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07/05/88

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: WHITE GOLD CENTRAL

ALTERNATE NAMES:  
WHITE GOLD PROJECT

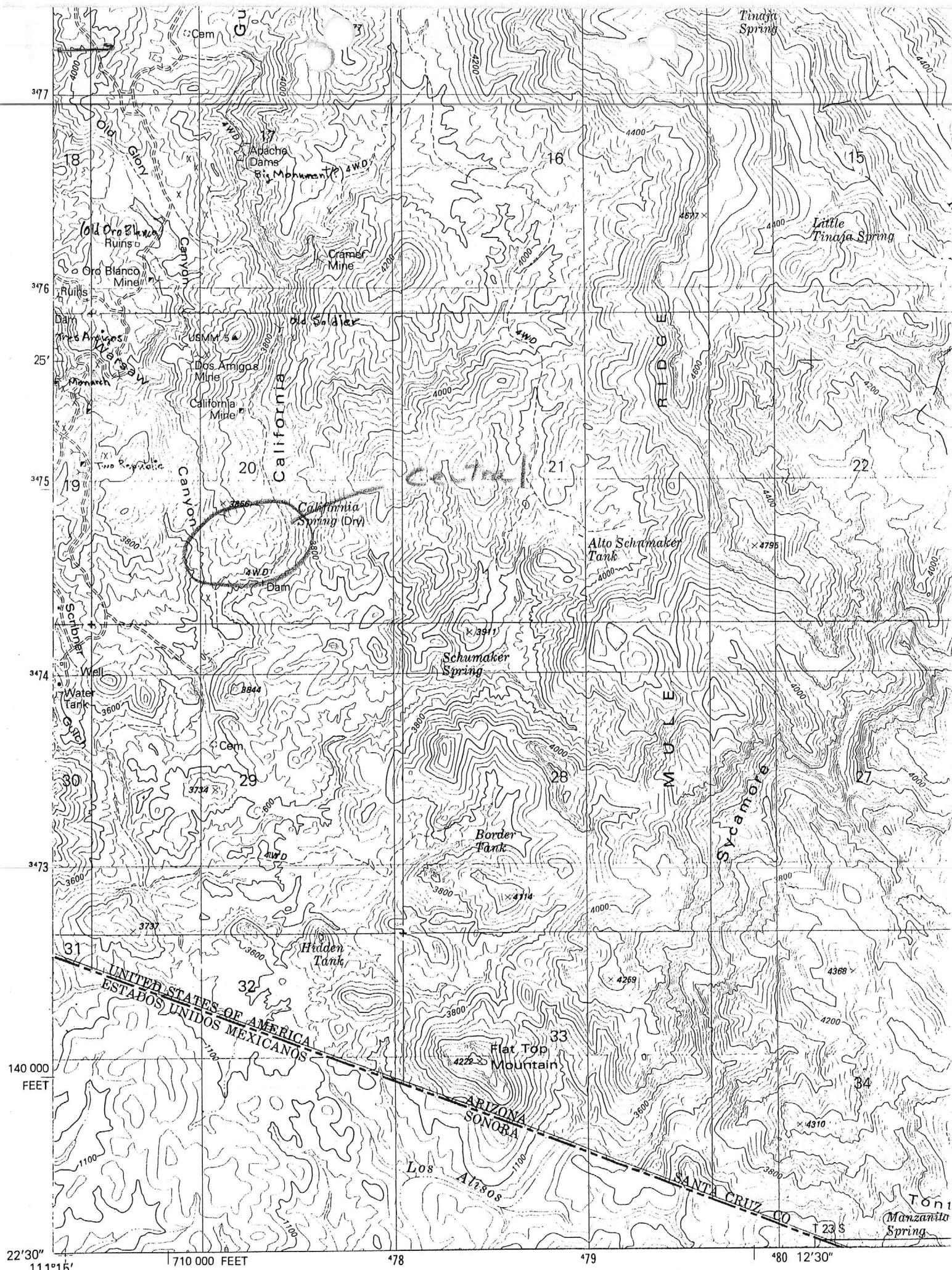
SANTA CRUZ COUNTY MILS NUMBER: 249

LOCATION: TOWNSHIP 23 S RANGE 11 E SECTION 20 QUARTER S2  
LATITUDE: N 31DEG 24MIN 35SEC LONGITUDE: W 111DEG 14MIN 20SEC  
TOPO MAP NAME: RUBY - 7.5 MIN

CURRENT STATUS: DEVEL DEPOSIT

COMMODITY:  
GOLD  
SILVER

BIBLIOGRAPHY:  
ADMMR WHITE GOLD CENTRAL FILE



WHITE GOLD CENTRAL

SANTA CRUZ COUNTY

HEM WR 5/13/88: Mines and prospects of the Oro Blanco District, Pima and Santa Cruz Counties were discussed with Herb H. Shear, President of Skylark Resources Ltd (card). Mr. Shear was in Arizona to discuss a possible joint venture with Gold Star Mining Co (card) on the White Gold Project, formerly held by Echo Bay Mines. This exploration project covers a large block of ground in the Oro Blanco District and includes several prospect areas assigned new MILS numbers. MILS 249, White Gold Central is estimated to contain 1,018,844 tons of .033 opt Au and 408,652 tons of .05 opt Au. Additional details are not as yet available. All are promising exploration prospects in various stages of development.

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# GOLDSTAR MINING COMPANY

BOX 871  
YERINGTON, NEVADA 89447  
702-463-4366

February 12, 1988

Mr. A.D. MacLeod  
NCA Minerals, Corp.  
Seventh Floor  
509 Richards Street  
Vancouver, B.C. V6B 2Z6

RE: White Gold Project  
Santa Cruz County, Arizona

Dear Mr. MacLeod:

As you have requested, I am summarizing the exploration potential of the subject property from the work done by Houston Oil and Minerals, then by Echo Bay following their purchase of Houston.

## INTRODUCTION

The 121 White Gold and West claims were acquired by purchase, option, and staking beginning in December 1982. The property was originally optioned in 1981 by Copperfields Mining Company which, due to the depressed copper market at that time, was unable or unwilling to make a \$15,000 property payment to the owners in 1982, and the property became available. They had drilled 47 air-trac holes, outlining a small deposit. Goldstar then drilled an additional 42 conventional rotary percussion holes confirming Copperfields findings and expanding the tonnage.

Portions of the property are held under purchase agreements with one party receiving \$2,500 per month and the other \$1000 per month. The original buyout price was \$263,000, and as of March 1, 1988 \$74,100 is still owed. Thirteen payments of \$2,500 per month remain to be paid on one property, and fourty-one \$1,000 per month and one \$600 remain on the other. A 1/2% NSR finders fee to \$100,000 will be due to one individual.

With Echo Bay's new deposit tonnage parameters due to the finding of the 37+mt Cove deposit, they feel that the multi million tons required by them probably do not exist on the property. Therefore, in early February of 1988 they terminated the project, relinquishing the properties back to Goldstar

A final report with all of the detailed data is not expected from Echo Bay until April, however I have obtained the drill summaries and discussed the exploration potential with their geologist, Fred Saunders. Below therefore, are my findings and ideas on the exploration potential of the property. Drill summaries, a small map with their locations, and a compilation map accompany this letter



## DRILLED TARGETS

### 1. Central Zone

While this area has had the most drilling in the past, only two holes were drilled in close proximity to it, with four drilled several hundred feet away from it. Detailed examination of past data and offset drilling of the mineralized holes will have to be done.

As of February 1987, Echo Bay calculated the overall reserves within the Central Zone at 1,018,844 tons of 0.033 opt. Au material using a 0.010 opt. cutoff (33,220 oz.) and 408,652 tons of 0.050 material with a 0.020 cutoff (20,559 oz.).

### 2. Pedro

Three holes were drilled into this flat lying quartz-calcite contact zone between the siltstones and tuffs with encouraging results. Hole 138 was mineralized throughout its entire 135 foot length, averaging 0.017 opt. Au, or from 45 to 115 feet 0.024. Only five 5' intervals ran less than 0.010 opt. Au. The offset hole, 139, 350 feet to the east hit spotty mineralization with the best grade being 0.079 opt. The 400 foot exposure of the contact zone 250 feet to the west of hole 138 had ten rock chip samples taken from it which ran up to 0.050 opt. Au. Two had only trace, and 4 were less than 0.010 opt. Hole 137, several hundred feet to the south encountered no mineralization in its 100 foot length.

There is easily room for a deposit of greater than a million tons surrounding the mineralized hole, therefore mapping and offset drilling is recommended.

### 3. Hill of Gold

Three holes to a maximum depth of 200 feet were drilled into this area. Only one hole, 134, hit significant mineralization, 15' 0.053 opt. Au near the surface. Away from the area drilled, rock chip geochemical samples ranged up to 0.131 opt. Detailed mapping followed by drilling should be done in this area.

### 4. Schumaker Spring

A 45°, 100 foot hole, 145, in the bottom of the canyon, hit 10 feet of 0.021 opt. Au near the surface. The significance of this hole is that it is the only one in the area and the silicification of the tuff breccia(?) and its thickness is greater above the hole. Mapping and sampling should be done.

### 5. White Tail

Mapping of the area needs to be done to further determine the potential for mineralization. Two of the four holes were of significance, number 149, the easternmost hole hit 400 feet of silicified and stockworks tuff breccia but did not assay, and hole 148, about five hundred feet to the west hit 30 feet of 0.026 opt. Au from 95-125 feet.

#### 6. West Extension

Hole number 122 hit 25 feet of 0.052 opt. Au from 100 to 125 feet at the contact between a siltstone unit and the Sidewinder quartz monzonite. Hole 150 was drilled about 100 feet west of this hole to a depth of 150 feet but failed to hit the intrusive and had only spotty mineralization. Offset drilling on 50 foot centers is recommended to outline this zone.

#### GEOCHEMICAL TARGETS

##### 1. Oro Fino

Due to significant values in the recon geochemical samples, the claims in this area were purchased during the 1987 drilling program. Mapping and additional sampling needs to be done.

##### 2. Boundry Tank

Rock chip values up to 0.021 opt. Au were found during first pass sampling. Considerable silicification and iron staining was noted in the area which should be mapped and sampled.

##### 3. West Silica Hill

Recon geochemical samples of this silicified area returned values up to 0.030 opt. Au. Additional sampling with mapping should be done.

##### 4. Silica Ridge


This large siliceous ridge should be further sampled then mapped. Values to 0.020 opt. Au were obtained initially. There are several pits and one tunnel on this ridge.

##### 5. Sentinel Peak

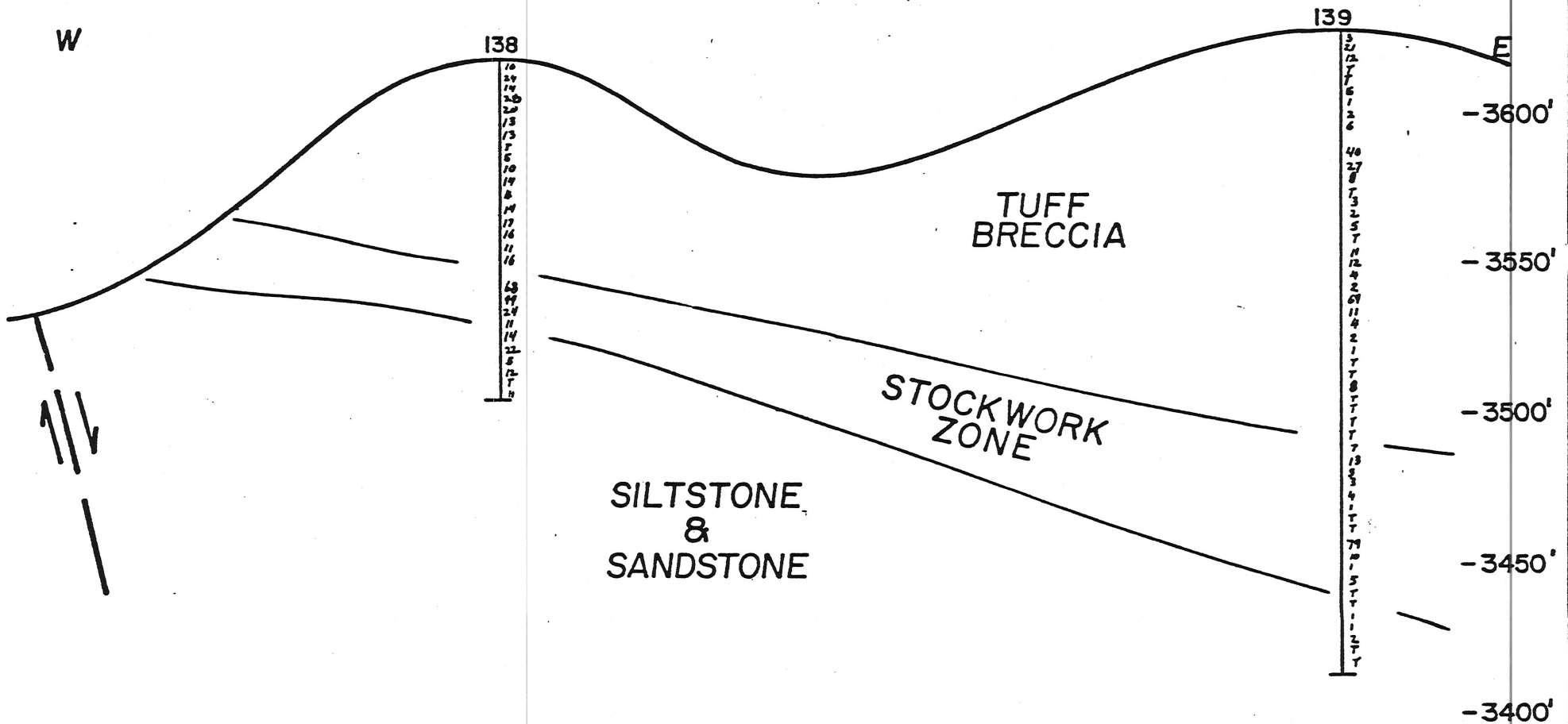
Additional rock chip samples need to be taken, and if values are found, the area should be mapped.

#### GENERAL

As mineralization occurs within the conglomerate sequence, as stockworks and brecciation within the tuffs, and along the contacts between the Sidewinder intrusive and the siltstone, these areas should be examined in detail.

  
Jay W. Santos

LOOKING NORTH



**PEDRO PROSPECT**  
**ORO BLANCO JV**  
SANTA CRUZ COUNTY, ~~NEVADA~~

*Arizona*

FIGURE II

Values in milliounces Au/ton



TABLE 1.

HOLE #	DEPTH	TARGET	ANGLE	BEARING	FOOTAGE	GEOLOGY	ASSAYS	
							INTERVAL	AU OPT
OB-119-87	200'	Section Corner Hill	Vert.	---	0- 5'	volc bx	25- 30'	.015
					5- 85'	qtz monz	105-110'	.016
					85-110'	slst + ss		
OB-120-87	470'	Section Corner Hill	Vert.	---	0- 35'	sil volc bx	60- 65'	.018
					35-100'	chl ss	165-170'	.108
					100-165'	sil volc bx	245-250'	.016
					165-250'	chl volc bx	365-370'	.034
					250-275'	chl ss	415-420'	.046
					275-315'	volc bx		
					315-375'	chl ss + slst		
OB-121-87	300'	Section Corner Hill	Vert.	---	0- 60'	oxid volc bx	20- 25'	.010
					60-122'	unox volc bx	280-285'	.010
					122-270'	chl slst		
					270-280'	ls		
					280-300'	ss + slst		
OB-122-87	300'	West Extension	Vert.	---	0-100'	oxid slst	100-125'	.053
					100-115'	blch + slst	205-210'	.017
					115-200'	qtz monz	245-250'	.017
					200-300'	slst	290-295'	.010
OB-123-87	300'	West Extension	Vert.	---	0- 35'	slst	50- 60'	.011
					35- 55'	ls/slst-jsp	70- 75'	.016
					55-160'	slst	145-155'	.014
					160-165'	ls	290-295'	.010
					165-245'	slst		
					245-255'	ls		
					255-300'	slst		
OB-124-87	300'	West Extension	Vert.	---	0- 30'	slst	25- 35'	.015
					30- 55'	ls-jsp	255-265'	.010
					55-165'	slst	265-275'	.024
					165-190'	ls	285-295'	.019
					190-225'	slst		
					225-250'	ls		

TABLE 1. (continued)

HOLE #	DEPTH	TARGET	ANGLE	BEARING	FOOTAGE	GEOLOGY	ASSAYS	
							INTERVAL	AU OPT
OB-125-87	400'	West Extension	Vert.	---	250-287	slst		
					287-300'	ls		
					0- 75'	slst	5- 35'	.012
					75- 80'	ls	150-155'	.043
					80-145'	slst-ss	195-200'	.016
					145-150'	ls	235-245'	.017
					150-290'	slst	360-375'	.035
OB-126-87	300'	West Extension	Vert.	---	240-360'	ss		
					360-400'	slst		
					0-120'	slst-ss	55- 60'	.010
					120-135'	calc slst	120-130'	.011
					130-170'	slst	135-155'	.010
					170-190'	chert		
OB-127-87	350'	NW Central	-45	N 36 degrees E	190-300'	slst	260-285'	.024
					0- 5'	cong.	0- 5'	.013
					5- 95'	qtz monz	20- 25'	.015
					95-150'	slst	180-190'	.013
					150-175'	ss		
					175-275'	slst		
					275-300'	ss		
OB-128-87	385'	NW South	Vert.	---	300-350'	cong		
					0-345'	cong	10- 15'	.040
					345-385'	slst-ss	140-145'	.028
							150-155'	.016
							285-290'	.026
OB-129-87	365'	South	Vert.	---			340-355'	.032
					0- 70'	oxid cong	80- 90'	.021
					70-200'	stwk cong	245-250'	.031
					200-295'	slst		
					295-325'	qtz monz		
					325-365'	cong		

TABLE 1. (continued)

HOLE #	DEPTH	TARGET	ANGLE	BEARING	FOOTAGE	GEOLOGY	ASSAYS	
							INTERVAL	AU OPT
OB-130-87	200'	South	Vert.	---	0- 90'	sil cong	15- 25'	.011
					90-110'	qtz monz		
					110-165'	cong		
					165-180'	ss		
					180-200'	qtz monz		
OB-131-87	325'	West Extension	Vert.	-	0- 75'	oxid ss-slst	30- 40'	.010
					75-120'	unox ss-slst	220-240'	.010
					120-150'	int ss-cong		
					150-215'	slst		
					215-250'	pebbly ss		
OB-132-87	235'	West Extension	Vert.	---	250-325'	ss-slst		
					0- 50'	oxid ss	0- 5'	.042
					50-110'	unox ss-slst	30- 35'	.016
					110-120'	calc slst	230-235'	.014
					120-185'	slst		
OB-133-87	200'	Hill of Gold	Vert.	---	185-225'	cong		
					225-235'	slst		
					0- 37'	oxid cong	20- 25'	.010
					37- 80'	oxid slst + ss	100-105'	.010
					80-160'	ss		
OB-134-87	200'	Hill of Gold	-45 degrees	Due North	160-200'	slst		
					0- 75'	oxid cong	10- 25'	.053
					75-100'	unox ss		
					100-130'	slst		
					130-160'	rhy dike		
OB-135-87	150'	Hill of Gold	Vert.	---	160-200'	ss		
					0- 50'	Tert volcs	no $\geq$ .01	
					50- 85'	oxid ss-slst		
					85-150'	unox slst		

TABLE 1. (continued)

HOLE #	DEPTH	TARGET	ANGLE	BEARING	FOOTAGE	GEOLOGY	ASSAYS	
							INTERVAL	AU OPT
OB-136-87	200'	Pedro South	-45 degrees	N 30 degrees W	0- 20'	Tert tuff bx	60- 65'	.018
					20- 30'	rhy dike	95-100'	.011
					30- 40'	tuff bx	110-115'	.018
					40- 65'	qtz monz	160-170'	.041
					70-135'	tuff bx	175-180'	.010
					135-145'	ss		
					145-175'	qtz monz		
					175-200'	ss		
OB-137-87	100'	Pedro	Vert.	---	0- 50'	oxid wk sil tuff bx	no $\geq$ .01	
					50- 70'	sil + cal stwk		
					70-100'	unox ss		
OB-138-87	135'	Pedro	Vert.	---	0- 80'	ox wk sil	0- 30'	.018
						tuff bx		
					80-110'	qtz-cal stwk	45-115'	.024
						tuff bx		
					110-135'	ss	80-100'	.043
OB-139-87	265'	Pedro	Vert.	---	0- 95'	ox wk sil	5- 15'	.017
						tuff bx		
					95-160'	unox wk sil	50- 60'	.034
						tuff bx		
					160-230'	qtz-cal stwk zn	90-100'	.012
					230-265'	ss	110-120'	.040
							175-180'	.013
							210-220'	.050
OB-140-87	325'	SE Central	Vert.	---	0-150'	ox wk to mod	115-155'	.011
						sil cong		
					150-195'	unox cong		
					195-205'	slst		
					205-325'	cong wk sil		

TABLE 1. (continued)

HOLE #	DEPTH	TARGET	ANGLE	BEARING	FOOTAGE	GEOLOGY	ASSAYS	
							INTERVAL	AU OPT
OB-141-87	250'	SE Central	Vert.	---	0- 65'	ox-sil cong	Pending	
					65-250'	unox cong	170-180'	.015
OB-142-87	175'	Section Corner Hill	-45	Due North	0- 40'	volc bx-sil	Pending	
					40-100'	ss oxid	55- 60'	.012
					100-175'	unox sil ss/slst		
OB-143-87	295'	Cemetary Hill	Vert.	---	0- 35'	mod sil ox	Pending	
						tuff bx		
					35- 70'	unox wk sil	40- 45'	.011
						tuff bx		
					75-140'	mod stwk tuff bx		
					140-185'	wk stwk tuff bx		
					185-200'	chl tuff bx		
OB-144-87	225'	Cemetary Hill	Vert.	---	200-235'	mod stwk tuff bx		
					245-295'	wk stwk tuff bx		
					0- 35'	ox mod sil +	Pending	
						tuff bx		
					35- 60'	unox wk sil +	55- 60'	.021
OB-145-87	100'	Schumacher	-45	N 60 degrees W		stwk tuff bx		
					60- 80'	strong stwk tuff bx		
					80-120'	mod stwk tuff bx		
					120-225'	wk stwk tuff bx		
OB-146-87	200'	White Tail	-45	N 40 degrees E	0- 30'	sil repl tuff	15- 25'	.021
						bx		
OB-147-87	200'	White Tail	Vert.	---	30-100'	unoxid ss		
					0- 30'	rhy mod sil	Pending	
					30- 35'	qtz vein-flt zn		no $\geq$ .01
					35- 80'	qtz monz unox		
OB-148-87	200'	White Tail	Vert.	---	80-200'	wk stwk tuff bx		
					0- 35'	qtz monz	Pending	
					35- 50'	str sil-stwk		
OB-149-87	200'	White Tail	Vert.	---		tuff bx	55- 60'	.010
					30-200'	qtz monz		



TABLE 1. (continued)

HOLE #	DEPTH	TARGET	ANGLE	BEARING	FOOTAGE	GEOLOGY	ASSAYS	
							INTERVAL	AU OPT
OB-148-87	150'	White Tail	Vert.	---	0- 15'	tuff-wk to	95-100'	.043
					15- 25'	str stwk		
					25-110'	rhy dike	105-125'	.027
					110-150'	wk sil + stwk tuff bx-ox unox tuff bx		
OB-149-87	400'	White Tail	Vert.	---	0- 25'	cover		no $\geq$ .010
					25- 65'	mod to str stwk tuff bx		
					65- 95'	qtz monz-unox		
					95-105'	flt gouge		
					105-165'	str sil + stwk tuff bx		
					165-400'	wk to mod stwk tuff bx		
OB-150-87	150'	West Extention	Vert.	---	0-150'	slst + ss	20- 25'	.010
						wk to mod ss	65- 70'	.010
OB-151-87	185'	Two Prospect	+45	N 60 degrees W	0- 40'	ss	40- 45'	.010
					40- 45'	sil flt zn	95-100'	.015
					45-100'	str sil cong	135-140'	.014
					100-185'	wk to mod sil cong		
OB-152-87	175'	Central	Vert.	---	0-175'	wk sil cong	140-145'	.010
OB-153-87	200'	Dale/Two	Vert.	---	0-155'	mod to str sil		no $\geq$ .010
					155-200'	Sidewinder qtz monz		
OB-154-87	250'	Pedro	Vert.	---	0- 5'	str sil felsic tuff		
					5- 45'	wk to mod sil tuff		
					45-250'	felsic tuff		no $\geq$ .010

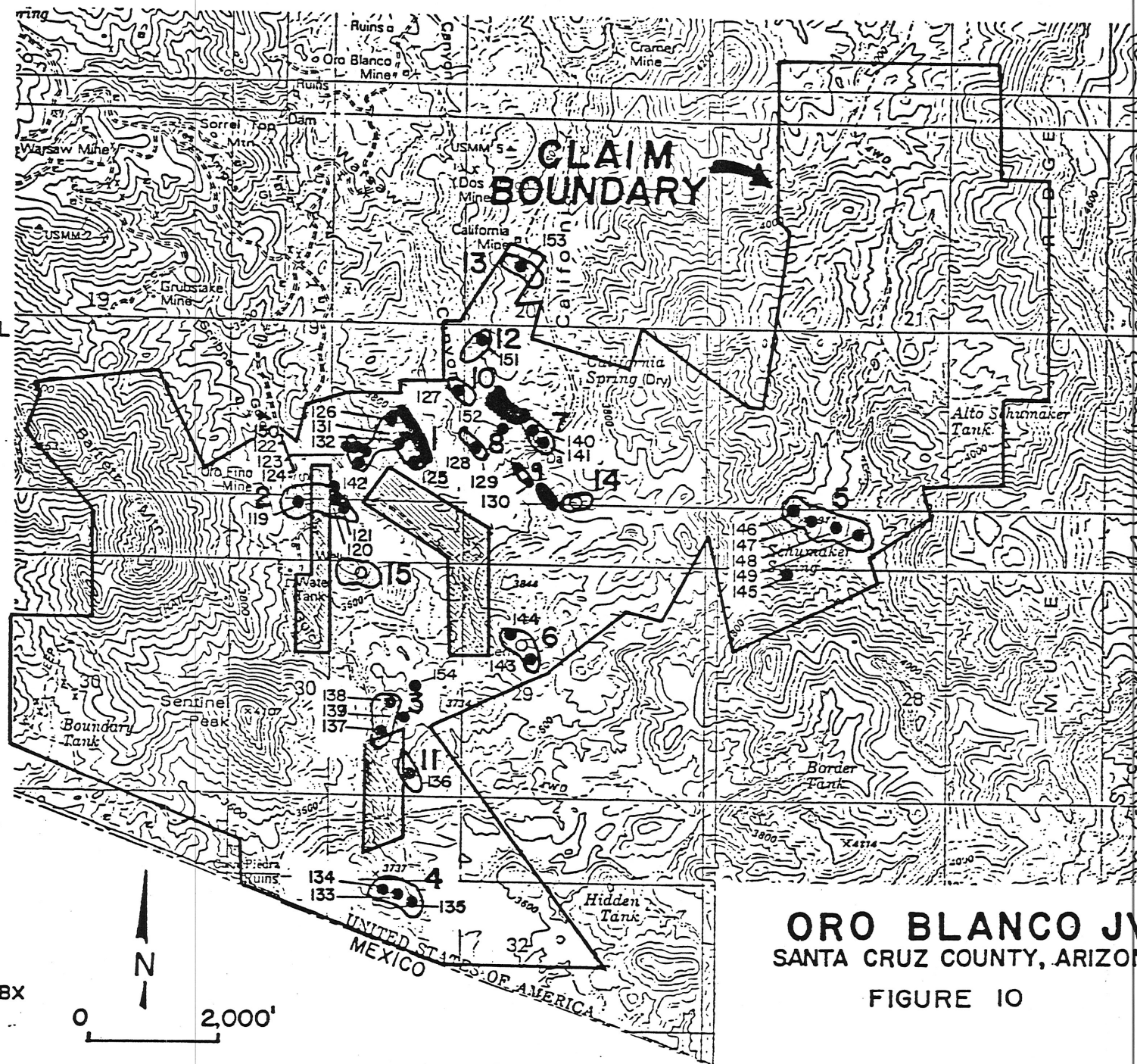
## Explanation

### PROSPECTS

1. WEST EXTENSION
2. SECTION CORNER HILL
3. PEDRO
4. HILL OF GOLD
5. WHITETAIL
6. CEMETARY HILL
7. S.E. CENTRAL
8. N.W. SOUTH
9. SOUTH
10. N.W. CENTRAL
11. PEDRO SOUTH
12. TWO
13. DALE / TWO
14. STATION 'G'
15. WEST SILICA HILL

### SYMBOLS

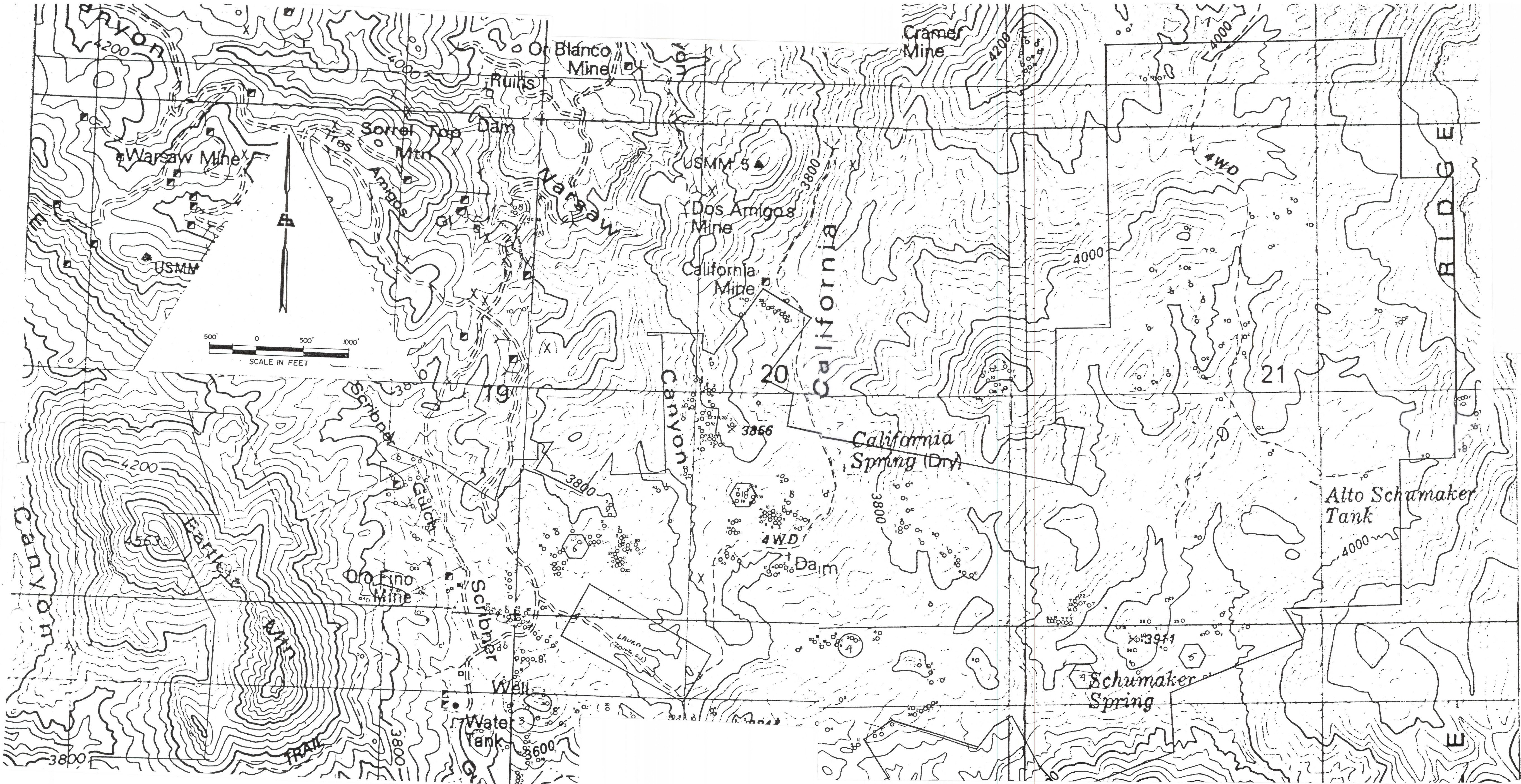
- PROPOSED HOLE
- COMPLETED HOLE
- 5 ○ PRIORITY TARGET
- DRILLED DEPOSIT
- ▨ PROPERTY NOT CONTROLLED BY EBX



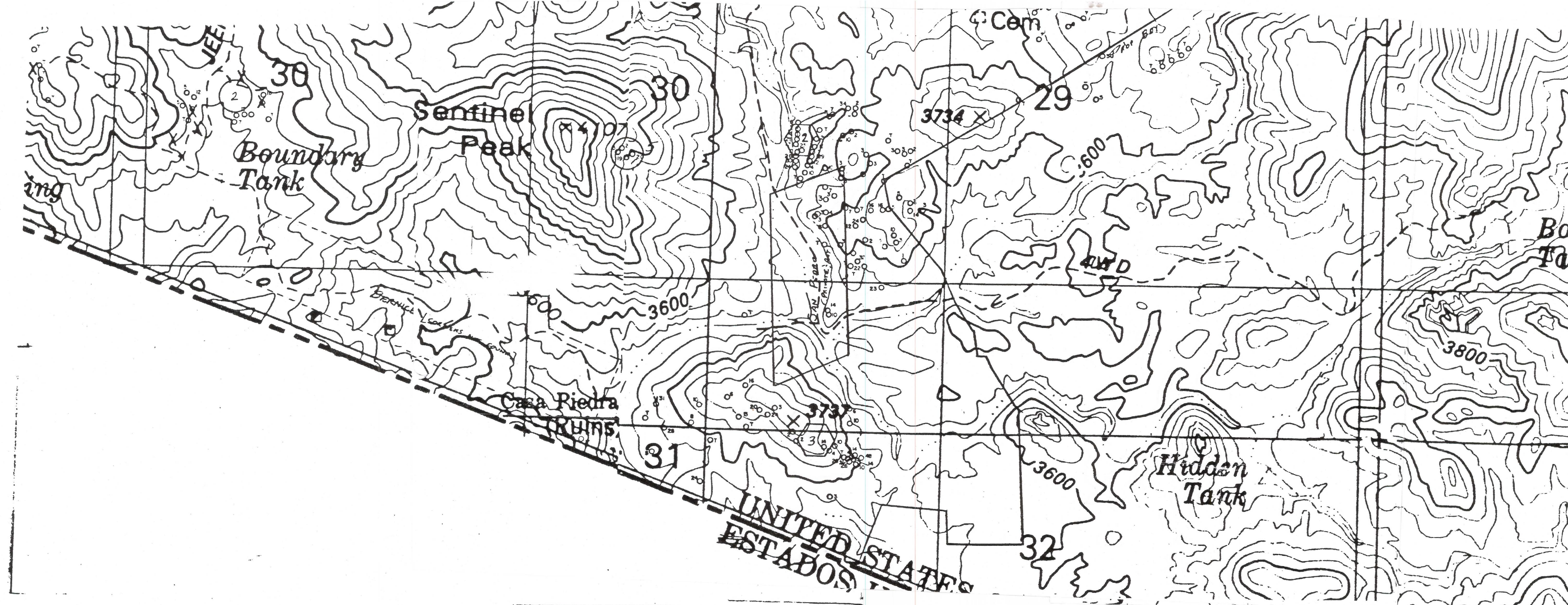
**ORO BLANCO JV**  
SANTA CRUZ COUNTY, ARIZONA

FIGURE 10









LEGEND

- $\frac{1}{2}$  O = Rock chip sample site - values in milliounces Au  
(1 = 0.001 opt. Au)
- Hexagon = Drilled Targets
1. Central zone
  2. Pedro
  3. Hill of Gold
  4. Schumaker Spring
  5. White Tail
  6. West Extension
- Circle = Geochemical Targets
1. Oro Fino
  2. Boundry Tank
  3. West Silica Hill
  4. Silica Ridge
  5. Sentinal Peak

Base map and all data preliminary - supplied by Echo Bay

WHITE GOLD PROJECT  
Santa Cruz County, Arizona  
DATA COMPILATION  
Jay W. Santos February 13, 1987