on the property (circa 1920?), and was abandoned many years ago. Current ore production (which is sulphide ore) is stockpiled for milling at irregular intervals in a small mill on the nearby Snaffle property. The Snaffle and the Silver Xmas mines are controlled by the people who are working the Silver Cord. The Silver Cord had an RFC "gold-silver" loan in the 1930s.

The two principal developments are an old incline shaft and a long adit. The shaft was sunk on the vein many years ago to a depth of about 500'. Later an adit was driven\*in the steep hillslope on the east bank of Turkey Creek. At its end the adit penetrates the large black dike. At a number of places the vein is stoped both above and below the floor of the adit. The projection on slope of the old incline shaft is some 400' east of the end of the adit and apparently somewhat higher than the adit level.

\* (532' on the vein)

Incl # 5

I guess it will be getting  
 too hot pretty soon for you  
 to get out in the field much.  
 I am feeling fine again.  
 I suppose you know how  
 this business is for a  
 while you are covered up  
 with work then a slack  
 spell comes. Your friend  
 Mr. Bain has sent done  
 much this winter. Maybe  
 he is slowing down too.  
 This is one of the days I  
 am covered up so I will  
 quit  
 As ever  
 W.R.C.

W. R. Curry, Assayer  
 14437 Rios Canyon Road  
 El Cajon, Calif. 92021  
 (714) 443-1754

### ASSAY CERTIFICATE

El Cajon, Calif. 3-31-32 19

I hereby Certify that the samples described below, received from  
Melvin Jones  
 assay as follows:

OWNER'S MARK AND SAMPLE	GOLD		SILVER		TOTAL VALUE PER TON	PERCENTAGE OF		
	Ozs. Per Ton	Value Per Ton	Ozs. Per Ton	Value Per Ton		Copper	Lead	Zinc
No 1 Golden Turkey	0 48	62 20	1 52	6 23	68 43			
No 2 " Belt	0 64	82 94	2 16	8 85	91 79			
No 3 Key West	0 20	23 92	0 80	3 28	29 20			

GOLD at \$ 129.60 per oz.  
 SILVER at \$ 4.10 per oz.  
 LEAD at .....c  
 COPPER at .....c

Charges.....

W.R. Curry  
 Assayer

Incl. #1

CHARLES E. GREY, GEOLOGIST

PETROLEUM, MINING, GROUND WATER

RARE MINERALS

2800 WISCONSIN, N.E.

AREA CODE 505 PHONE 298-4443

ALBUQUERQUE, N.M. 87110

Mr. Louis Bourguignon  
411 Columbia St  
Albuquerque, N.M.

Re: NEZONA, INC.

Dear Mr. Bourguignon:

The following is my opinion of your properties and mill equipment.

The groups of claims are immediately outlined in the attached reports by yourself and Mr. Henry Jarvis of Cleator, Arizona. Although they are not geologically oriented, they are accountable and correct. I have not computed total reserves on all of your properties, however there is enough ore to run a 250 ton mill over eight years. During this period of time you will discover, through core drilling, much virgin ore from the excellent geologic structures present on your claims. All of your mines have been developed laterally, just under the surface rocks, to the point where the veins turn down vertically. These are the parent veins which yielded the ore to the surface rocks. I am appalled that no one has shafted downward into these high-grade ore zones. There can be developed, with sound operation, very large amounts of high grade ore from these vertically oriented veins. The following estimates of proven tonnages are based on the following prices of metals: Gold, \$35.00; Silver, \$1.60 / Oz.; Lead, 13.5¢ per pound and Zinc at .15¢ per pound.

1. 1-C and 1-T (Valley Assay, taken by Grey) show:  
.82 Ozs. Gold; 7.10 Ozs Silver; .90% Lead and  
1.8% Zinc. Value per ton is \$47.89.
2. 2-C and 2-T (Valley Assay, taken by Grey) show:  
.20 Ozs. Gold; 4.60 Ozs. Silver; .90% Lead and  
1.90% Zinc. Value per ton is \$22.49.
3. 3-C and 3-T (Valley Assay, taken by Grey) show:  
.80 Ozs Gold; 4.00 Ozs. Silver; .90% Lead and  
2.0% Zinc. Value per ton is \$42.83.

Incl #2

2- Bourguignon, 2-12-71

The three foregoing combinations of assays represent samples taken from the Golden Belt and Turkey Mill Dumps. Over 200 samples are represented by each combination. These samples were panned for metallurgical studies and the cons and tails assayed separately. The combination shows the true value and their average is \$37.77 per ton. If the new process of recovery which you have under option only recovers 80 percent or \$30.11 per ton, your production cost will be \$3.01 per ton or a gross value before taxes of \$26.10. On 400,000 tons in the two dumps, this would be a gross value of \$8,440,000.00.

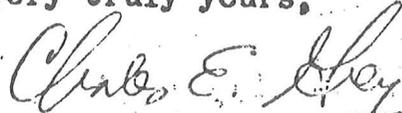
Sample 4-SC represents the high grade vein (22 inches thick) within the mine (Silver Chord) and the Sample 5-RS is the same vein about 610 feet through the hill and on the same vein. The high grade stringer within the 52 inch thick ore vein is very uniform in both cuts. On the inside of the mine the ore runs \$168.60 per ton and on the edge of the hill it is \$292.54 per ton. The assays numbered 1 and 2 on the American Smelting and Refining sheet correlate to the ore vein of 52 inches in thickness and about half-way into the breast of the Silver Chord drift. The Inspiration settlement sheet is from a small stringer within the extremities of the poor ore in the Silver Chord. Skyline Assay number 3 correlates with Valley Assay 5-RS. These assays and settlement sheets show the consistency of the Silver Chord ore.

It should be pointed out that Skyline Assay number 2 correlates to number 3 assay on the American Smelting and Refining sheet. The overall Silver Chord assays represent approximately 160,000 tons of known ore.

From the proof you have on the known ore in the dumps and in the Silver Chord, you should start an immediate milling operation. The profits from the already mined ores will allow you to test by core drilling the very rich Silver Chord, Golden Belt and Turkey vertical veins, none of which have been mined or tested previously and are the source of the already mined ore.

If I can be of service in the future, please advise.

Very truly yours,



Charles E. Gray, Ph.D.

## GOLDEN TURKEY MINE

### 7 Lode Claims

The Golden Turkey Mine consists of 7 unpatented Lode Claims. A drilling program is required to develop the evident ore reserves on this property.

### MINE DUMP

150,000 Tons  
\$20.00 per ton

### MILL TAILING DUMP

250,000 Tons  
\$25.00 per ton

## GOLDEN BELT MINE

### 3 Lode Claims

The Golden Belt Mine consists of 3 unpatented Lode Claims. A drilling program is required to develop the evident ore reserves on this property.

### MINE DUMP

75,000 Tons  
\$20.00 per ton

### MILL TAILING DUMP

125,000 Tons  
\$30.00 per ton

## MEYERS PROPERTY

The Meyers Property consists of 9 unpatented Lode Claims. Geological indications are in evidence to support the theory that this property is the source of mineralization in the Golden Belt and Golden Turkey Mines. A drilling program on this property should develop large reserves of high-grade ore. Surface samples have assayed \$65.73 per ton.

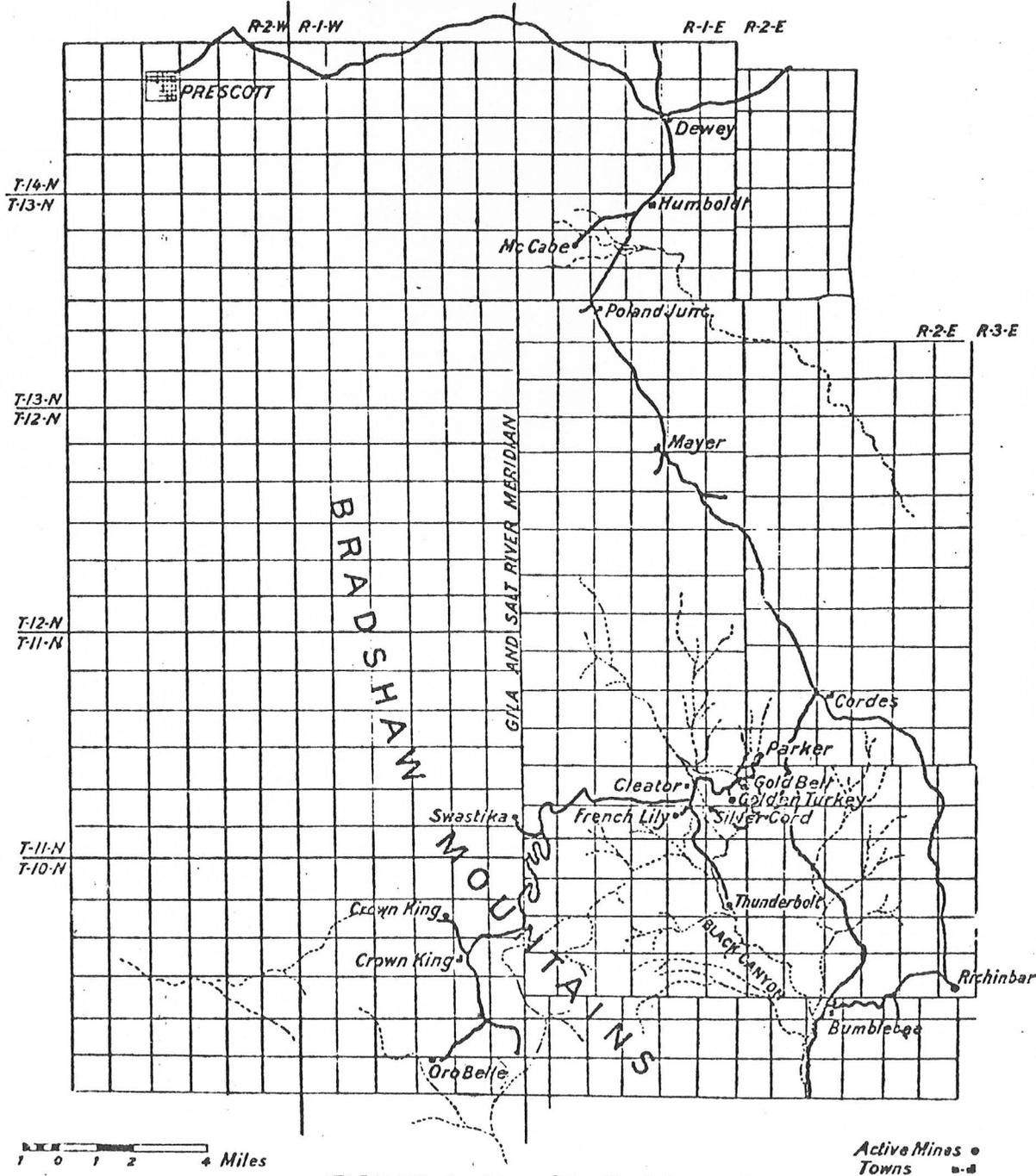


FIGURE 1.- Map of the Black Canyon Region.

# GILA ANALYTIC AND RESEARCH LABORATORY, INC.

**REPORT TO:**

Frank H. McIntosh  
3728 Pleasant Lane  
Bedwell, New York 15760

**LABORATORY NUMBER** Research 011

**DATE RECEIVED** February 27, 1972

**DATE COMPLETED** March 8, 1972

COMPLETE  
ANALYSIS  
OF:

ORE

SOIL

WATER

LEAF  
TISSUE

LEACHING  
SOLUTIONS

HYDROPONIC  
SOLUTIONS

AIR

FERTILIZERS

INSECTICIDES

HERBICIDES

FOOD

URINE

**ANALYSIS REQUESTED:** Seven Samples - Cu, Ag, and Au, Zn, Pb  
R-1, BM-1, AZ-1, Drill, GB-1, LP-1, AC-1  
Concentrates

**CERTIFICATE OF ANALYSIS: Standard Conditions - Atomic Absorption**

	Copper	Silver	Gold	Palladium	Platinum	Lead
R-1	40 ppm	0.00	1.03 oz	0.38 oz	0.00	6 ppm
BM-1	0.340 %	4.8 oz	0.24 oz	0.18 oz	0.00	2.87 %
AZ-1	196 ppm	1.62 oz	1.32 oz	0.42 oz	0.00	0.1148 %
Drill	68 ppm	0.00	0.57 oz	0.24 oz	0.00	180 ppm
GB-1	10.01 %	2.58 oz	0.78 oz	0.84 oz	0.00	0.0364 %
LP-1	32 ppm	0.00	0.66 oz	0.36 oz	0.00	14 ppm
AC-1	4.2 ppm	0.00	1.02 oz	0.24 oz	0.00	22 ppm

*Jay Wilson*  
ANALYST

**BILL TO:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**CHARGES:**

Research 011



SKYLINE LABS, INC.

SPECIALISTS IN GEOCHEMICAL EXPLORATION

12090 WEST 50TH PLACE, WHEAT RIDGE, COLORADO 80033 TEL.: (303) 424-7718

REPORT OF ANALYSIS

Job No. M-315  
October 11, 1969

Mr. Louis Bourguignon  
Cleator  
Arizona 85327

3 Pulp Samples

Item	Sample No.	Au (oz/ton)	Ag (oz/ton)
1.	No. 1	.20	67.
2.	No. 2	.010	10.
3.	No. 3	.076	190.

*C.E. Thompson*

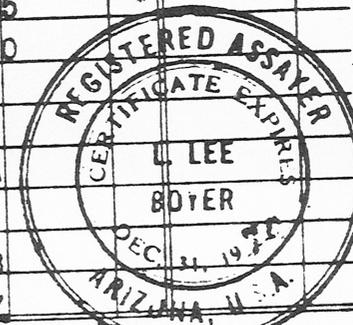
*Charles E. Thompson*  
Charles E. Thompson  
Chief Chemist

**VALLEY ASSAY OFFICE  
AND ORE TESTING LABORATORY**  
MEMORANDUM OF ASSAY

Made for Genreal Mining & Milling Co.

Tempe, Arizona 85281 May 1, 1970

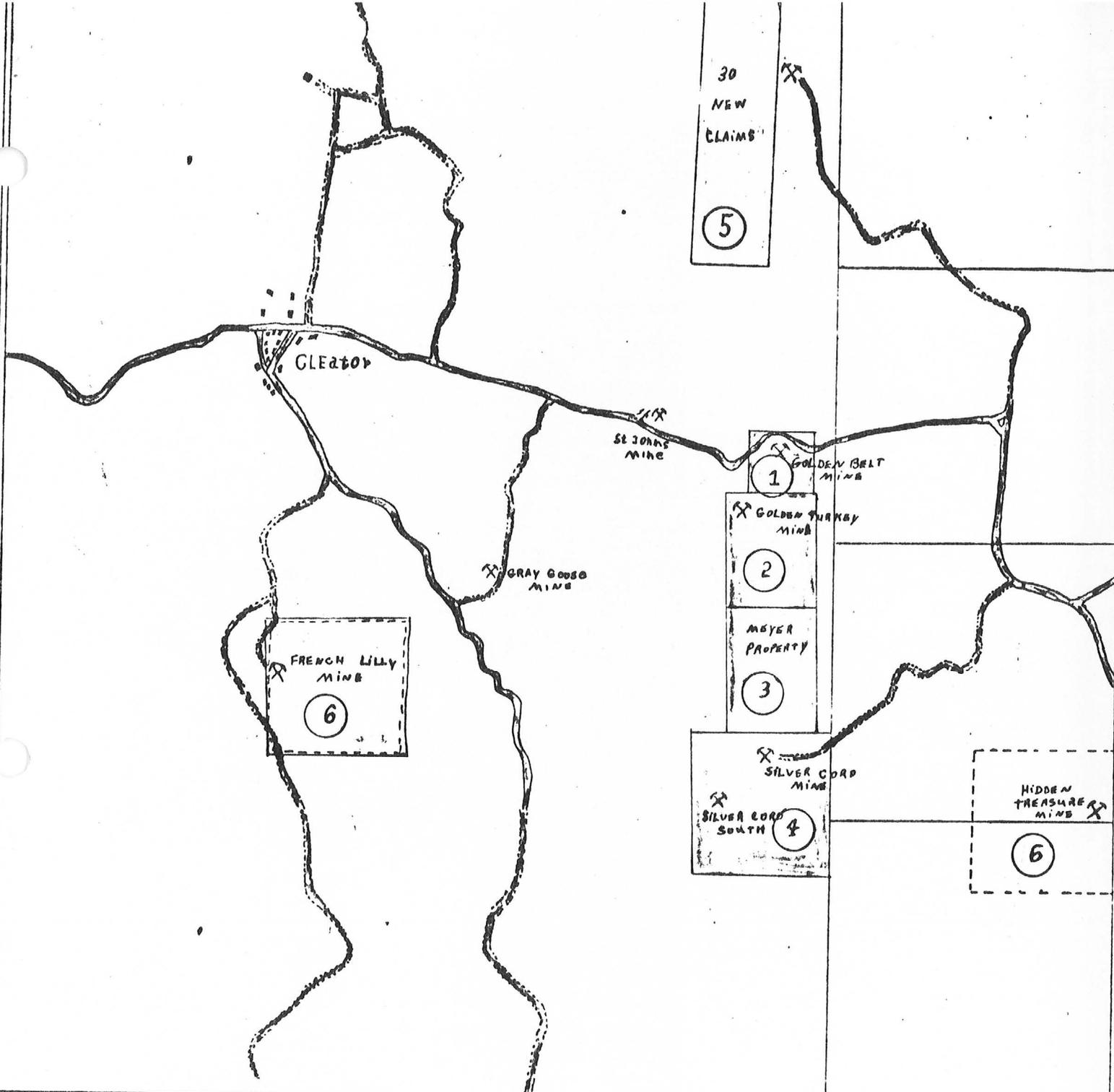
SAMPLE NO.	PER TON OF 2000 POUNDS AVOIRDUPOIS								COPPER, OR			LEAD, OR			ZINC, OR			TOTAL	
	GOLD, <del>PLATINUM</del>				SILVER				AT PER LB.			AT 0.15 PER LB.			AT 0.15 PER LB.				
	AT 35.00 PER OUNCE				AT 2.00 PER OUNCE														
	OZs.	100's	\$	Cts.	OZs.	100's	\$	Cts.	%	\$	Cts.	%	\$	Cts.	%	\$	Cts.	\$	Cts.
1-C	0.	62			3.	90						.5			.85				
2-C	0.	08			1.	80						.4			.75				
3-C	0.	48			2.	40						.3			.90				
1-T	0.	20			3.	20						.4			.95				
2-T	0.	12			2.	80						.5			1.15				
3-T	0.	32			1.	60						.6			1.10				
4-SC	0.	64			61.	20						12.4			4.3				
5-RS	0.	18			174.	10						.4			2.2				
6-SEC	0.	22			4.	20						.6			.85				
REMARKS:																			
7-GBD	0.	46			2.	40						10.2			4.8				
8-TD	0.	12			2.	30						.6			2.7				



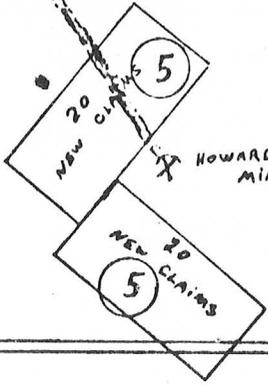
BY [Signature] Registered Assayer.

NO. \_\_\_\_\_

CHARGE \$ 121.00 Pd.



PROPOSED NEZONA, INC. PROPERTIES		
1	GOLDEN BELT	LEASE - PURCHASE
2	GOLDEN TURKEY	LEASE - PURCHASE
3	MEYER	LEASE - PURCHASE
4	SILVER CORD	LEASE - PURCHASE
5	NEW CLAIMS	TO BE FILED
6	SHOULD BE CLAIMED AND FILED	
R.D.F. 4/1/78		



## BLACK CANYON DISTRICT

The Black Canyon District comprises an area about 18 miles long by 8 miles wide that extends between the eastern foot of the Bradshaw Mountains and the Agua Fria River, from the vicinity of Cordes on the north to the Maricopa County boundary on the south.

Here, a northward-trending belt of sedimentary Yavapai schist, about 2 miles wide, is intruded on the east and west by Bradshaw granite and on the east by a northward-trending strip of diorite. These formations floor a former valley and hilly pediment that is covered on the east by volcanic rocks and has been deeply dissected by the southward-flowing, meandering drainage system of Black Canyon. The elevation of the district ranges from 2,000 to 4,000 feet above sea level.

Lindgren groups the gold-bearing veins of the Black Canyon district into two classes: (1) Pre-Cambrian quartz veins, and (2) quartz veins which dip at low angles and appear to be genetically connected with younger dikes of rhyolite-porphry.

The pre-Cambrian veins, according to Lindgren, are of a glassy quartz with free gold and some sulphides. They have furnished most of the gold for the placers of the district.

## BLACK CANYON MINES

## GOLDEN TURKEY MINE

The Golden Turkey mine, under lease-purchase option by Nezona, Inc., is on the west side of Turkey Creek, near the eastern foot of the Bradshaw Mountains, at an elevation of about 3,000 feet. Via the Black Canyon Highway, the property is about 15 miles from Mayer, the nearest railway shipping point.

Here, pre-Cambrian schist strikes northward and dips almost vertically. The vein, which strikes northeastward and ranges in dip from  $30^{\circ}$  to less than  $10^{\circ}$  SE., occupies a fissure zone that is probably due to thrust faulting. As exposed, the vein ranges from a few inches to more than a foot in width and in places forms a line, milky to clear, glassy quartz together with rather abundant irregular masses and disseminated metacrysts of pyrite.

In 1933, the Golden Belt mill was working the ore and monthly shipments were two car loads of concentrates containing gold, silver, some zinc and a little copper. Several shipments of smelting ore also were made.

In 1934, developments consisted of a 500 foot inclined shaft and approximately 2,000 feet of workings. Most of the ore mined came from below the 350-foot level, particularly where the vein flattens in dip. The oxidized zone extends to a depth of approximately 250 feet on the incline.

At the present time the Golden Turkey Mine consists of seven unpatented mining claims. The mine is full of water and is connected with the Golden Belt Mine underground.

The mine dump of the Golden Turkey consists of about 100,000 tons of material containing values of about \$20.00 per ton in gold and silver. Lead, zinc and some of the platinum group metals are present also.

The mill tailings consist of about 250,000 tons of material containing values of about \$25.00 per ton in gold and silver. Also some lead, zinc, platinum and platinum group metals are present.

## GOLDEN TURKEY MINE (cont.)

There are excellent geologic structures on all of the claims where, thru core drilling, a large tonnage of ore can be developed. All of the mine has been developed laterally, just under the surface rock, to the point where the veins turn down vertically. The vertical vein deposition is contacted on the west side by an intrusive diorite dike, and is the parent vein. At the present time, no one has drilled or shafted downward into these vertical veins. There can be developed, with sound operation, very large amounts of high grade ore from these vertically orientated veins.

The Golden Turkey property has more than adequate water for any type of operation and is accessible by a county maintained road in very good condition. Also, power lines are on the property and available for the operation.

## GOLDEN BELT MINE

The Golden Belt mine, under lease-purchase by Nezona, Inc., is a few hundred feet north of the Golden Turkey Mine. Its original location is reported to have been made by George Zika in 1873. Production prior to 1916, according to the local press, amounted to several hundred tons of ore of which part was shipped and part was milled. In 1931, 134 tons of concentrates from 1,345 tons of ore were produced, and 107 tons of smelting ore were shipped. Operations were continued through 1932 and 1933 and during 1933, ore from the Golden Turkey mine also was treated in the mill.

The geology of this mine is similar to that of the Golden Turkey. The prevailing rocks consist of pre-Cambrian schist, intruded by dikes of siliceous to basic porphyry. The Golden Belt vein, which strikes approximately N. 60° E. and dips from 10° to 23° SE., occurs within the fissure zone of a probable thrust fault. It is stated the vein, as exposed, ranges from a few inches to about 3 feet in width and carries from 1/4 ounce to 2 ounces of gold and from 1 to 10 ounces of silver per ton. In the upper portions of the mine, above the water level, the vein contains oxides of iron and lead and some free gold. Below the water level or 50 feet below the surface, galena and pyrite predominate, and the gold occurs mainly in the galena.

In January, 1934, the mine was developed by an irregular, inclined shaft, reported to be 800 feet in length, with several hundred feet of drifts and stopes. As the workings extended under Turkey Creek, considerable water was encountered.

At the present time the Golden Belt Mine consists of three unpatented mining claims. It has a past production of well over 100,000 tons of ore as evidenced by the now accessible and visible stopes and dumps as well as mill tailings. The ore is of primary mineralization type, fairly complex, consisting of gold, silver, zinc, galena and some platinum group metals. The inclined shaft is 2700 feet in length at a 15° incline, exposing a blanket vein and has now been filled with water to about 180 feet vertical depth from the surface.

The mine dump contains about 25,000 tons of material with values of about \$65.00 per ton in gold, silver, lead, zinc and platinum group metals.

The mill tailings dump contains about 100,000 tons of material containing values of about \$70.00 per ton in gold and silver. Also some lead, zinc and platinum group metals are present.

The stagnant water in the mine carries minerals both in suspension and solution. With proper filtration for the colloidal matter and ionic exchange, the minerals in suspension and those in solution could be removed.

## MEYER PROPERTY

The Meyer property consists of nine unpatented claims under lease-purchase by Nezona, Inc., and joins the Golden Turkey on the south. The geology of the Meyer Property is basically the same as the Golden Turkey, with intersections of intrusive dikes of siliceous to basic porphyry with a southwest-ward trending thrust fault, however there has been no amount of development work done on the property. Ore outcrops on the property assayed \$65.67 per ton in gold and silver. Large amounts of placer material and vein outcrops are in evidence on the property and the values in silver seem to increase sharply toward the southern end of the property. An extension of the Golden Turkey vein contacts the property on the north, and cross-veining is intersected by Turkey Creek.

Water, electrical power, and roads are on the property.

## BLACK CANYON PLACERS

Placer gold occurs along Black Canyon, which upstream branches into Turkey, Poland, Bumblebee, and several other creeks and southward drains into the Agua Fria River. The gold particles are generally flat and fairly coarse. Black sand occurs abundantly in the gravels and adheres to and contains smaller gold particles.

During the cool portion of the 1932-33 season, about 25 men, mostly transients, were engaged in small-scale placer mining in Black Canyon, chiefly between Arrastre Creek and Cleator, and to a small extent in American Gulch and Mexican Gulch. Most of the concentrating was done with rockers and sluices, and only a small amount with dry washers. The largest nugget found during that time came from American Gulch and was valued at \$14.38.

Recent tests in the area have disclosed values in the placer gravels ranging from a few cents to as much as \$90.00 per yard. Heavy rains have caused several flash floods in the Turkey Creek vicinity and black sand concentration is abundant in the resulting sand bars. Nezona, Inc. has conducted a claims program in the area and now owns claims on the placer areas of any substantial size.

Dr. Jay Wilson of Gila Analytic and Research Laboratory, Inc. was contracted and paid in advance on June 28, 1973 to conduct a sample and assay report on the various placer properties of Nezona, Inc. Dr. Wilson finished his assay report the early part of September, 1973 and the sample location maps and claims maps are a part of this report.

\* Values referred to on the Golden Turkey, Golden Belt Mine and Meyer Property are based at \$35.00 Per ounce gold and \$1.60 per ounce silver. Information for this report was obtained from Bulletin 137, Arizona Bureau of Mines, Oral communication with local residents, personal observation, and through the efforts of Charles E. Grey, Ph. D.

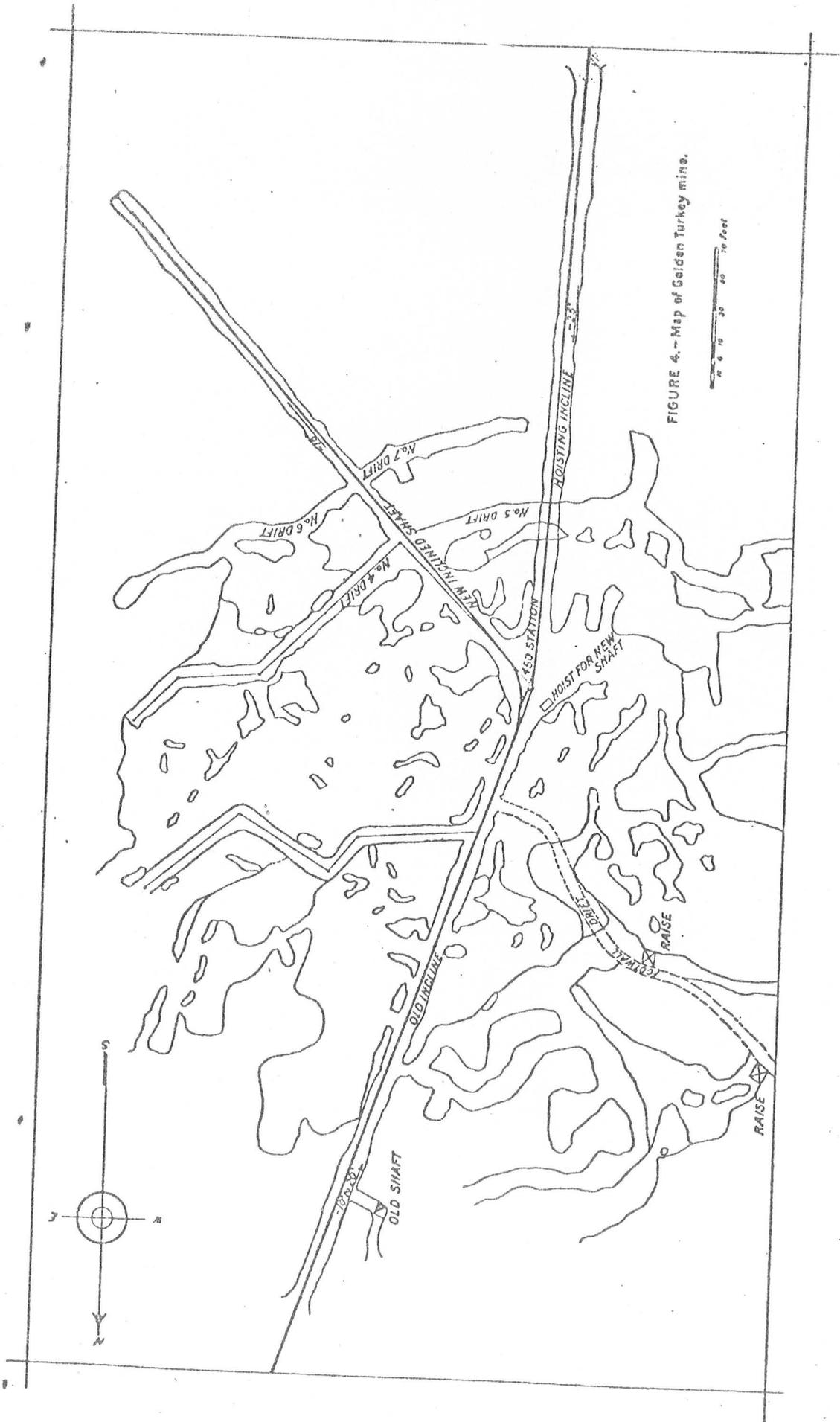


FIGURE 4. -- Map of Golden Turkey mine.

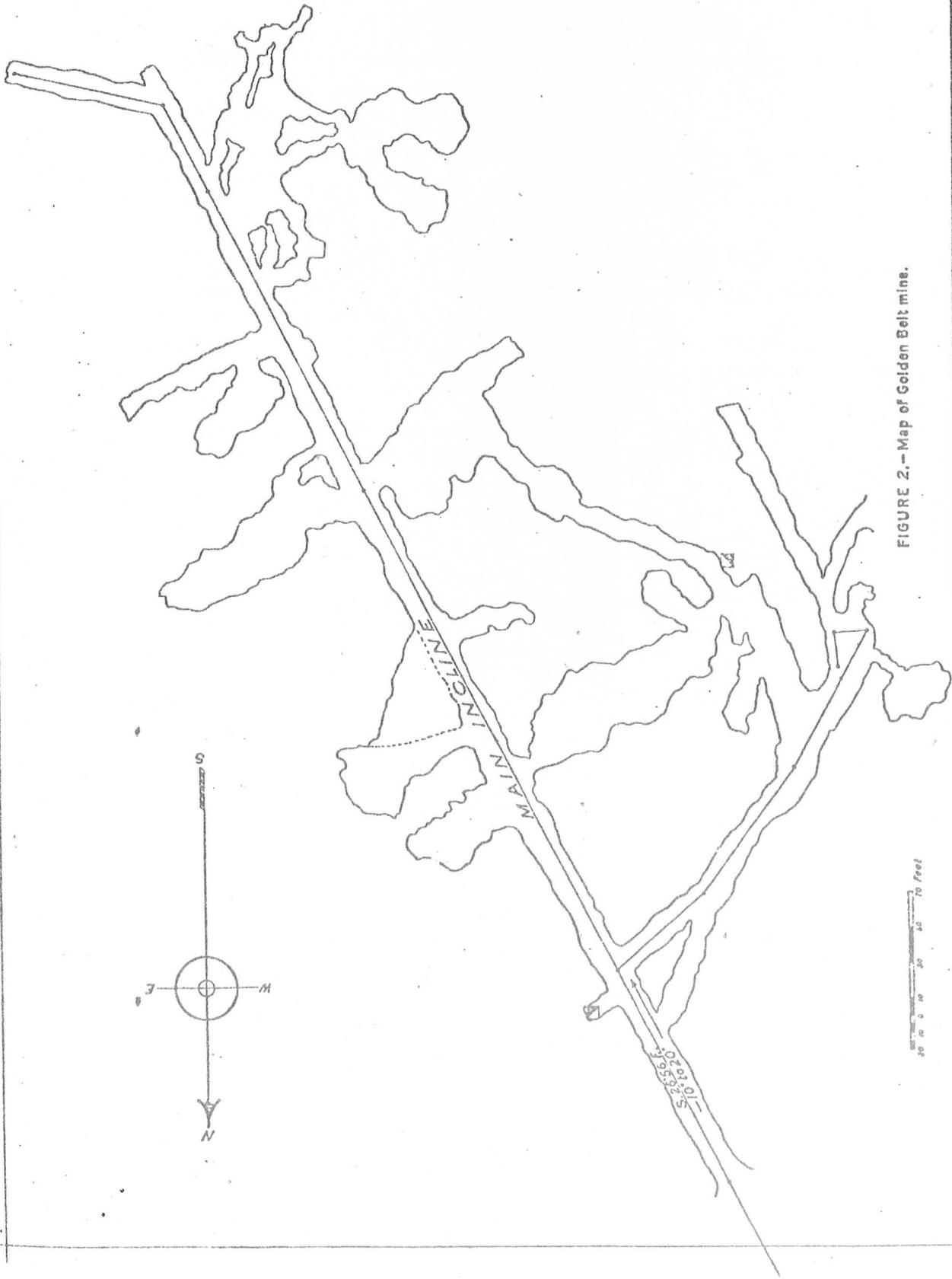
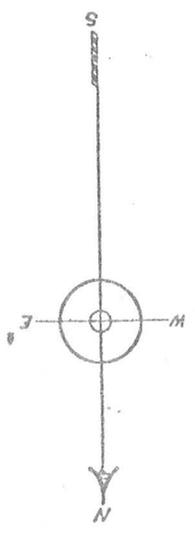
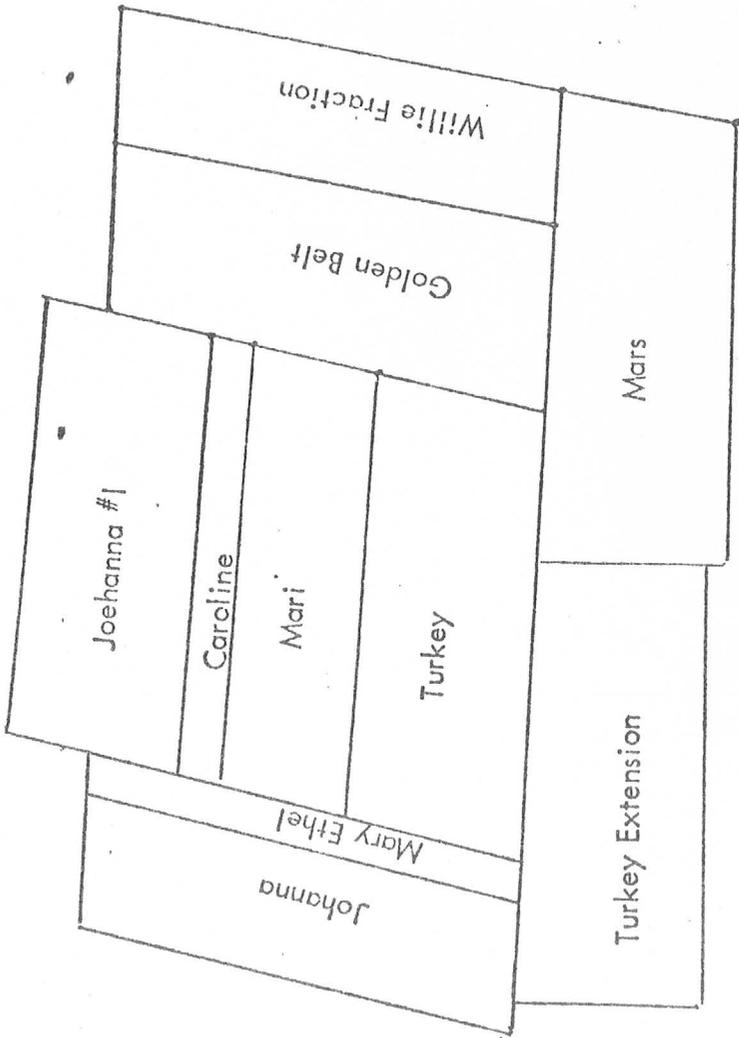


FIGURE 2.- Map of Golden Belt mine.





NEZONA, INC.			
SCALE:	APPROVED BY:	DRAWN BY:	REVISED:
Golden Belt and Golden Turkey			
T-10-N RI-E			DRAWING NUMBER

# GILA ANALYTIC AND RESEARCH LABORATORY, INC.

August 8, 1973

COMPLETE  
ANALYSIS  
OF:

Nezona, Inc.  
3043 West Charter Oak Road  
Phoenix, Arizona 85029

ORE

SOIL

WATER

LEAF  
TISSUE

LEACHING  
SOLUTIONS

HYDROPONIC  
SOLUTIONS

AIR

FERTILIZERS

INSECTICIDES

HERBICIDES

BLOOD

URINE

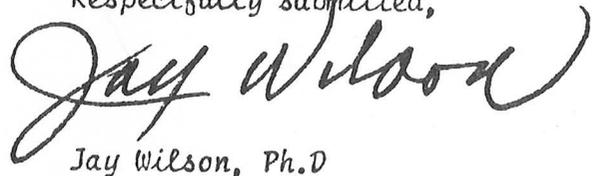
Attention: Louis Bourguignon  
Russell Owen Farr  
Dr. Jack R. Vinson

Gentlemen:

Herewith is our report on the commercial possibilities of the Nezona, Inc. mining properties; Black Canyon Placers.

We appreciate your confidence in entrusting this study to us. We look forward to working with you again.

Respectfully submitted,



Jay Wilson, Ph.D

### *A Placer Deposit*

*A mass of gravel, sand, or similar material resulting from the crumbling and erosion of solid rocks and containing particles or nuggets of gold, platinum, tin, or other valuable minerals, that have been derived from rocks or veins. (1)*

(1) U. S. Geological Survey Bulletin Number 613, page 184

Scope & Purpose

During the first weeks of July, 1973, the undersigned visited the Black Canyon area which is the subject of this report. There were three different trips that consisted of certified sampling of the area. Two additional trips were taken in which the geology of the area was considered. During the last week of July, two more trips were also made to determine the source of this placer material. It should be noted that these claims have been visited by this laboratory for another client any number of times in the past two years. This report deals with and will cover only the placer deposits of the area.

A placer is a deposit brought into being by nature's forces. It is only as good or as bad as that material with which these forces have to work. Therefore, this paper will deal with possible sources of these deposits as well as with the nature of the deposits themselves.

This report will establish that NEZONA, INC., has a workable, commercial placer with ideal year-round working conditions.

For a placer deposit to exist, there are many conditions that must prevail. Veins must be of that certain characteristic that will allow their easy breakdown by nature. Values in these veins must be in their native form, or in such a form that they can be reduced. Weather conditions and the pH of the formations are important factors in causing erosion of these veins and their values.

The theory that has long been accepted that a placer is fed by some huge mother lode is erroneous. Most placers come into existence being fed by extremely small veins which in themselves could never be mined commercially, but because of their numbers alone can be concentrated into placer deposits of commercial value.

A lengthy summary of the fundamental geology of this area is not considered warranted inasmuch as a detailed discussion is available in all of the references cited in this paper. This section will cope not only with the necessary geology but with the form of the free values as well as with the area's past production.

Placers of Deposit

The geology of a placer deposit itself is, as a general rule, not related to the values found. The values, as in this case, have traveled some distance before being concentrated in their present location. Therefore, the area drained by the placer must be considered from a geological standpoint to give credence to this deposit.

The area being considered in this report is the Black Canyon District. This district is made up of an area approximately 18 miles long by 8 miles wide. The western boundary is the Bradshaw Mountains with the Agua Fria River its eastern side. The Cordes Area forms the northern end and the Maricopa County line forms the southern boundary.

Inasmuch as the Black Canyon District has and is being fed from the west, the only geology to be considered in this report will be that of the Bradshaw Mountains. This report will encompass mining properties in the Bradshaws and those properties on their eastern slopes that do and could contribute to the Black Canyon deposit.

The Blue Bell Mine is approximately four miles south of Mayer and at an altitude of 4500' above sea level. The deposit is contained in the Yavapai schist and the ore body is essentially a silicified and mineralized zone that conforms to the schist. The ore body contains principally copper, but there is also free gold and silver.

The Golden Turkey Mine is near the eastern foot of the Bradshaw Mountains at an elevation of about 3000' above sea level. Via the Black Canyon Highway, the property is about fifteen miles from Mayer. On this property the pre-Cambrian schist strikes northward and dips almost vertically. The vein occupies a fissure zone that is probably due to thrust faulting. As exposed, the vein ranges from a few inches to more than a foot in width and in places forms a branching lode several feet wide. The vein filling consists of very coarse crystalline, milky to clear, glassy quartz together with rather abundant irregular masses and disseminations of pyrite, galena, and sphalerite. The gold accompanies the sulphides, particularly the pyrite. This property produced 2983 ounces of gold and 61,956 ounces of silver in the single year of 1935.

The Golden Belt Mine is a few hundred feet north of the Golden Turkey. The geology of this mine is similar to that of the Golden Turkey. This property has produced over \$1,000,000 in gold and over \$50,000 in silver.

The Silver Cord Mine is a mile southeast of Cleator. During the period of one lease, 500 tons of ore was shipped from the property containing 314 ounces of gold and 14,644 ounces of silver.

The Howard Copper is sixteen miles southeast of Cleator. The property consists of twenty foot wide mineralized material in chloritic schist. The values are in free gold and silver, and copper.

The Howard Silver Mine is about one mile from the Howard Copper Mine. A flotation mill was built on the property for milling a quartz vein carrying galena and sphalerite with free gold and silver.

The French Lilly is about two miles southwest of Cleator. Records show that the best ore shipped from this mine contained 50% zinc and 1 1/2 ounces of gold. The ore shows a filled quartz vein with comb structure.

The Thunderbolt Mine is located at the intersection of Poland and Turkey Creeks. The ore consists of a quartz vein that occupies a fissure in the Yavapai schist. The values are in lead, zinc, free gold and silver.

The Jubilee, St. John's, Gray Goose, Bill Arp, Maggie, Algonquin, Nigger Brown, Blanchiana, the Gillespie, and hundreds of unnamed prospects, as well as the properties described above contribute, on a day to day basis, to the build-up of these Black Canyon area placers.

Gold was discovered in Yavapai County during 1862-1863 by two expeditions. One of them, guided by Pauline Weaver and including Major A. H. Peeples, located the Rich Hill Placers. While the other party, headed by Captain Joseph R. Walker, found placer and lode gold deposits in the Lynx Creek, Hassayampa, the Big Bug, Groom Creek and Granite Creek areas. Fifteen or twenty years earlier both Weaver and Walker had extensively trapped in Arizona and probably had become aware of areas favorable for prospecting.

On May 10, 1863, the Walker party organized the Pioneer Placer Mining District to include certain portions of the Oolkilsipava River and its tributaries. A month later it was extended to the Verde River on the east and to the divide of the river Hassayampa and Antelope Creek on the west, and to include the Agua Fria River and its Tributaries.

Using the crudest of equipment, still, the values of production from the Yavapai County gold placers, prior to 1900, is conservatively estimated at \$24,000,000.

Investigation of the title to this property is not in the province of this report.

The owners of the property have provided leases, location notices and maps of their holdings. They are included in this report. The following claims are recorded in the Yavapai County Court House in Prescott, Arizona. Also included in this list are two mineral leases. It should be stated that these leases will be submitted with this report only at the discretion of the owners.

Placer - 480 Acres

Turkey 1	Poland 1	Snoopy 1	Blue Turkey 1	Ojos Bonitos 1
Turkey 2			Blue Turkey 2	Ojos Bonitos 2
Turkey 3			Blue Turkey 3	Ojos Bonitos 3
Turkey 4			Blue Turkey 4	Ojos Bonitos 4
			Blue Turkey 5	Ojos Bonitos 5
			Blue Turkey 6	Ojos Bonitos 6
				Ojos Bonitos 7
				Ojos Bonitos 8
				Ojos Bonitos 9
				Ojos Bonitos 10
				Ojos Bonitos 11

All of the owners are cooperating in matters involving the legal conveyance of these holdings. We sincerely wish to express our appreciation for all the aid this group has freely given us. There appears to be no problems on this property known to the writer.

Climate and Environment

Climatic conditions in the area are very nearly ideal and allow for year-round mining.

Road accessibility is good.

Adequate water can be developed for year-round mining.

There is absolutely no useable timber for mining purposes on the property.

## Assay Reports and Values

Certified assays given by this firm are handled in a special way. The samples must be and are cut by a member of this firm, and no one but the analyst is allowed to handle these samples until the assays are completed. The analysis' are run on three different basis ---

Fire  
Wet Chemistry  
Atomic Absorption

If there appears to be any discrepancy in the results of these procedures, the samples are then subjected to X-Ray Analysis. The final results are based on extractable metal not on theoretical values. The reports are given in ounces per ton, rather than in dollar value. This has become necessary because of the worlds' metal market fluctuation.

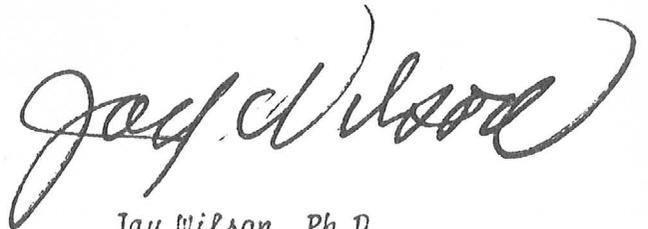
Certified assay reports are included. The samples are numbered on the maps and also indicate the location of the area in which these samples were cut.

No definite estimate of mining yardage can be provided without a detailed survey of the property. However, on the basis of sight examination, it is reasonable to predict a lifetime operation at maximum production of 1500 cubic yards per day. Closer estimates of proven reserves can be made only following a plane table survey of the property.

In addition to a lifetime of proven reserve, the future potential of the property may be enhanced by indication that the price of gold may be increased further. There is considerable agitation before Congress at the present time to advance the price of gold, as well as, to make possible the legal ownership of gold by U. S. Citizens.

Providing that it has proper supervision,  
there is no reason why this Black Canyon  
mining project should not be successful.  
Efficient operations and high recovery  
rates, if maintained, may be expected to  
produce handsome returns to any investor.

This is a good property.

A handwritten signature in cursive script that reads "Jay Wilson". The signature is written in dark ink and is positioned above the typed name and date.

Jay Wilson, Ph.D  
August 8, 1973

CERTIFIED SAMPLING

GILA ANALYTIC AND RESEARCH LABORATORY, INC.  
Nezona, Inc., (Russell Farr, Louis Bourguignon, Dr. Jack R. Vinson)  
3043 West Charter Oak, Phoenix, Arizona 85029

COMPLETE ANALYSIS OF:	Sample	Bead Weight	Fire Assay Gold	Atomic Absorption Determinations		
				Gold	Silver	Platinum
	1	3.52 mg	0.0338 oz	0.0412 oz	0.0246 oz	0.0011 oz
ORE	2	5.16	0.0494	0.0501	0.0531	0.0009
SOIL	3	4.81	0.0428	0.0463	0.0486	0.0012
WATER	4	1.81	0.0172	0.0189	0.0341	0.0006
LEAF TISSUE	5	2.31	0.0224	0.0241	0.0182	0.0009
LEACHING SOLUTIONS	6	1.03	0.0092	0.0111	0.0012	Trace
HYDROPONIC SOLUTIONS	7	5.17	0.0482	0.0496	0.0612	0.0015
AIR	8	2.48	0.0232	0.0263	0.0316	0.0007
FERTILIZERS	9	4.36	0.0372	0.0381	0.0472	0.0010
INSECTICIDES	10	2.02	0.0192	0.0191	0.0092	0.0008
ICIDES	11	0.61	0.0048	0.0061	0.0006	Trace
BLOOD	12	4.12	0.0388	0.0439	0.0521	0.0009
URINE	13	13.01	0.1190	0.1201	0.0961	0.0018
	14	17.41	0.1540	0.1761	0.1243	0.0013
	15	13.32	0.1236	0.1309	0.1812	0.0016
	16	7.08	0.0648	0.0803	0.0863	0.0009
	17	4.16	0.0370	0.0399	0.0241	0.0006
	18	4.42	0.0426	0.04307	0.0502	0.0006
	19	8.36	0.0776	0.0862	0.0517	0.0011
	20	9.20	0.0802	0.0904	0.0919	0.0012
	21	4.96	0.0328	0.0387	0.0241	0.0008
	22	4.78	0.0324	0.0363	0.0461	0.0008
	23	10.76	0.0975	0.1021	0.1097	0.0012
	24	4.97	0.0304	0.0383	0.0231	0.0004
	25	17.82	0.1500	0.1701	0.1303	0.0013
	26	18.32	0.1640	0.1732	0.1007	0.0015

*Latest Procedures in Instrumental Analysis*

BLUE TURKEY PLACER CLAIMS

6 CLAIMS - 120 ACRES

4,800,000 Yards - 7,200,000 Tons

OJO'S BONITOS PLACER CLAIMS

11 CLAIMS - 240 ACRES

20,000,000 Yards - 30,000,000 Tons

TURKEY PLACER CLAIMS

4 CLAIMS - 80 ACRES

1,000,000 Yards - 1,500,000 Tons

POLAND PLACER CLAIM

1 CLAIM - 20 ACRES

500,000 Yards - 750,000 Tons

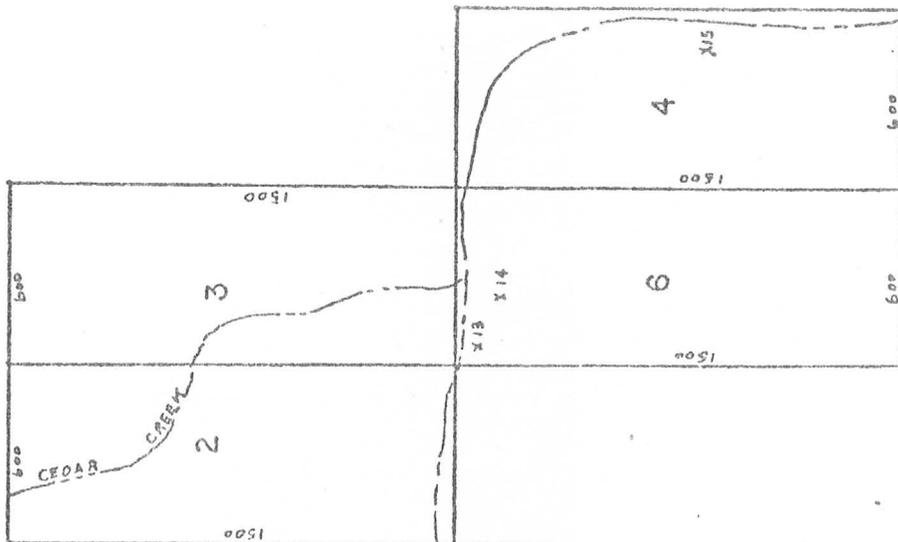
SNOOPY PLACER CLAIM

1 CLAIM - 20 ACRES

500,000 Yards - 750,000 Tons

NAME OF CLAIMS	NO. OF CLAIMS	ACRES	TONS	VALUE PER TON	COST PER TON	RECOVERABLE VALUE	
Blue Turkey	6	120	7,200,000	\$13.72	\$0.50	\$82,656,000.	
Ojo's Bonitos	11	240	30,000,000	2.90	0.50	69,600,000.	
Turkey	4	80	1,500,000	5.44	0.50	6,525,000.	
Poland	1	20	750,000	6.29	0.50	3,772,500.	
Snoopy	1	20	750,000	12.09	0.50	7,252,500.	
<b>TOTAL</b>	<b>23</b>	<b>480</b>	<b>40,200,000</b>			<b>\$169,801,000.</b>	

<b>NEZONA, INC.</b>		
SCALE:	APPROVED BY:	DRAWN BY:
DATE:		REVISED:
<b>PLACER CLAIMS ESTIMATE</b>		
		DRAWING NUMBER:



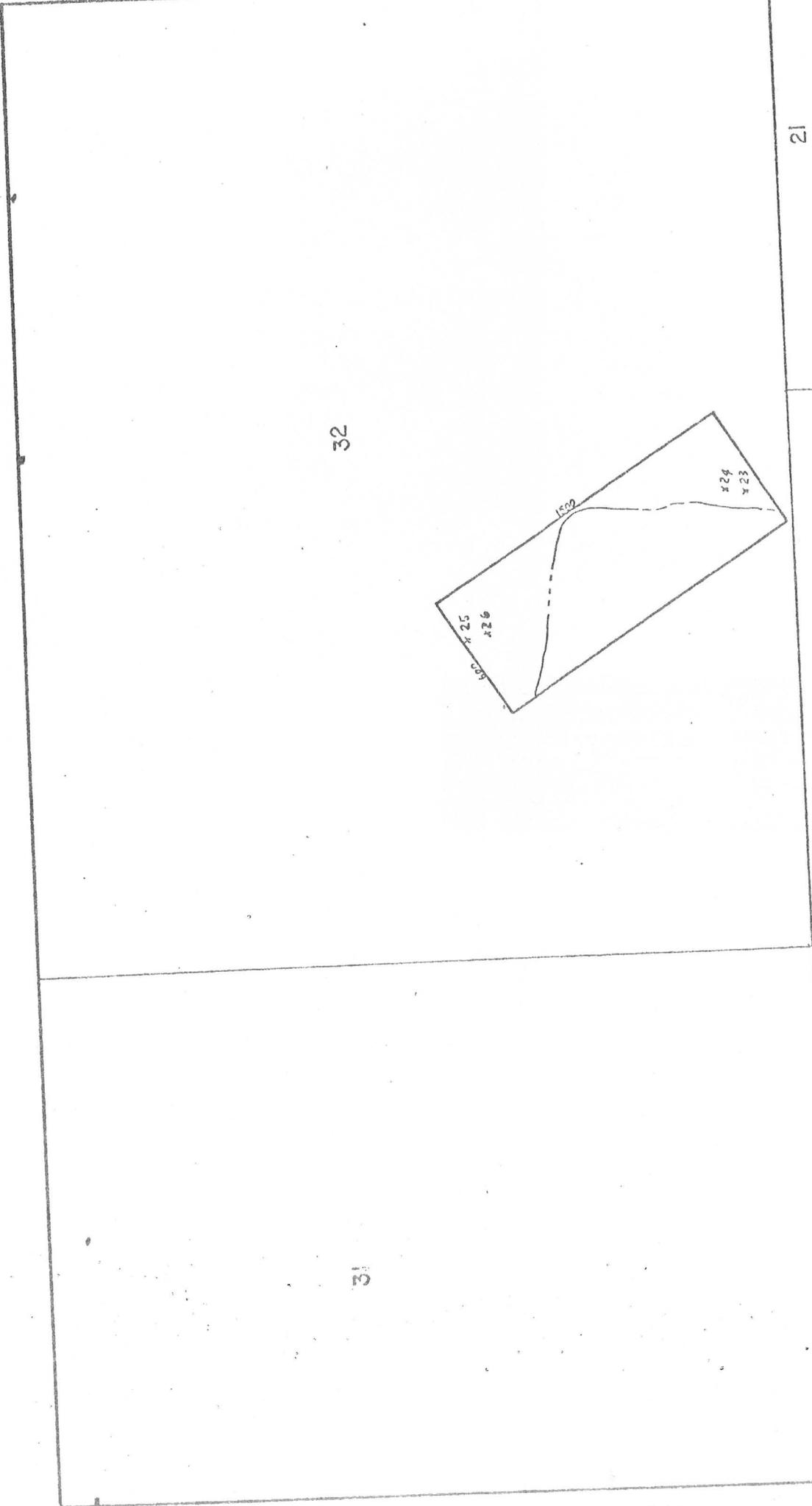
NEZONA

SCALE: 1" = 660'  
 APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 REVISION: \_\_\_\_\_

BLUE TURKEY CLAIMS

PROPERTY NUMBER





32

31

21

REVISIONS	
NO	DATE
1	
2	
3	
4	
5	

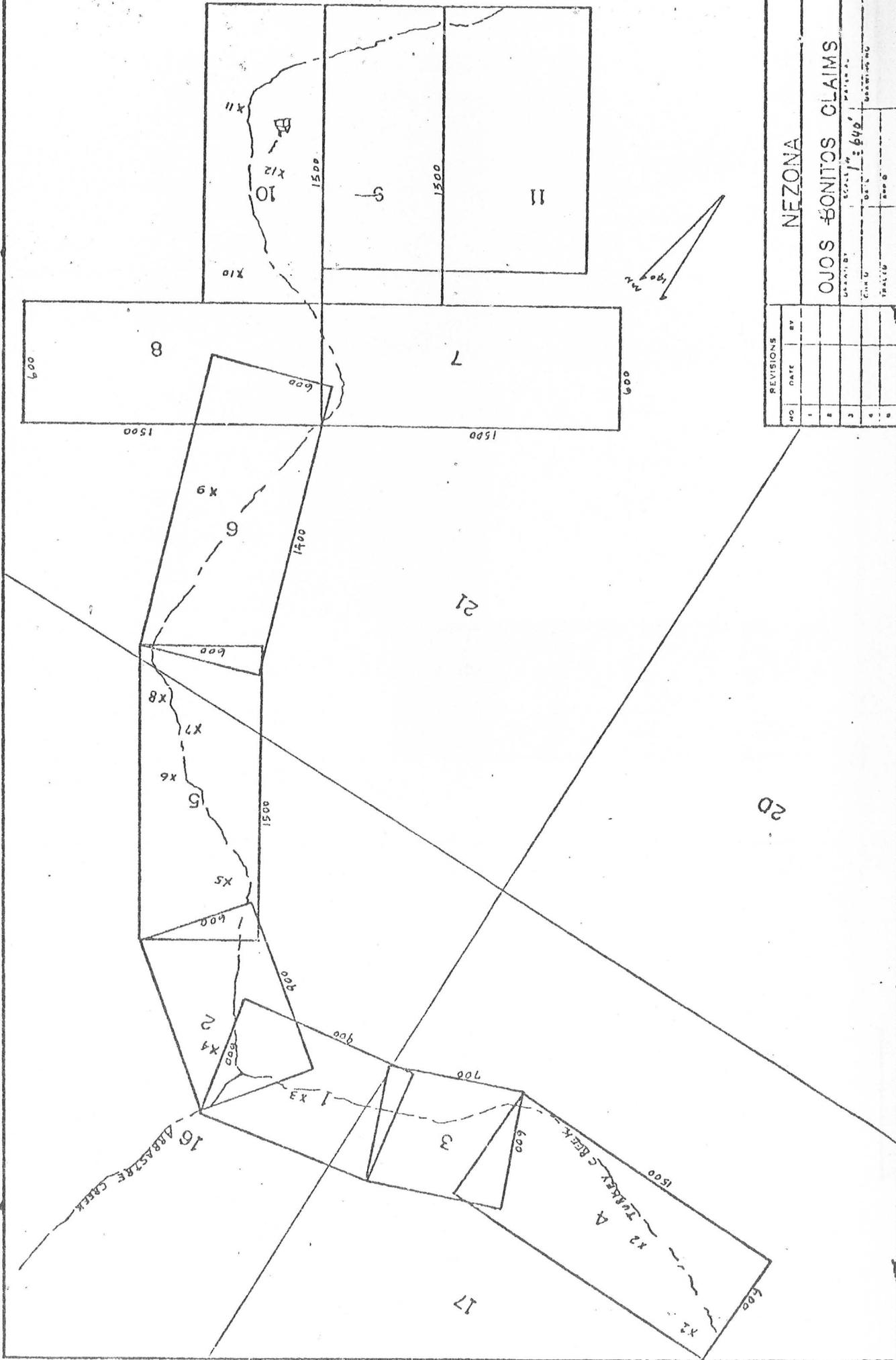


NEZONA

SNOOPY NO. 1

SCALE 1" = 640'  
 DRAWN BY DATE  
 CHECKED DATE  
 TYPED DATE

20



REVISIONS	
NO	DATE BY
1	
2	
3	
4	
5	

NEZONA

OJOS BONITOS CLAIMS

Surveyed by: [Signature]  
 Date: [Date]  
 Scale: [Scale]  
 Section: [Section]

ELVIN H. JONES

Mining Geologist

Box 1, Montello, Nevada 89830

5 April 1976.

MHJ/j

RECONNAISSANCE GEOLOGICAL SURVEY OF THE NEZONA, Inc., GROUPS OF  
LODE AND PLACER CLAIMS NEAR CLEATER, AZ. BRADSHAW MTNS. & BLACK  
CANYON AREA.

At the direction of Mr. Howard S. Gable, Box 946, Kansas City, Mo. 64141, the undersigned, assisted by Mr. Robert Ollinger, Yarnell, Az., and accompanied by Mr. Russell Farr III, proceeded to the Nezona properties in the vicinity of Cleater, Az, Bradshaw mountains, and Black Canyon Mining District, on March 17, 1976. This was for the purpose of making a geological reconnaissance survey of the Nezona holdings, which includes the Golden Turkey, Golden Belt and Silver Cord mines and the Black Canyon area placer claims, and other properties. It is understood that Nezona, Inc., Mr. Russell Farr II, (President) has an office at 1236 E. Northern, Phoenix. Mr. Farr's home address is 3043 W. Charter Oak Rd., (Phoenix) - Ph 602-942-1985. This company owns the claims, or has leases with option to buy (mines) on other properties. During the initial visit with Mr. Farr II, he gave the writer various old reports and maps, but Mr. Farr III accompanied and directed the group to the properties. In this rapid visit, the various placer claims were pointed out, and a surface examination was made of the Golden Turkey, Golden Belt mines, dumps, tailing piles, old mill, and new pilot mill (for small placer operation). Samples were taken from the mentioned dumps to be tested for gold and silver. Time did not permit the examination of other listed (or unlisted) properties (It would take several days to do this).

The properties are:

LODE

Golden Turkey mine (7 claims)  
Golden Belt mine (3 claims) (also has mill)  
Meyer property (lode?) (9 claims)  
Silver Cord mine (10 claims)

PLACER

Blue Turkey (6 claims)  
Cjo's Bonitos (11 claims)  
Turkey (4 claims)  
Poland (1 claim)  
Snoopy (1 claim)  
Los Felice (placer ?) (9 claims)

On March 22, 1976 (after visiting the properties), the writer contacted Mr. Farr II, at his home and discussed the Nezona holdings. Went over the Grey and Wilson reports (copies attached) with him, discussed his milling operation, and the holdings of his company in general. Mr. Farr II stated that Nezona has additional claims that were not in the reports he previously gave the writer. These are mostly along the "black dyke" in the vicinity of the Los Felice claims (formerly St John property) and extends some distance to the North. Said he has one drill hole in the vicinity of the dyke which turned out real good (still has the cores). He said his recent placer operation was near the junction of the Poland and Snoopy claims, and that about 8% of the gold there is free, but the other 92% is tied up in sulphides. After digging and screening the ore, it was hauled by truck to his small pilot plant on the Golden Belt property, where it was successfully processed. He said he recovered

38 oz. of Au in his last operation. (note: no operations were going on during my visit). When asked about future plans, Mr. Farr II said that if he received sufficient capital, he would start up the placer operation again, possibly in a larger scale. He also plans, as an initial operation, to leach the mentioned mine dumps. He will build leaching pads and establish a simple mill to grind the dump material down to leaching size, place it on the pads and heap leach it with cyanide spraying, to recover the Au and Ag. Mr. Farr II said he would deliver or send a written report covering the oral information (above outlined) to the undersigned. But he failed to do this.

#### GEOLOGY.

The Bradshaw mountains in the area of the mines are Pre-Cambrian monsonites and schists (Yavapai fm). The metalliferous deposits probably originated during the Laramide (Late Cretaceous-early Tertiary). It is believed that the lode formations under discussion in this report are associated to a degree to the mentioned black dyke which goes thru the St. John's property and its strike is about North-Northeast. This dyke continues for some distance and its dip is about vertical; the discussed mines are on the East side. The dyke was not closely examined but it appears to be 40 feet wide in places. This situation suggests metasomatic deposits. From a megascopic examination, this dyke appears to be a lamprophyre (it carries some manganese, also). In the mines, the gold and silver values are in quartzose rock. The gold is associated with sulphides: pyrites, argentite, galena, sphalerite. In places, some chalcopyrite is present.

#### OLD REPORTS.

Pertinent to this cursory initial study of the listed properties, is a review of the material in two major reports, attached. These are the Mr. Chas. E. Grey report (Golden Turkey, Golden Belt, Silver Cord) and the Mr. Jay Wilson report (Placers).

Comments on the Mr. Grey report: a It is noted that Mr. Grey has not specifically outlined where and how he obtained his samples. Were they grab samples, channel cuts, or what? How big were the samples? Exactly where did he take them? All of this is important information to anyone reviewing his report. b How did Mr. Grey compute the reserve tonnage? How long in length, width, and depth were the orebodies? He should say his tonnage figures were guessed, inferred, estimated, or proven, as the case may be? He should know that something as important as this is, will be checked by others. c Mr. Grey says "he is appalled that no one has shafted downward into these high grade ore zones". On what information does Mr. Grey base his knowledge that there is high grade ore at depth? If he had this information, he should as a geologist, outline his source of knowledge in great detail, which he failed to do.

Comments on the Mr. Wilson report: (this report is quite lengthy but he fails to give much pertinent information). a How did Mr. Wilson take his samples? How much material was taken (weight)? What depth were the samples taken (did he have deep pits)? Or did he merely scrape of some of the surface? b How were the samples processed and assay results obtained? Was the material screened down to certain sizes, after being weighted? This procedure should be described in detail in placer geology reports. c How was the gold content determined? (wet washer, dry washer, amalgamation, etc.?) d All placer geology reports should describe the particle sizes in detail. How much of the material is clay, sand pebbles, boulders, cobbles etc? This is very important in calculating processing costs. e He gives ore reserves on the various groups of placers. How did

he arrive at these tonnages ? How deep is the placer material, etc. ?

#### MILL EQUIPMENT.

There is an old mill on the Golden Belt property which apparently has not been in operation for a long time. Noted were a jaw crusher, cone crusher, ball mill, one Humphery spiral, six (small) floatation cells, a filter unit, and a diesel electric power plant. Some elements appear to be missing from a normal set-up (classifier, screening, tables.) The mill, when operable could probably mill 35 to 50 tpd. Nearby, under a tin roof was Mr. Farr's placer pilot processing plant. Noted was a small crusher, trommel, screens, tables, and a magnetic separator. Nearby, was a large flatbed truck with a large ball mill aboard. Also in the vicinity was a bulldozer and dump truck.

#### SAMPLING

Two (301b) samples were taken by the writer from the Golden Turkey and Golden Belt dumps, as follows:

- No.1 - Golden Turkey - NE side of dump where someone recently had removed a few truckloads of material. Grab composite sample taken at 5' intervals up the dump.
- No.2 - Golden Belt - Grab composite sample from 5 small pits scattered on top of dump (where someone took samples before).

The above samples were ground down and quartered before sending to the assay office.

#### CONCLUSIONS:

Sample assay results:	Golden Turkey dump (#1)	<u>Au</u> .48 oz.	<u>Ag</u> 1.52 oz.
	Golden Belt dump (#2)	.64 oz.	2.16 oz.

At recent prices of gold (\$129.60 oz) and silver (\$4.10 oz), sample No.1 has a value of \$68.43 a ton, and No. 2 has a value of \$91.79 a ton. (see assay report in inclosures).

The above assays should not be taken as indicative of actual values of the entire dumps, as one sample is only a rough guide. The dumps should be thoroughly sampled, by perhaps 100 samples, each, and taken in depth, as well as the sides and top, in order to determine the actual values. Assuming that the writers' sampling results are sustained, or higher values are found, then, Mr. Farr's proposal to leach this dump material, should prove profitable.

The undersigned, does not feel there is sufficient information to give an opinion on the placer claims. Without extensive and reliable sampling (which could be expensive), the undersigned has a negative viewpoint, based on many placer properties examined in the past. Records show a large placer plant with power shovel operated near Bumblebee in 1932, unsuccessfully.

In general, the writer is of the opinion that should an efficient and adequate custom concentration plant be established in the Bradshaw area (or the vicinity of Clester, Az., for example), the ore remaining in the old mines, and on the dumps, which merits concentration, could be concentrated and marketed, and all would make a good profit. The present ore is not rich enough for direct shipping to smelters, or other distant processing plants. Transportation costs are too high for this.

water can be made available at all of the cites mentioned, above.

MELVIN H JONES  
Mining geologist

I N C L O S U R E S

Number

1. Assay report, Golden Turkey and Golden Belt dumps, 3/31/76.
2. Chas. E. Grey, PhD, Geologist report, 2/12/71, with tonnage data, maps, smelter return, assy reports, mine histories.
3. Jay Wilson, PhD, Geologist report, 8/8/73 with assays report, claim maps, tonnages.
4. Los Felice claims (St. John company), maps, date and author unknown.
- 5.\* Travis P. Lane, Engineer report, Silver Cord mine, 6/12/61.
- 6.\* W.H. Jenkins report, The Golden Belt group of claims, date unknown.
7. Photos.

\* Copies courtesy of Director, Arizona Department of Mineral Resources, Phoenix, Arizona.

A

# MAP OF LOS FELICE GOLD PROPERTY

BLACK CANYON MINING DISTRICT  
YAVAPAI COUNTY, ARIZONA

OWNED BY  
**ST. JOHN GOLD & COPPER CO.**



SILVER CORD  
MINE



- LEGEND
- Shaft
  - ≡ Open Cut
  - ≡ Trench
  - - - Tunnel
  - Approximate location of neighboring property

NOTE

There are calculated to be 5,000,000 tons of oxidized gold ore above the sulphide zone that would net \$3.50 per ton.

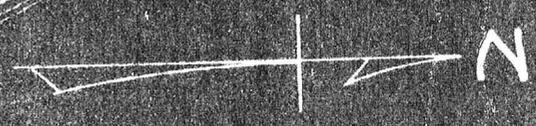
Incl # A

FA'

PENNSYLVANIA  
MINE

One mile to CLEATOR  
(On Santa Fe R.P.)

County Road



OLD HORSE  
LOUNCELOT  
Quartz Vein

ELICE No. 1  
LOS FELICE

Millsite & Water Right

HIGH PEAK  
Townsend Butte

HIGH GRADE VEIN  
TURKEY

GOLDEN TURKEY  
MINE

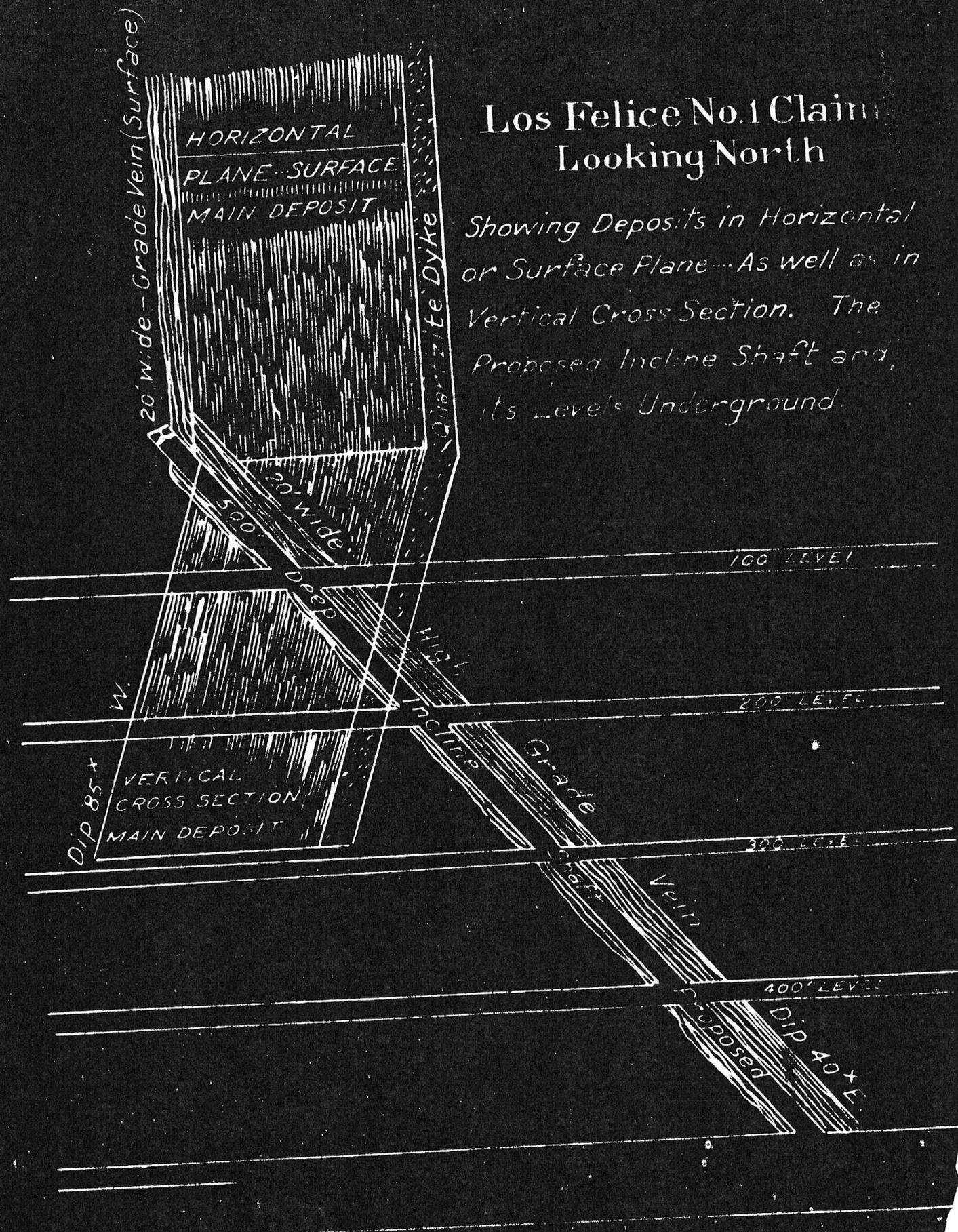
GOLDEN BELT  
MINE

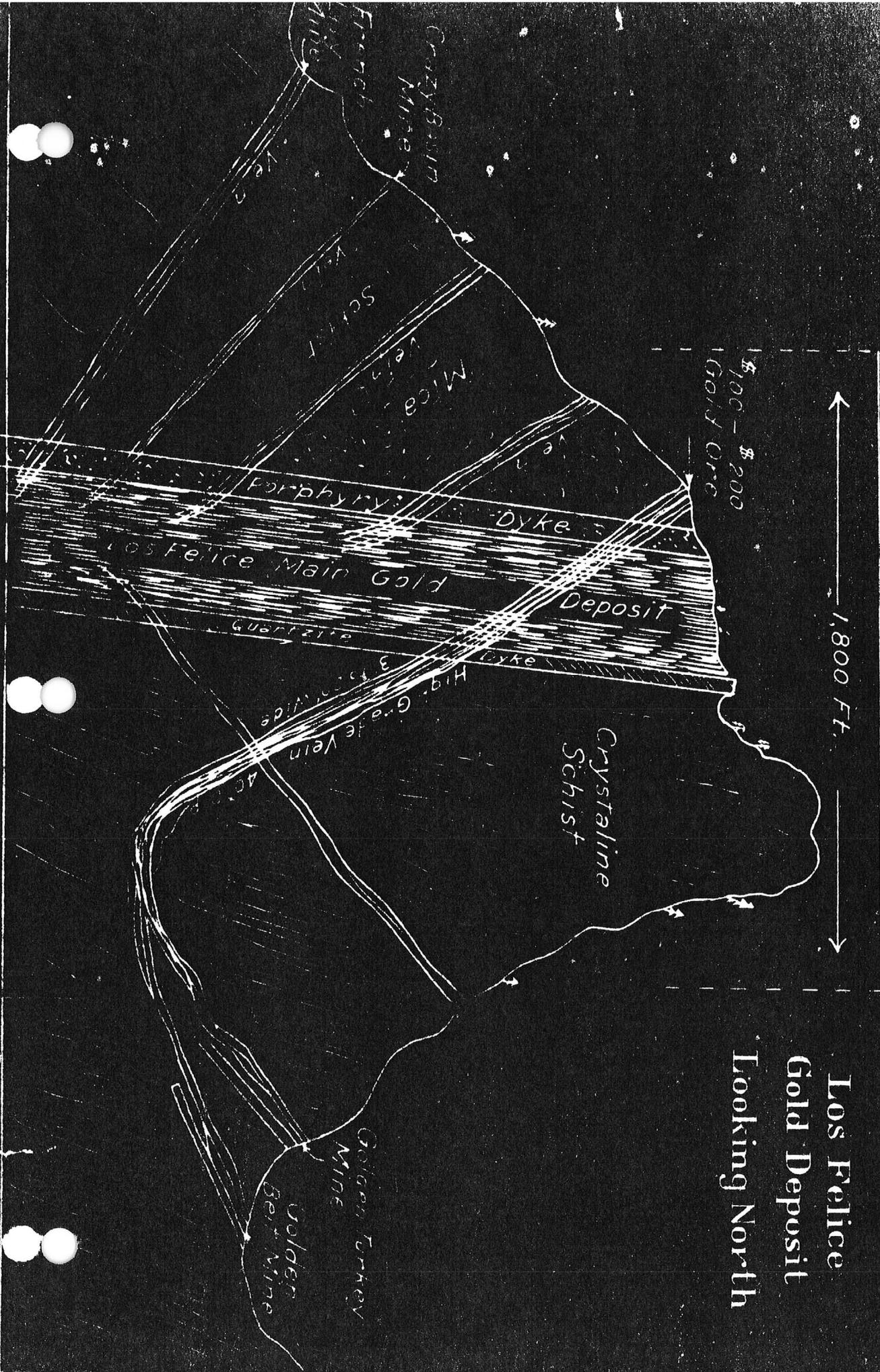
Highway



# Los Felice No.1 Claim Looking North

*Showing Deposits in Horizontal or Surface Plane...As well as in Vertical Cross Section. The Proposed Incline Shaft and its Levels Underground.*





Cross Vertical Section  
 Los Felice  
 Gold Deposit  
 Looking North

High Grade Vein \$100 to \$200

Horizontal Section

Main Deposit

\$7.59

\$23.29

\$7.43

90' Tunnel

Proposed 110' Ext'n

30' Winze

Vertical Cross Section

High Grade Vein

500' Depth

Grade Incline

100' LEVEL

200' LEVEL

Main Deposit

Incline

Vein

300' LEVEL

Main Deposit

400' LEVEL

DIP 40+

500' LEVEL

Proposed

Vertical Cross Section

### Vertical Cross Section Center Los Felice Claim Looking North

Showing Main Vertical Deposit, High Grade Ripping, and Proposed 400' deep Incline shaft levels.

I now know of quite a good deal of machinery and material that is suitable for the contemplated plant for the treatment of this ore, that is comparatively close to the mine and on which a very large saving could be made in freight alone as well as on first cost.

#### CONCLUSION

I am convinced from personal observation and many months of work on the "GOLDEN BELT" property and from many assays made by myself as well as reports and assays made by other engineers that the ores from the "GOLDEN BELT" Group will average not less than twelve dollars per ton and that excluding all high grade assays that the ores will average not less than eight dollars per ton. I am also convinced that working results fully as good as shown by tests made and work done can be had from the mine.

I consider the property proven up and also that the mine has great future possibilities in addition to the ore already opened up.

Respectfully submitted,

(Sig) W. H. Jenkins.

Other chemicals, including assaying and quicksilver	.08	
Repairs and replacements	-----	.05
Superintendence	-----	.085
Interest on investment in mill	-----	.055
Clean-up expense, inc. melting and fluxes--and--mer-		
Testing of bullion, etc	-----	.085
Total mining and milling cost per ton	-----	1.50
		<u>\$3.50</u>

It is my belief that both mining and milling costs can be reduced from these figures after the plant is fully broken in. For instance, I have talked with representatives of machinery companies who will sell an engine (hot-head type) and guarantee that power costs, under our local conditions, will not exceed one and three-quarter cents per kilowatt hour. I have allowed a power consumption of thirty horse power for twenty-four hours per day, which is more than should be used.

I think it would be advisable to use the Merrill precipitation apparatus and process (patented). This will eliminate many zinc box and treatment troubles and with it, a very weak cyanide solution can be used with a consequent saving of cyanide.

I have allowed, in my estimate, \$5.00 per shift for most of the labor, and under present conditions, labor costs will be much less.

Separate working tests were made on the sulphide ores, coming from the high grade streaks and the, when figured by percentage, the extractions were considerably less than on the general run of ore, the gross extraction in dollars and cents was much more than on the porphyritic ore on which a very high percentage can be extracted.

These sulphide ores will be largely mixed with the other ore as mined and the general effect will be to vary materially sweeten-up the gross and net returns.

If it should prove to be desirable a considerable quantity of the high-grade ore can be sorted out in the mining and handling with little or no extra cost. This sorted ore could then be shipped to smelter and possibly this may prove advisable and will be fully determined by working tests. In many parts of the mine, the high-grade quartz streaks can be mined separately if it should prove more profitable. Also when ore can be treated at the mine, it very frequently makes considerable difference in the smelter rates and allowances.

In view of the present conditions, it is rather difficult to make an exact estimate of the cost of a reduction plant for the treatment of these ores, but it is a fact that the cost of a leaching and amalgamation plant such as is considered in this report, will not be more than one-third the cost of an all-slimes plant.

Naturally, the cost of a plant will depend on the size and tonnage desired to treat and as the tendency of cost figures on mine supplies and machinery is very downward, therefore, any cost figures are subject to revision and probably revision downward.

Detailed plans and estimates accompany this report and it must be noted that the plans call for a mill especially and specifically designed according to the tests of which the details are herein given.

The building at present on the ground is in fair condition and could be used to good advantage and there are also some supplies and material on hand that could be used.

If it is considered advisable, it is possible to purchase quite a good deal of second-hand machinery and material in this part of Arizona. It, of course, necessary to be assured that any machinery purchased is in good condition and running order and that prices are right.

Tests on sample obtained by mixing residue from numerous large assay samples from different parts of the mine:

HEADS

Silver 1.15 oz; Gold, 0.29 oz; value, \$7.05 per ton.

TAILS AFTER CYANIDING

Silver, 0.40 oz; Gold, 0.03 oz; Value, \$1.04 per ton.

TAILS AFTER AMALGAMATING

Silver, 0.14 oz; Gold, 0.01 oz; value, 0.35 per ton,

showing an extraction by cyanide alone of over 89% of the gold and and over 65% of the silver.

Total extraction by cyaniding and amalgamation was 96% of the gold and 89% of the silver.

This test was fully confirmed by other tests and by tests made on ore crushed to only one-half inch size, which gave results nearly as good.

MESH TEST ON ORE CRUSHED TO ONE-QUARTER INCH:

On quarter-inch screen, 5.6% of ore			
thru " " " "	94.4%	"	"
on 20-mesh " " " "	44.2%	"	"
thru " " " "	60.2%	"	"
on 60-mesh " " " "	25.1%	"	"
thru " " " "	25.1%	"	"
on 80-mesh " " " "	2.5%	"	"
thru " " " "	22.6%	"	"

It will be observed that by crushing the ore to only one-quarter inch that over fifty per cent of the product will pass twenty mesh screen and that more than twenty-two percent will pass an eighty mesh screen. To this fact, I attribute the good results obtained, for, as previously stated, most of the values are in the fine seams and in crushing the ore, it breaks along the lines of fracture, thus exposing the fines to the action of the cyanide solution. There is just enough coarse ore to give a good leaching product.

The grinding of the ore for amalgamation, after cyanide treatment, can be done at a very small cost as more than fifty percent of the ore is already down to twenty mesh, which size gives good results on amalgamating the residue of the gold after the clearing action of the cyanide solution.

AFTER CYANIDING, THE ORE WAS GROUND DOWN TO TWENTY MESH:

MESH TEST:

thru 20 mesh screen, 100% of ore		
On 60 " " " "	49.6%	" "
thru " " " "	61.4%	" "
on 80 mesh screen	3.7%	" "
thru " " " "	47.7%	" "

Cost of treatment will be about as follows:

Mining, per ton-----	\$ 2.00
Milling, cost per ton:	
Incidentals, including freight, etc	.15
Labor, ten men, four on one shift, three on other shifts, seven men at \$6.00, three, at \$5.50-----	.385
POWER-----	.295
Cyanide, one pound, including chemical	
Mechanical loss-----	.24
Zinc-----	.125
Lime (8 lbs per ton of ore) at \$15.00	

From my measurements, I have estimated that there are about twenty-five thousand tons of ore now opened up and I estimate that about one hundred thousand tons of probable ore underlies about twenty-five acres of the property that adjoins the mill-site. This estimate has been confirmed by others who have made examinations.

There are many advantages in mining in a flat vein, such as this is, and some disadvantages. The mine is perfectly dry, so no water to pump or handle, and partly on account of being dry, the ground stands better and takes less timbering. The country rock is hard and makes a good roof and the only timbering necessary will be a few straight posts or stulls; no timber to be framed nor expensive labor to frame and set it, no waste rock to be mined and handled to make room for timber. The only framed timber needed will possibly be a few sets in the main working stopes. Good ventilation, a matter of great importance, can be easily and cheaply secured, wherever needed, by driving a hole thru roof to surface. The great disadvantage is that all ore has to be shoveled instead of being handled partly by gravity, thru chutes, as in vertical veins.

As stated, the formation is hard and stands well, and all the old workings are in very fair shape; most of the work has been done many years with scarcely a stick of timber.

The porphyry vein matter is soft and easily and cheaply mined. From our actual work on the mine, I estimate that the ore can be mined and put in the mill for less than two dollars per ton.

I have made numerous and extensive tests on the ore from the "GOLDEN HILL GROUP" and with very satisfactory results.

The original tests made by me on these ores were made along the line of fine grinding and subsequent treatment of the slimes by either filter press methods or continuous counter current decantation, but upon further observation and tests, it was found that nearly all the values in the ore were carried in the seams of oxidized mineral and that these values could be liberated from the ore and recovered by coarse crushing and cyanide leaching followed by amalgamation.

This plan of treatment not only makes a very large reduction in the first cost of the milling plant, by eliminating a great deal of expensive machinery, much of which is patented by companies who get very high prices; but the treatment plan as adopted makes a very large saving in the cost of treatment per ton and cost of handling the ore.

Tests were made on ores ranging in size from run of mill mine to ore ground to minus 150 mesh.

A great many tests were made but I will include in this report details of only those tests upon which I base my ultimate conclusions.

My conclusion is that the best and most economical results can be obtained by crushing the ore to one-quarter inch mesh and leaching with a weak cyanide solution running one pound or less to cyanide to ton of solution; then, after cyanide treatment, grinding the ore to about twenty mesh, followed by amalgamation.

The gold in the ore is in such physical condition that it does not amalgamate readily until after cyanide treatment. The cyanide has a cleaning action that causes the residue of gold to easily amalgamate.

The ore, crushed to one-quarter inch mesh, gives a very good leaching product as at that size the slimes in the ore do not interfere with the leaching and by giving a six-day treatment to the ore very good results were obtained.

dike of a different character, known locally as "birds-eye" porphyry. This dike shows iron sulphides and carries small values. It is the theory of the former owners of the property that the vein "goes down" alongside this dike and this theory has been favorably considered by engineers who have examined the property. It is possible that this is the true theory of the vein and on the west side of the dike, to the south, on the "TOWNSHIP" claim, the formation is dipping toward the dike and there is a vein several feet thick, with a foot or so of good ore, that is dipping into the dike from the opposite direction than the dip of the "GOLDEN BELT" vein which is on the east side of the dike; however, on the north end of the claims, the "GOLDEN BELT" porphyry or vein matter shows on both sides of the dike.

After doing considerable development work on these claims and becoming familiar with the surrounding country, I have formed the opinion that the veins do not go down, for I have traced and found either the same vein or other flat veins in almost every direction and for long distances from this group.

In any case, there is a large tonnage of a very good grade of ore in sight and with very great future possibilities for large and extensive ore bodies to be opened by further development work.

### DEVELOPMENT

Until recently, there has been no systematic development work done on this property. For almost forty years, the mine has been worked by "chloriders" who have followed the high grade streaks and mined the ore that was most easily accessible and suitable for treatment in arrastres. In mining this ore several hundred feet of tunnels and drifts have been driven and in doing this work, a large tonnage of very good mill ore has been exposed. Also, many open cuts, shafts and other work has been done and all this work has been done on ore. It was only recently known or recognized that the large porphyretic vein was in reality the ore and in many places the foot-wall of the main vein was not reached and it was not possible for engineers making examinations of the property to see nor sample nor know the full width of the ore bodies.

Two of the old tunnels are nearly two hundred feet long and several others are nearly that length with drifts, etc. The open cuts also show mill ore in large quantities and all of a good grade that will pay a good profit in a modern reduction plant.

I have recently done considerable work on this property, systematizing the development work to some extent and opening up the vein to its full thickness in many of the old workings, equipping the property with a gasoline hoisting engine, starting a new working shaft or slope on the ore. This slope is all in ore and is so located that the mine cars can be run directly to mill bins without rehandling. This slope is now about one hundred and sixty feet in length and is about ready to connect up with some of the old workings.

The ore bodies have been carefully and accurately sampled wherever exposed. In all cases, large and fair average sample cuts were taken.

The assay map, accompanying this report, shows accurate surveys and measurements of the various workings and where each sample was taken, together with the size of the ore body and the values of the ore.

My assays show an average value of twelve dollars and sixty cents per ton, which I believe to be a fair average of the ore, but, as a factor of safety, I have omitted in my estimates, all assays taken from the so-called high grade streaks and after eliminating these assays the average value is 0.325 oz. in gold and 1.45 oz. in silver per ton, equal to \$8.09 per ton.

## WATER AND FUEL

These mines are located directly on the banks of Turkey Creek and there is running water eight or nine months out of every year. During times when there is no surface flow, there is plenty of seepage water or underground flow sufficient for all purposes. There are now two wells which give an ample supply and the lift will only be about eighty feet to the top of mill building. There is running water at all times, a short distance up the creek and a few hundred yards down the creek from the mine.

There is sufficient wood in the vicinity for domestic use, but no fuel for power purposes, and in this section, the most economical and efficient power is generated from gas or oil engines of various types.

There is no timber suitable for mine purposes and necessary mine timbers would have to be shipped in. But in a "blanket vein" such as this is, the only timbers needed (outside of mine haulage ways) are straight posts or stulls, with head boards, and not many of these as the roof or country rock is hard and stands well.

## EQUIPMENT

There is a good Fairbanks-Morse gasoline hoist (recently installed) with ore-cars, track, etc. Supply of mine steel (drills), picks, shovels, hammers and other mine tools, Blacksmith and sharpening outfit, etc.

The old mill building on the property is in good shape and could be used to good advantage. It contains two Tremain steam stamps boiler and small steam engine. This machinery would have to be scrapped and could doubtless be sold for a small sum above the cost of taking it out of the building.

## ORE AND FORMATIONS

The general formation is "Yavapai Schist", with porphyry quartzite and diorite dikes cutting thru it, and in places, sheets or flows of diorite overlying the schist.

The "GOLDEN BELT" vein is, so far as present developments show, a comparatively flat or blanket vein, which lies approximately parallel to and near the surface of most of the "GOLDEN BELT" group. It is my opinion that there are, at least, two veins, one underlying the other; and it is very possible, and I think, probable, that there are other veins underlying the veins as shown by present workings.

In tunnel No 1, on the "GOLDEN BELT" claim, the vein appears to be dipping towards the south at an angle of about twenty-five degrees, and it is possible that the vein will become more or less vertical and become a "fissure" instead of a blanket vein. Further development at this point will be necessary to prove what the vein will do, but as the development can all be done on good ore, the work should more than pay its own way.

The vein matter, wherever opened up, appears to be a shattered porphyretic rock with small seams of hematite and other oxidized minerals running thru it in all directions. These small seams are entirely oxidized and carry most of the values and are from knife-blade thickness to a quarter of an inch or more in size. There are also unshattered quartz streaks, usually on the hanging and foot-walls, and varying from one inch to as much as two feet in thickness but generally not more than five or six inches wide. These so-called high grade streaks or quartz streaks carry sulphides of iron and lead, the in places, the sulphides are wholly or partially oxidized.

Running northerly and southerly thru the "TOWNSEND", "GOLD BELT", and "GOLDEN CLIFF" claims and just west of the end line of the "GOLDEN BELT" and "MILLIE FRACTION", there is a large porphyry

R E P O R T

on

THE GOLDEN BELT GROUP OF MINES  
Turkey Creek Mining District  
Yavapai County, Arizona

By W H Jenkins

LOCATION AND TRANSPORTATION

12 6735

The GOLDEN BELT group is located on the east slope of the Bradshaw Mountains in the Turkey Creek and Black Canon Mining Districts, Yavapai County, Arizona. The mine is two and one quarter miles from Turkey Creek Station (Post Office is Turkey) on the Bradshaw the Bradshaw Mountain branch of the Santa Fe Railroad. This branch runs from Prescott to the Crown King, De Soto, Blue Bell and other mines in the district, also passing thru Humboldt, where there is a smelter.

There is a good hard wagon or auto road from Turkey directly to the property. The character of the country, thru which the road passes, is such that loads can be hauled at all times and in any kind of weather. There is also a good road from the "Black Canyon, Prescott to Phoenix Highway", to the mine, distance about two miles.

The GOLDEN BELT GROUP proper, includes five claims known as the "GOLDEN BELT", "WILLIE FRACTION", "GOLD STANDARD", "MARS", and "MARIE", together with four adjoining claims.

This group was located in 1873 and the property has been worked almost continuously ever since and has been a producer on a small scale during the entire time. The original locations have never lapsed, and so are recorded amongst the first locations in the district. There are no title complications of any kind as a few inconsequential technicalities as to spelling and improper description have now been legally straightened out in the county records. Also, being the prior locations on these veins and owning the apex of the veins, under the "Apex decisions" of the courts, owners of this property have the right to follow the veins outside the side lines of the claims, if it should ever become necessary or advisable.

The mine was originally located by Geo Zika, but for more than twenty years has been worked by M Theising. Most of the ore mined has been treated by arrastres, but a few years ago, Mr Theising had a small two stamp (Tremain Steam Stamps) mill built and as this mill was not suitable for the treatment of the ores, it did not pay out and the title to the property passed to the people who built the mill. The capacity of the mill was less than eight tons per day of twenty-four hours and with its small capacity, high cost of operation and incomplete apparatus it was not successful and the greater part of the values went off in the tailings; about a thousand tons of tailings were hauled away and treated in a cyanide plant, then located a few miles away and I am informed by one of the men who worked the tailings that they made a very satisfactory recovery. This statement is, apparently, not at all exaggerated as at the present time, there is a small tailings dump of about a hundred tons, at the mine and my sampling and assays show that these tailings now run 7.36 oz in silver and 0.33 oz gold; a total value of about \$14.00 per ton.

In addition to the previously mentioned claims, Mr Theising still retained title to the following claims: "THE TURKEY", "TOWNSHIP", "LOS ANGELES" and "GOLDEN CLIFF". These claims show the same veins and the same formations that are developed on the other claims. There is a considerable mining activity in this district and there are quite a number of mines and milling plants in operation.