



CONTACT INFORMATION

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PRINTED: 09/12/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: WOLVERINE LODE

ALTERNATE NAMES:

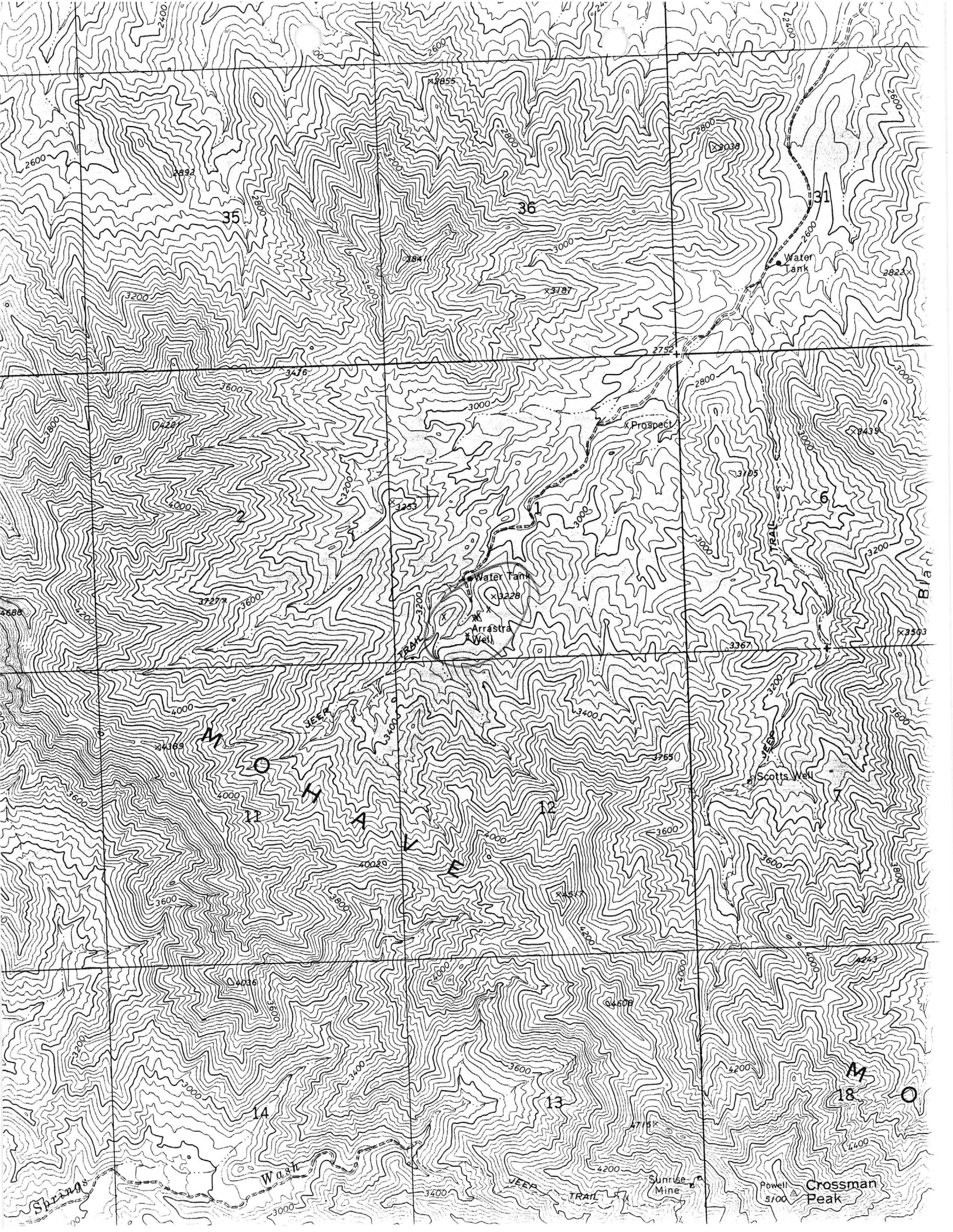
MOHAVE COUNTY MILS NUMBER: 287A

LOCATION: TOWNSHIP 14 N RANGE 19 W SECTION 1 QUARTER SW
LATITUDE: N 34DEG 35MIN 06SEC LONGITUDE: W 114DEG 11MIN 49SEC
TOPO MAP NAME: CROSSMAN PEAK - 7.5 MIN

CURRENT STATUS: UNKNOWN

COMMODITY:
GOLD

BIBLIOGRAPHY:
USGS CROSSMAN PEAK QUAD
ADM MR WOLVERINE LODE FILE



Cards made up.

ARIZONA STATE OFFICE
BU. LAND MANAGEMENT

DEC 29 1980

7:45 A.M.
PHOENIX, ARIZONA

PRELIMINARY GEOLOGICAL REPORT

Wolverine 1 Through 4 Lode Claims
Mohave County, Arizona

For

First Florida Research Corporation

April 1980



By: *Lloyd L. Wall*

Lloyd L. Wall
Consulting Geologist

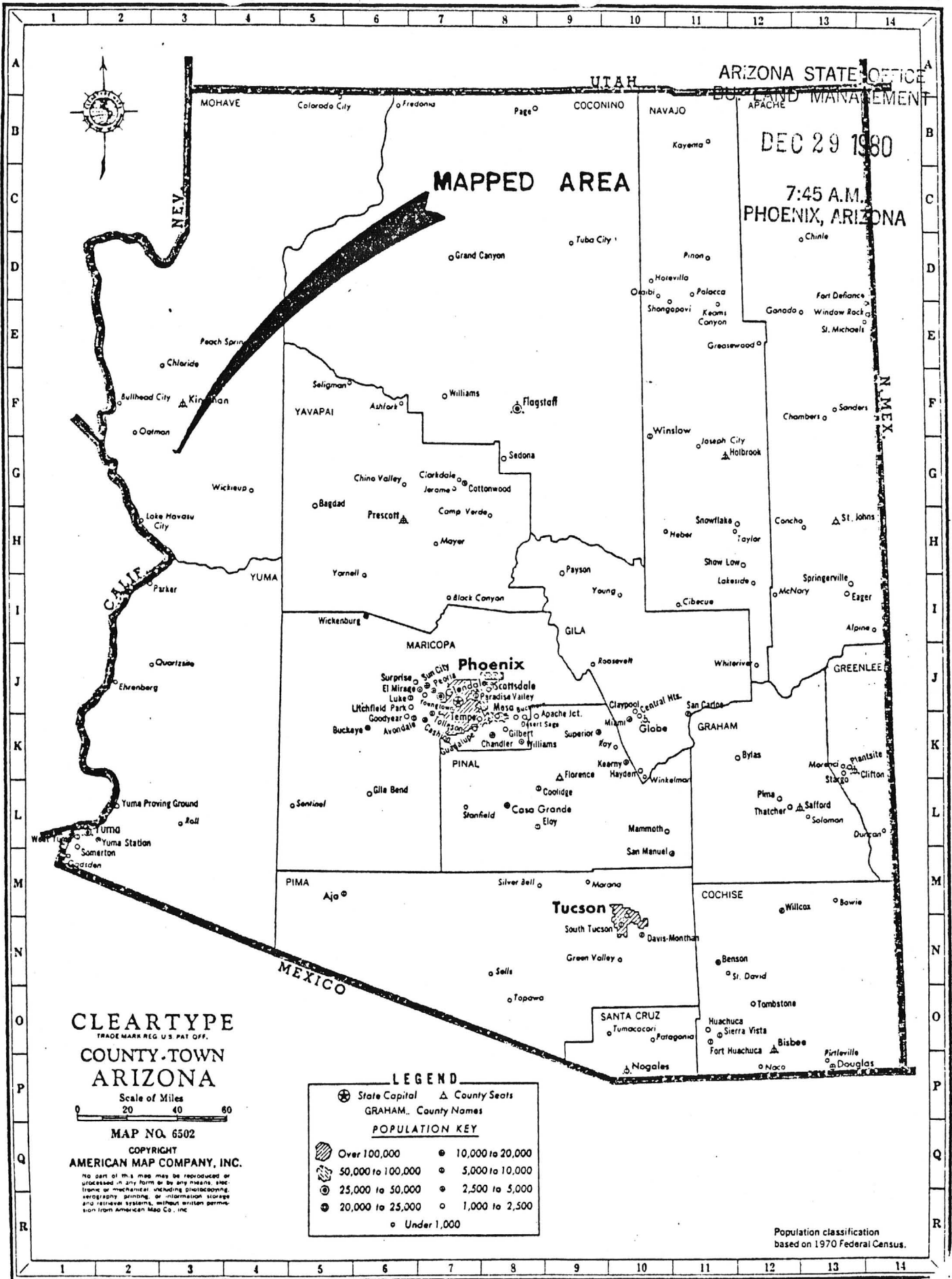


FIGURE I

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Lode Claim Deed -- Figures 2, 3, 4, and 5

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BLM Registration -- Figure 10

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I. Introduction

The purpose of this study was to determine the economic potential of four lode claims registered as Wolverine 1 through 4. Work was done for First Florida Research, Incorporated.

II. Property Description

The four lode claims were originally located by C. Jane Wolf of Clearwater, Florida, on July 22, 1979. Ownership was later transferred to First Florida Research, Inc., on September 5, 1979. Reference Appendix Lode Claim Deeds-1 through 4 (Figures 2, 3, 4, and 5), and BLM Registration No. 946415, Figure 10.

The claims are located in the northeast quarter, Section 11; southeast quarter, Section 2; southwest quarter, Section 1; and the northwest quarter, Section 12, of T14N, R19W, G and SRB and M in the Mohave Mountains, Mohave County, Arizona. Reference Crossman Peak, Arizona quadrangle, Figure 2.

The claims are accessible from Interstate 40, Exit 13 (Franconia Road), 23 miles along an unimproved dirt road. Thirteen miles of the unimproved road is only a jeep trail. The claims are at an elevation of 3,200 to 3,600 MSL.

There is no electrical power available at the site. There is some limited well water within 1,500 feet of the claims' east boundary.

III. Area History

Complete mining history was not available for the immediate area. However, some prospect holes were encountered within the immediate area. The Sunrise Mine and Jupiter Mines that have produced silver in undisclosed amounts were active in the early 1900's.

These mines are located on the west and south faces of Crossman Peak, which is two miles southeast of the property.

IV. Method of Investigation

Initial grab samples of white quartz veins were collected by Dr. Benard Wolfe and analyzed by Dr. D. E. Davies, Chemtec Corporation, Henderson, Nevada.

The author conducted a geochemical analysis and magnetic survey during a one-day field trip in April, 1980. The

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geochemical samples were analyzed by Chemtec Corporation. The magnetic survey was made using a Portable Askinina torsion bar magnetrometer. General geology and structural interpretation was completed using standard field techniques.

IV. Geology

Metamorphic schists and gniess have been intruded with various felsparic igneous rocks to form the major controlling structure. The metamorphic schists and gniess banding exhibited a degree of lit-par-lit probably influenced by the dolerates and grand dolerates immediately encountered with the schists.

The schists and gniess are well exposed in the main drainage pattern on the south end of the claims. These metamorphic units generally strike N35°E and dip 58° south along the bonded planes. Ages of the metamorphic units are undetermined at this time.

Hydrothermal solution of an acidic Ph have penetrated the micaeous banded zones of the schists, developing some clays and badly decomposed schists. The hydrothermal solutions were quartz bearing. Veins of milky and rose quartz varying from six (6) inches to forty-eight (48) inches were injected into the altered schists. Strike and dip of the quartz viens are paralled to the altered schists zones.

Some dolerate and grand dolerate were injected into the area, truncating the schists and gniess. Quartz veins have been injected into these dolerates and grand dolerates, followed by monzonite intrusives. It appears the monzonites were that least igneous activity within the area. Most of the intrusive activity and quartz veins penetration is believed to be tertiary in age. Tension joint patterns transverse the area. One system strikes N72°W and dip 75°E. These joint systems appear not to contribute to any mineralization. Faulting was not observed in the immediate area. Drainage patterns were controlled by the joint patterns. Reference, Figure 6 for geological details.

Mineralization occurred in certain quartz veins. The reason for selective occurance, of noble metals within some quartz veins has not been determined as of to date. The hydrothermal solution alteration of the micaeous schists zone also produce noble metal mineralization.

V. Geochemical Study

The initial group samples collected by Dr. Benard Wolf along the wash running through the claims and along the canyon

wall indicated the following value as analyzed by Chemtec Corporation:

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<u>Sample I.D.</u>	<u>PT*</u>	<u>AU*</u>	<u>AG*</u>
Lower	.000	.250	.230
50'	.2733	.0350	.0264
200'	1.6341	.2013	.0175
400'	1.1673	.2781	.1437
Lower 2	.6834	.3123	.2174

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* oz/ton values. Reference, Figure 7.

Exact sample location was not mapped during the author's visit.

The geochemical analysis conducted by the author was completed on a selective grid in which samples were taken on a 200 ft. grid if the zone was within a suspect target unit. Samples were not taken within well defined beds of dolerate, grand dolerate, and monzonites. (Note, the quartz veins and altered schists were the suspect target units studied.)

The following is an analysis of grab samples cultured by the author and analyzed by Chemtec Corporation.

<u>Lab No.</u>	<u>Sample</u>	<u>Per 2,000 Lbs.</u>		
		<u>Oz/Ton</u> <u>PT</u>	<u>Oz/Ton</u> <u>AU</u>	<u>Oz/Ton</u> <u>AG</u>
3/51	FR Wash #1	.5834	.21002	.02625
3/52	FR Wash #2	1.1668	.2362	.04375
3/53	FR 3WXX	.46672	.0350	.14001
3/54	FR 1.25 S 2E	1.6335	.18960	.0175
3/55	FR 4N9E	()	.0350	.0350
3/56	FR 6.25 NYY	()	.0700	.13126
3/57	FR 8N8W	()	.08167	.07875
3/58	FR 8.7N3W	.2333	.0350	.02625
3/59	FR 10N3E	.35004	.07292	.0350
3/60	FR 10NYY	()	.0350	.04375
3/61	FR 12N4E	.2333	.0350	.0350
3/62	FR 12N9E	.70008	.1400	.08751
3/63	FD 4NYY			
	FD 8NYY	.2333	.0350	.02917

Determination of the extend of mineralization was beyond the scope of this particular study due to the lack of vein samples analyzed and the depth of the veins being unknown. Core drilling and detailed geochemical samples across each

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vein would be necessary to give accurate estimates of noble metals present. There is sufficient indicated noble metals present to at least warrant a more detailed geochemical study of each vein and altered zone. 7:45 A.M. PHOENIX, ARIZONA

VII. Magnetic Survey

There was insufficient anomaly differentials mapped on the 200 ft. grid to give any clear high anomaly zones. This is primarily due to the chemical proximity of all intrusive and schists present.

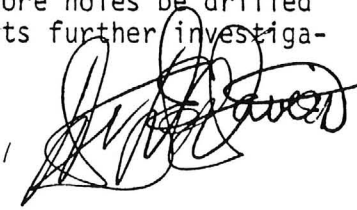
VIII. Conclusions and Recommendations

There is sufficient indications of the presents of low grade gold and good platinum showings to warrant further studies. This study identified the target zones, therefore, it is recommended that each ore bearing zone be mapped and sampled sufficiently to determine average ore tenor and possible tonnage available for mining.

Complete detailed bench tests to determine to what extent the noble metals can be extracted from the ore. This data would help define operations costs.

The property would have to be open pit mined due to the wide dispersion of the ore bearing veins. Detailed mining costs could be made when the extent of mineralization is known.

It is also recommended that a few core holes be drilled if the detailed geochemical study warrants further investigation.



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APPENDIX

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7:45 A.M.
PHOENIX, ARIZONA



CHEMTEC CORPORATION

POST OFFICE BOX 5
HENDERSON NEVADA 89015
PHONE (702) 564 5255

January 28, 1980

Name: To Wolf property
Address: Samples taken in canyon and Northwest wall.

Dear

Following is the information you requested from the samples you submitted to us.

Lab. No.	Class	Sample (ID)	Lot							
			Per 2000 Lbs.							
			oz/ton	oz/ton	oz/ton	%	%	%	%	%
	PT	AU	AG	PB	CU	FE	ZN	NI		
	Lower		.000	.250	.230					
	50'		.2733	.0350	.0264					
	200'		1.6341	.2013	.0175					
	400'		1.1673	.2781	.1437					
	Lower 2		.6834	.3123	.2174					

This information is to be used only by the person or persons submitting the samples and is not to be used for any other purpose such as soliciting of funds or promotional activities, without the written permission from Chemtec Corporation. Such information will be submitted on a different form.

Sincerely,

D. J. Davies

FIGURE 7

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CHEMTEC CORPORATION

7:45 A.M.
 POST OFFICE BOX 11 PHOENIX, ARIZONA
 HENDERSON, NEVADA 89115
 PHONE (702) 864-8255

Date: 4/4/80

Name: First Florida Research
 Address:

Dear Sir:
 Following is the information you requested from the samples you submitted to us.

Lab No.	Sample	Lot								
		Per 2000 lbs.								
		oz/ton PT	oz/ton AG	oz/ton AQ	SS PB	CU	Fe	Zn	Ni	
3/51	FR Wash #1	.5834	.21002	.02625						
3/52	FR Wash #2	1.1668	.2362	.04375						
3/53	FR 3WXX	.46672	.0350	.14001						
3/54	FR 1.25 S 2E	1.6335	.18960	.0175						
3/55	FR 4N9E	()	.0350	.0350						
3/56	FR 6.25 NYN	()	.0700	.13126						
3/57	FR 8N8W	()	.08167	.07875						
3/58	FR 8.7N3W	.2333	.0350	.02625						
3/59	FR 10N3E	.35004	.07292	.0350						
3/60	FR 10NYN	()	.0350	.04375						
3/61	FR 12N4E	.2333	.0350	.0350						
3/62	FR 12N9E	.70008	.1400	.08751						
3/63	FD 4NYN									
	FD 8NYN	.2333	.0350	.02917						

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Sincerely,

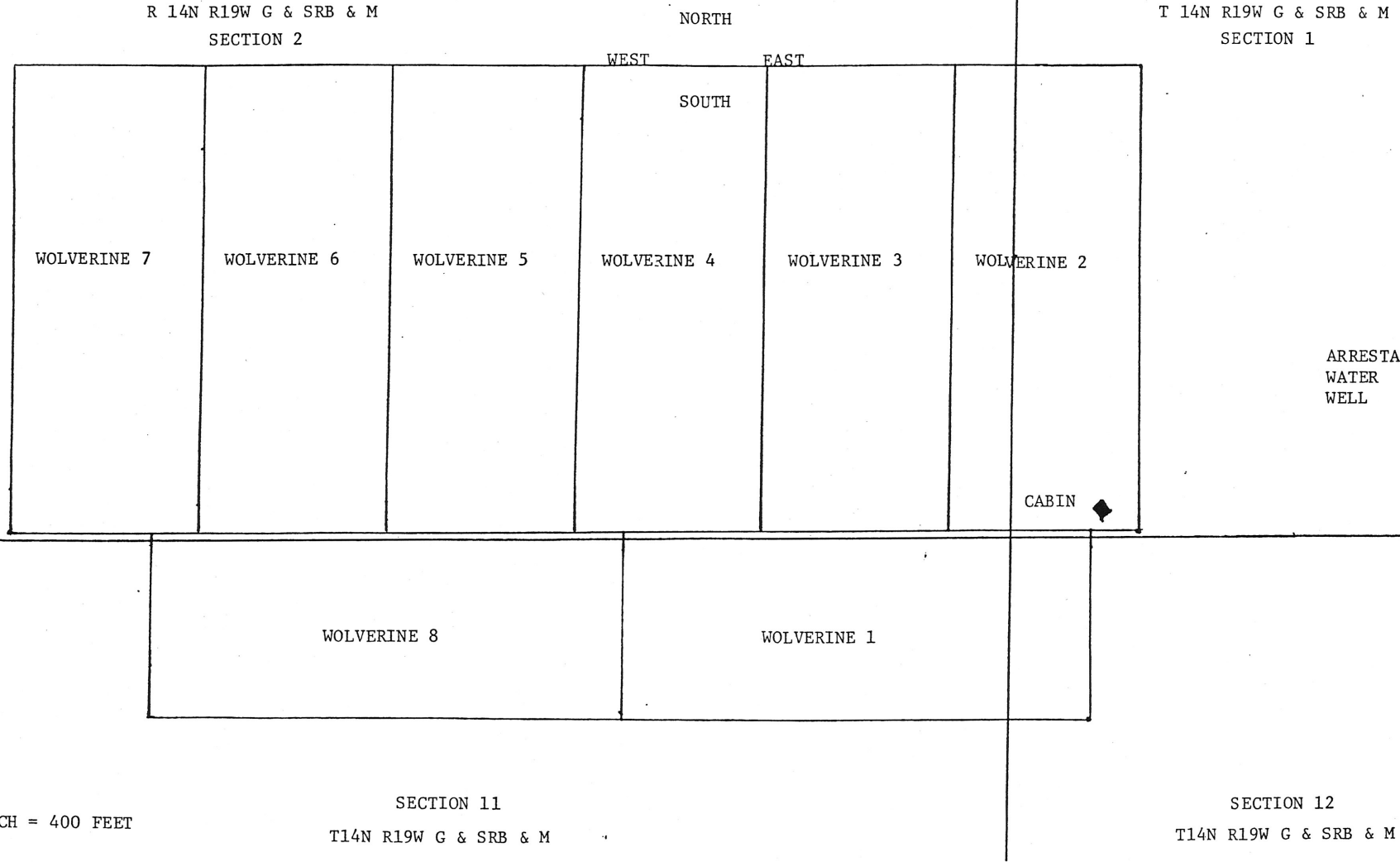
Dr. D.E. Davies

ARIZONA STATE OFFICE
PUBLIC LAND MANAGEMENT

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7:45 A.M.
PHOENIX, ARIZONA

WOLVERINE CLAIM #	1	2	3	4	5	6	7	8
BOOK	647	647	647	647	647	647	647	647
PAGE	679	682	685	688	691	692	693	694



SCALE: 1 INCH = 400 FEET



CHEMTEC CORPORATION

ARIZONA STATE OFFICE
BU. LAND MANAGEMENT

DEC 29 1980

7:45 A.M.
PHOENIX, ARIZONA
HENDERSON, NEVADA 88
PHONE: (702) 564-5255

Date: 2/5/80

Name: First Florida Research Inc.
Address: 6514 Central Ave.
St. Petersburg, Florida 33707

Dear Sir:

Following is the information you requested from the samples you submitted to us.

Lab. No.	Class Sample (ID)	Lot							
		Per 2000 Lbs.							
		oz/ton PT	oz/ton AU	oz/ton AG	% PB	% CU	% FE	% ZN	% N
1/63	Apex	.31503	.07584	.11084					
1/64	Upper end		.12251	.16626					
1/65	Upper River	.52505	.2100	.03208					
1/66	New Claim river bed (lower)	.31503	.2071	.03208					
1/67	Aluap Test Hole	.10501	.28586	.03792					
1/68	Aluap Lower	.10501	.29461	.02333					
1/69	Mine Run	.52506	.26253	.07875					
1/70	Mine Run Rocks	.31503	.1458	.01458					

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Sincerely,

[Signature]
Dr. H. B. Davies

FIRST FLORIDA RESEARCH, INC.
6514 CENTRAL AVENUE
ST. PETERSBURG, FL 33707

504
February 5, 19 80
63-601
631

PAY TO THE ORDER OF Chemtech Corporation \$ 1,200.00

One Thousand Two Hundred & 00/100 201217 DOLLARS

Barnett Bank
3100 Central Avenue
St. Petersburg, FL 33712

FOR Mining

[Signature]

ARIZONA STATE OFFICE
BU. LAND MANAGEMENT

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PHOENIX, ARIZONA

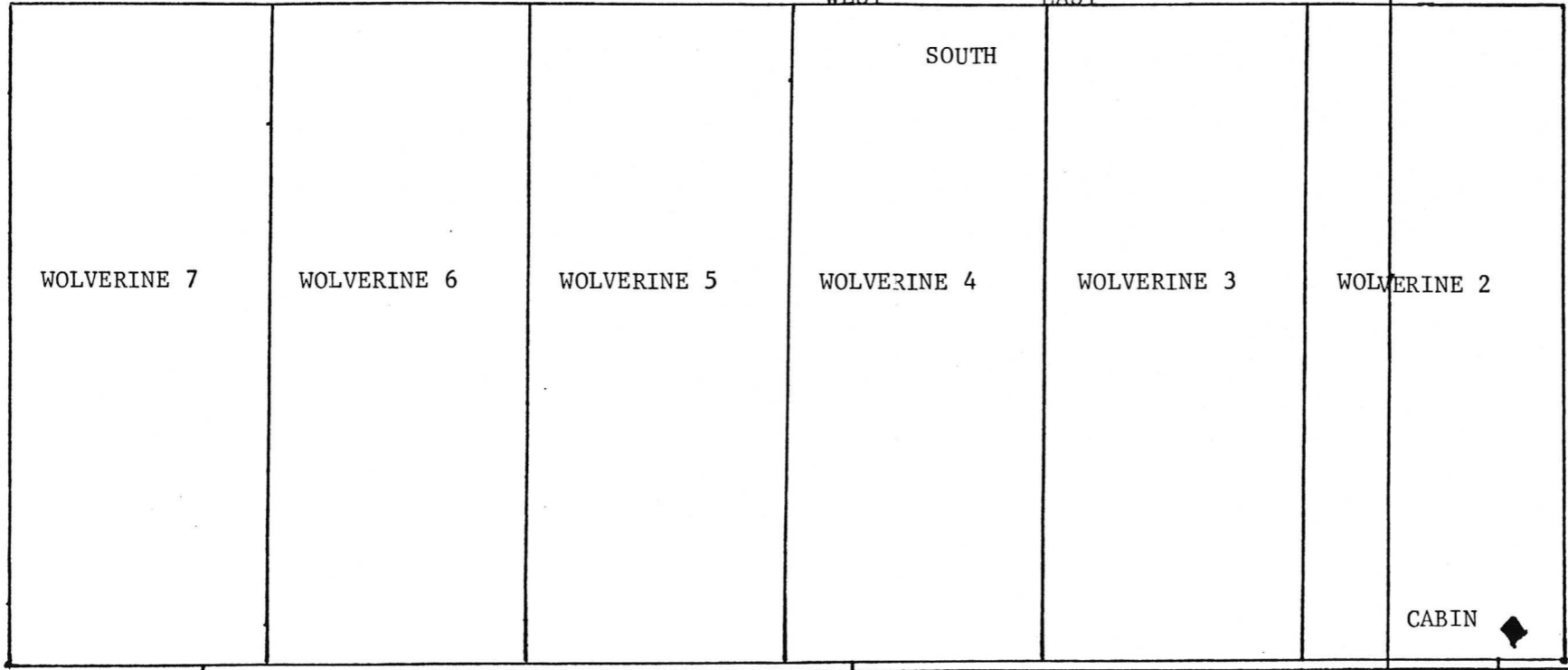
WOLVERINE CLAIM #	1	2	3	4	5	6	7	8
BOOK	647	647	647	647	647	647	647	647
PAGE	679	682	685	688	691	692	693	694

R 14N R19W G & SRB & M
SECTION 2

NORTH

T 14N R19W G & SRB & M
SECTION 1

WEST EAST



ARRESTA
WATER
WELL

CABIN

SECTION 11

SECTION 12

SCALE: 1 INCH = 400 FEET

T14N R19W G & SRB & M

T14N R19W G & SRB & M



CHEMTEC CORPORATION

ARIZONA STATE OFFICE
BU. LAND MANAGEMENT

DEC 29 1980

7:45 A.M.
PHOENIX, ARIZONA
POST OFFICE BOX 6
HENDERSON, NEVADA 8
PHONE: (702) 564-5255

Date: 2/5/80

Name: First Florida Research Inc.
Address: 6514 Central Ave.
St. Petersburg, Florida 33707

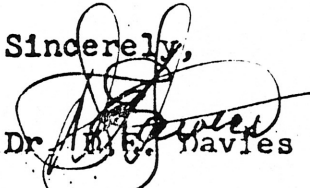
Dear Sir:

Following is the information you requested from the samples you submitted to us.

Lab. No.	Class	Sample (ID)	Lot						
			Per 2000 Lbs.						
			oz/ton PT	oz/ton AU	oz/ton AG	% PB	% CU	% FE	% ZN
1/63	Apex		.31503	.07584	.11084				
1/64	Upper end			.12251	.16626				
1/65	Upper River		.52505	.2100	.03208				
1/66	New Claim river bed (lower)		.31503	.2071	.03208				
1/67	Aluap Test Hole		.10501	.28586	.03792				
1/68	Aluap Lower		.10501	.29461	.02333				
1/69	Mine Run		.52506	.26253	.07875				
1/70	Mine Run Rocks		.31503	.1458	.01458				

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Sincerely,


Dr. M. F. Davies

FIRST FLORIDA RESEARCH, INC.

6514 CENTRAL AVENUE
ST. PETERSBURG, FL 33707

504

63-601
631

February 5, 19 80

PAY TO THE ORDER OF

Chemtech Corporation

\$ 1,200.00

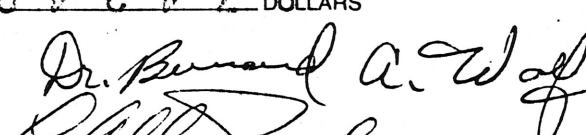
One Thousand Two Hundred & 00/100

DOLLARS



3100 Central Avenue
St. Petersburg, FL 33712

FOR Mining


Dr. Bernard A. Wolf