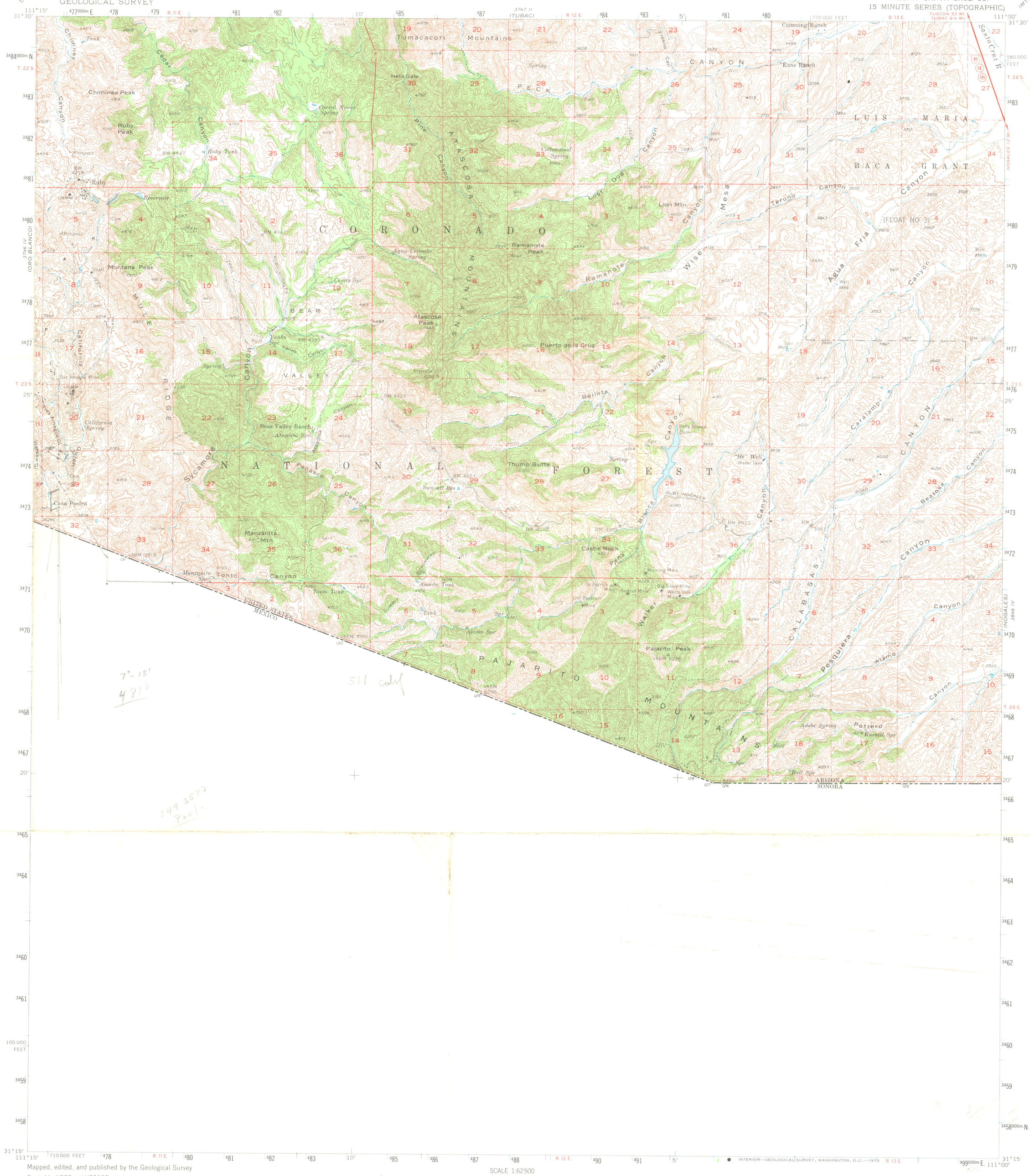
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RUBY QUADRANGLE
ARIZONA—SANTA CRUZ CO.
15 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by planetable surveys 1939
Culture revision and field check 1957

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, central zone
1000-meter Universal Transverse Mercator grid ticks, zone 12, shown in blue

Dashed land lines indicate approximate location

UTM GRID AND 1957 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:62 500

CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225 OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION
Heavy-duty — Light-duty
Unimproved dirt
U. S. Route — State Route

RUBY, ARIZ.
N3115—W11100/15
1957
AMS 3746 I—SERIES V798

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1973

9.06 Acres × 4840 □/yd/ac = 175,402

Unit 2 175,402 □/yd. @ $.03 Au @ $400.00

2,104,819.

$.02 @ $400 1,403,216.

175,402 ÷ 1.5

116,935 tons

$.0143 @ 400 $1,003,299 ÷

1.5 cu yd./T = $668,866

$\boxed{463.7}\boxed{704}$ × 400 = 185,488

Calculations Calif Gulch

Unit 1 6.7 ac.

6.7 × 4840 □/yd./Ac. × ~~1.5 cu. yd~~/T ×
$0.0143 oz/cu. yd. × $400/oz Au.
($300/oz Au)

× 3 yd. Depth = $556,464 556,464
(× 3 yd Depth × $300/oz. 417,332)

Unit 2 9.06 ac.

9.06 × 4840 × 0.0143 × 400
× 3 752,473 752,473
(× 3 × 300 = $564,355)

Unit 3

E. G. H.

~~Unit 1~~	~~17.5 × 200~~	~~3500# ÷ 9~~		~~= 389 □ yds.~~
Unit 2	19.2 × 200	3840# ÷ 9		= 427 □ "
Unit 3	33.8 × 200	6760# ÷ 9		= 751 □ "
Unit 4				

Unit 1	7.4 × .918	6.7 acres
2	9.87 "	9.06 ~~9.14~~ acres
3	16.55	15.19 acres
4	17.91	16.44
		47.39 acres

47.39 × 4840 □'/yd./acre = 229,368 □ yds.
× 3 yds deep = 688,103 cubic yds.
× 4 " " = 917,472 " "

917,472 cu yd.
× .03 Au @ $400/oz = $11,009,664
× .02 Au @ " /oz 7,339,776

M.P.B.

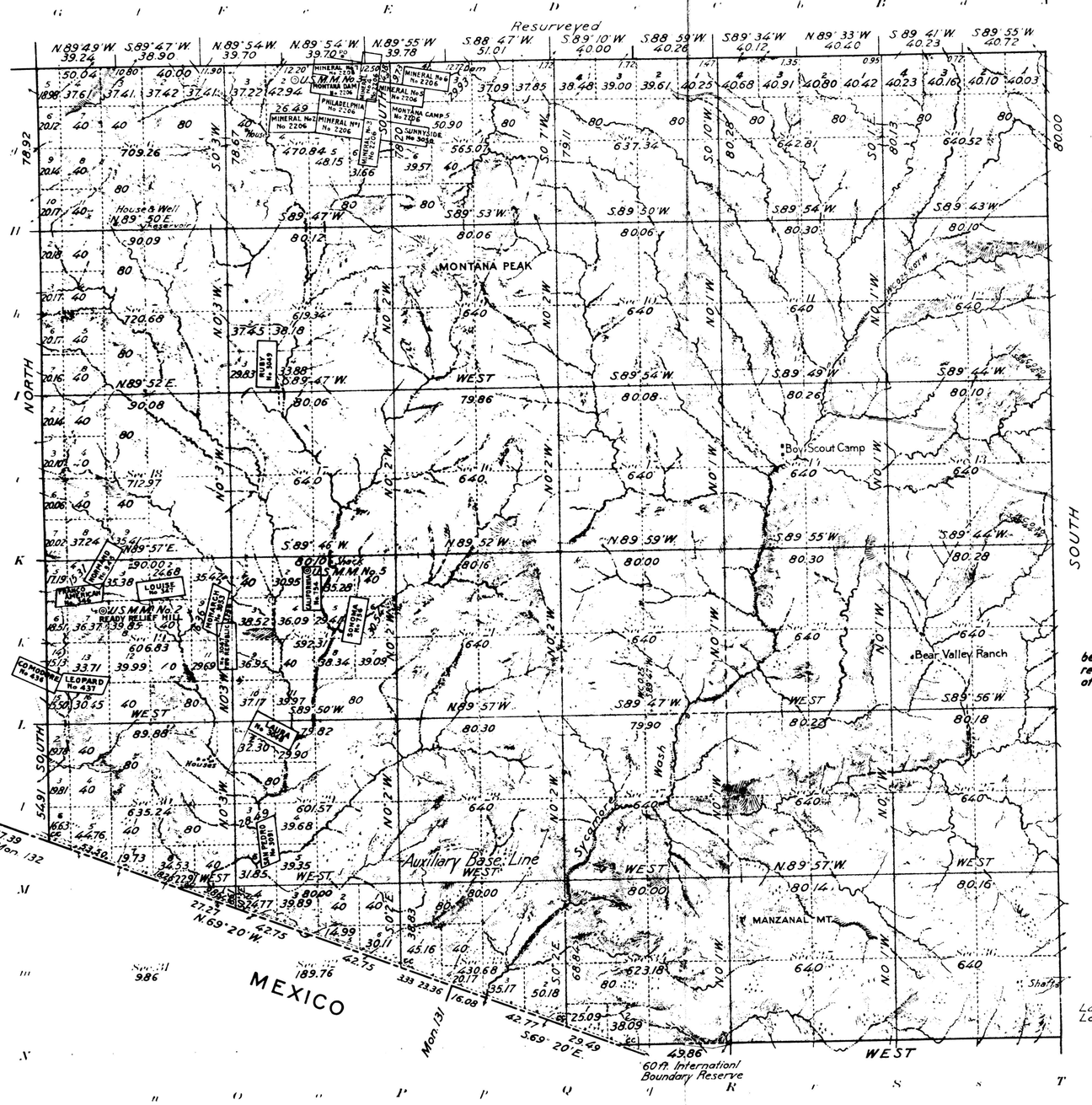
				Acres
Unit 1	7.25	× .918	=	6.66
Unit 2	9.12			8.37
Unit 3	16.58			15.22
Unit 4	18.31			16.81
			Total	47.06

Totals $\frac{(47.39)+(47.06)}{2}$ = 47.24 acres

Unit 2 9.92 × .918 = 9.11 9.92

Township No. 23 South Range No. 11 East, Gila and Salt River Meridian, Arizona.

2519



See field notes for connections to U.S. Mineral Monuments and ties to mineral claims.

DEPARTMENT OF THE INTERIOR
GENERAL LAND OFFICE.
Washington, D.C. June 25, 1927.
The survey represented by this plat having been correctly executed in accordance with the requirements of law and the regulations of this office, is hereby accepted.

Assistant Commissioner.

Areas in Acres

Public Land	21,568.26
Indian Reservation	
Indian Allotments	
Mineral Claims	446.04
Water Surface	
60 ft. Int. Bdy. Res.	27.14
Total Area	22,041.44

Lat 31° 22' 32" N.
Long 111° 09' 38" W.

Scale 40 Chains to an inch

Mean Magnetic Declination 13° 45' E.

Surveys Designated	By Whom Surveyed	Group No.	Group Date	Amount of Surveys Mls.	chs.	lks.	When Surveyed Begun	Completed
North bdy. Resur.				6	10	04	Dec. 22, 1924	Dec. 26, 1924
South bdy. Surv.				2	52	44	Dec. 30, 1924	Jan. 8, 1925
East bdy. Surv.	D.R. Averill U.S.S.	133	June 19, 1924	6	00	00	Dec. 27, 1924	Dec. 29, 1924
West bdy. Surv.	R.F. Wilson U.S.T.			4	55	88	Jan. 9, 1925	Jan. 10, 1925
Sub. lines Surv.				58	23	68	Dec. 30, 1924	Jan. 23, 1925
Connections U.S.-Mex. Bdy.				4	18	89	Jan. 8, 1925	Jan. 13, 1925

The above map of Township No. 23 South Range No. 11 East of the Gila and Salt River Meridian Arizona. is strictly conformable to the field notes of the survey hereof which have been examined and approved.

Office of U.S. Supervisor of Surveys
Denver Colorado. May 4, 1927

U.S. Supervisor of Surveys.

NOTICE OF LOCATION
(AMENDED)

NOTICE IS HEREBY GIVEN that the _____ lode mining claim, originally located by _____ as the _____ on _____, the location notice of which is of record in the office of the Recorder of Graham County, Arizona, at Docket _____, page _____, is hereby amended. This claim is approximately _____ feet in length along the vein or deposit of mineral-bearing rock in place and varies in width from approximately _____ feet to approximately _____ feet on each side of the middle of said vein or deposit. The general course of this claim is _____ and is located within the Lone Star Mining District, Graham County, Arizona. This claim runs from the location monument or stake on which the notice is posted approximately _____ feet in a _____ direction to the _____ center end monument or stake and approximately _____ feet in a _____ direction from the location monument or stake to the _____ center end monument or stake and is also marked by two corner monuments or stakes at each end of the claim, one on each side of the center end monuments or stakes. On the _____ end of the claim the corner monuments or stakes are separated by an approximate distance of _____ feet and on the _____ end of the claim the corner monuments or stakes are separated by an approximate distance of _____ feet, making the claim in the form of a _____.

This amended notice of location is made without waiver of any previously acquired rights, but for the purposes of more clearly describing the location thereof and of correcting errors, defects, or omissions, if any, in the original location or the record thereof. This claim is bounded on the _____ by the _____ claims(s); on the _____ by the _____ claim(s); and the _____ end line of this claim adjoins the _____ end line of the _____ claim and the location monument on which this notice is posted is situated approximately _____ feet in a _____ direction to the _____ corner of Section _____ T. _____ S. R. _____ E., G.S.R.B.&M., Graham County, Arizona.

Dated and posted on the ground this _____ day of _____, 1973.

OWNERS

_____

_____

_____

_____

By: _____

Witness:

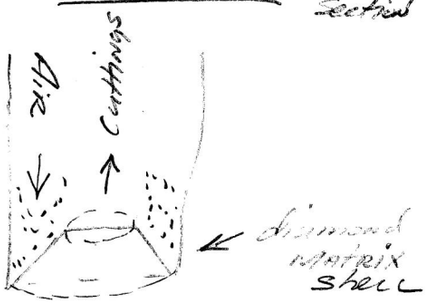
_____

_____

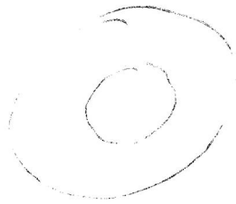
Trapesium/Trapezoid 0

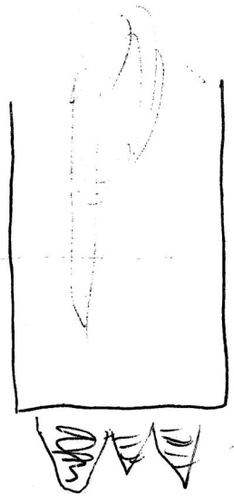
A bit design
often used in Placer Drilling

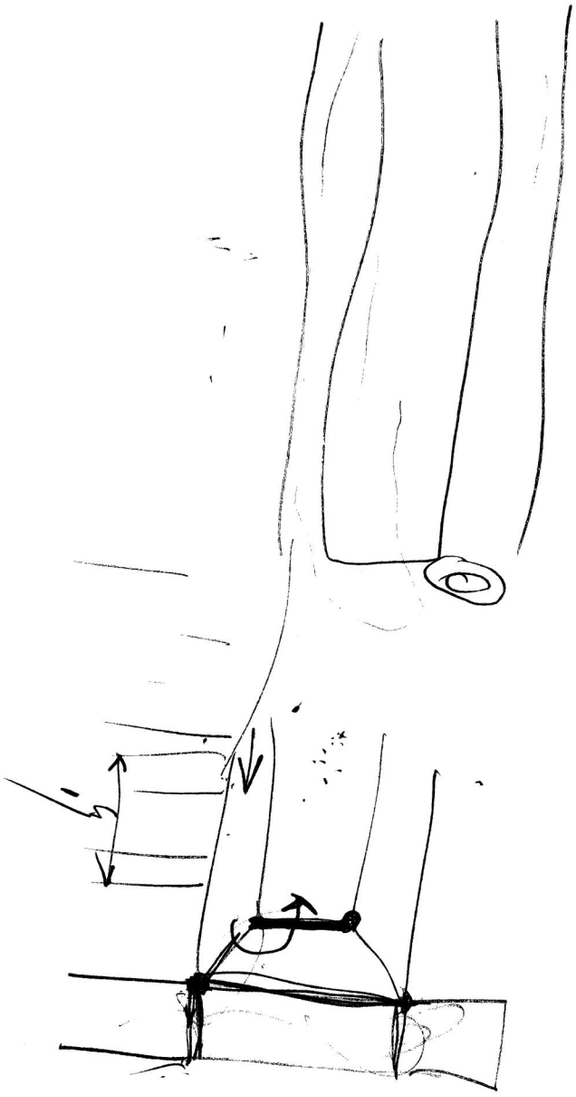
Side View (cutaway section)



Bottom View







602/887 5341

LEGEND

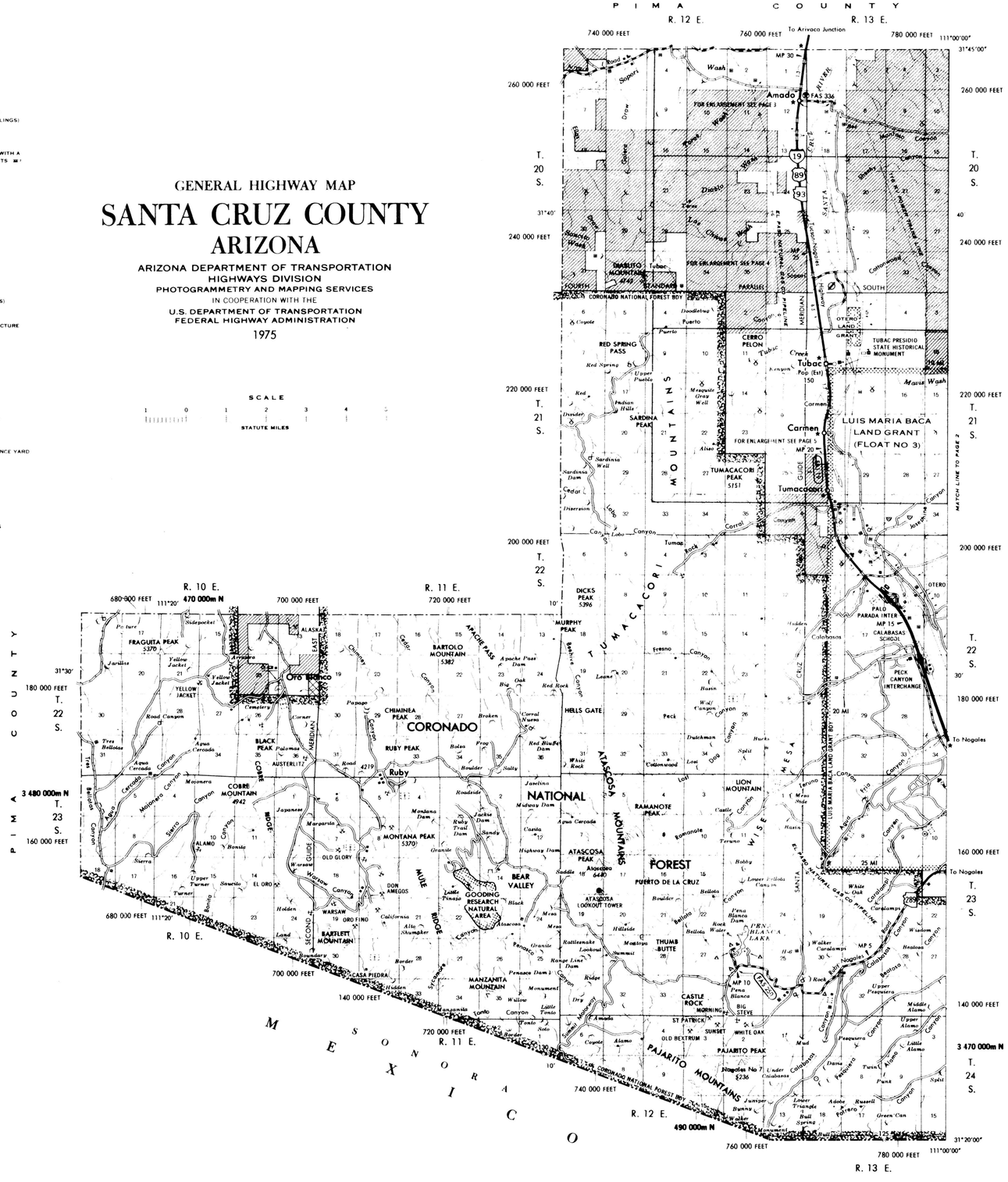
- PRIMITIVE TO UNIMPROVED
- GRADED AND DRAINED
- GRAVEL
- BITUMINOUS
- BITUMINOUS OR CONCRETE
- (F.C.A.) DIVIDED HIGHWAY (FCA INDICATES FULL CONTROL OF ACCESS)
- (FAI 263) FAI, FAP, FAS, NFH DENOTE FEDERAL AID INTERSTATE, FEDERAL AID PRIMARY, FEDERAL AID SECONDARY OR NATIONAL FOREST HIGHWAY
- 66 U.S. HIGHWAY MARKER
- 40 INTERSTATE HIGHWAY MARKER
- 73 STATE HIGHWAY MARKER
- 209 INDIAN SERVICE ROUTE
- FAS 263 END OF DESIGNATED ROUTE
- 75 12.6 MILEAGE BETWEEN POINTS
- RAILROAD AND STATION
- HIGHWAY INTERCHANGE
- HIGHWAY GRADE SEPARATION
- OVERPASS AND UNDERPASS
- HIGHWAY TUNNEL
- HIGHWAY BRIDGE
- SMALL BRIDGES CLOSELY SPACED
- HIGHWAY BRIDGE (OVER 200 FEET)
- DAM WITH ROAD
- AIRSTRIP
- COMMERCIAL AIRPORT
- MUNICIPAL AIRPORT
- MILITARY AIRFIELD
- HELIPORT
- INTERMITTENT STREAM
- NARROW STREAM (LIVE)
- WIDE STREAM, WITH DOCK OR BOAT LANDING
- CANAL OR IRRIGATION DITCH
- SAND
- LAKE, RESERVOIR OR POND, WITH DAM
- SPRING
- TAILINGS POND
- PROMINENT ELEVATION
- DIKE
- NATIONAL BOUNDARY
- STATE BOUNDARY
- COUNTY BOUNDARY
- TOWNSHIP OR RANGE LINE
- SECTION LINE
- SECTION LINE INDEFINITE
- LAND GRANT BOUNDARY
- MILITARY AIRFIELD BOUNDARY
- CORONADO NATIONAL FOREST BDY. — NATIONAL FOREST
- NATIONAL RESERVATION
- MONUMENTED BOUNDARY MARKER
- △ BON TRIANGULATION STATION (WITH NAME)
- MP 265 MILEPOST
- GAS LINE
- TRANSMISSION LINE
- UNDERGROUND COAXIAL CABLE
- RANCH
- DWELLING
- ROW OR GROUP OF DWELLINGS
- TENANT HOUSES
- SEASONAL DWELLING
- 7 SEASONAL DWELLINGS CLOSELY SPACED (FIGURE INDICATES NUMBER OF DWELLINGS)
- COMBINED DWELLING AND STORE
- HOTEL, INN
- MOTEL, TOURIST COURT (ALSO TRAILER COURT WHEN SHOWN WITH A NUMBER INDICATING NUMBER OF UNITS)
- CEMETERY
- HOSPITAL
- FIRST AID STATION OR HEALTH CENTER
- BOARDING SCHOOL
- SCHOOL
- CHURCH
- CHURCH AND SCHOOL
- GOVERNMENT BUILDING
- COURTHOUSE
- LIBRARY
- POLICE STATION
- FIRE STATION
- TOWN HALL OR COMMUNITY HALL
- CORRECTIONAL INSTITUTION
- POST OFFICE
- STORE, BUSINESS OR TRADING POST
- KOY BROADCAST TOWER (WITH CALL LETTERS)
- WELL
- WINDMILL
- WATER RETARDING OR DIVERSION STRUCTURE
- WATER TANK
- FACTORY OR INDUSTRIAL PLANT
- MINE OR PROSPECT
- OIL OR GAS TANK
- POWER PLANT
- TRANSFORMER STATION
- PUMPING OR GAUGING STATION
- WAREHOUSE
- STOCKYARD
- GRAVEL PIT
- DUMP, GARBAGE, RUBBISH AND OTHER
- JUNKYARD, AUTO
- JUNKYARD, SCRAP METAL
- SEWAGE DISPOSAL PLANT
- STATE OR COUNTY HIGHWAY MAINTENANCE YARD
- PICNIC GROUND
- CAMP SITE
- ROADSIDE REST
- SMALL PARK
- FOREST RANGER STATION, PERMANENT
- FOREST RANGER STATION, SEASONAL
- OBSERVATION OR LOOKOUT TOWER
- GOLF COURSE OR COUNTRY CLUB
- AMUSEMENT PARK OR RODEO GROUNDS
- FAIRGROUNDS OR RACE TRACK
- INDIAN RUIN
- SMALL MONUMENT, RESERVATION OR POINT OF INTEREST
- STATE CAPITAL
- COUNTY SEAT
- OTHER CITIES AND POPULATED PLACES
- INCORPORATED CITY
- DELIMITED AREA

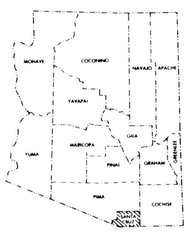
GENERAL HIGHWAY MAP

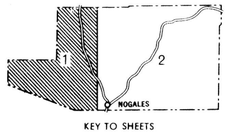
SANTA CRUZ COUNTY
ARIZONA

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PHOTOGRAMMETRY AND MAPPING SERVICES
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
1975

SCALE
1 0 1 2 3 4
STATUTE MILES







KEY TO SHEETS

COMPILED BY PHOTOGRAMMETRIC METHODS, PHOTOGRAPHY 1973
CONTROL BY USC&GS AND USGS
TRANSVERSE MERCATOR PROJECTION, 1927 NORTH AMERICAN DATUM
ARIZONA COORDINATE SYSTEM, CENTRAL ZONE
UNIVERSAL TRANSVERSE MERCATOR SYSTEM, ZONE 12

GENERAL HIGHWAY MAP
SANTA CRUZ COUNTY, ARIZONA
ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PHOTOGRAMMETRY AND MAPPING SERVICES
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
1974

© ADOT

ARIZONA STATE LAND DEPARTMENT

STATE TRUST LANDS

SURFACE

LEGEND

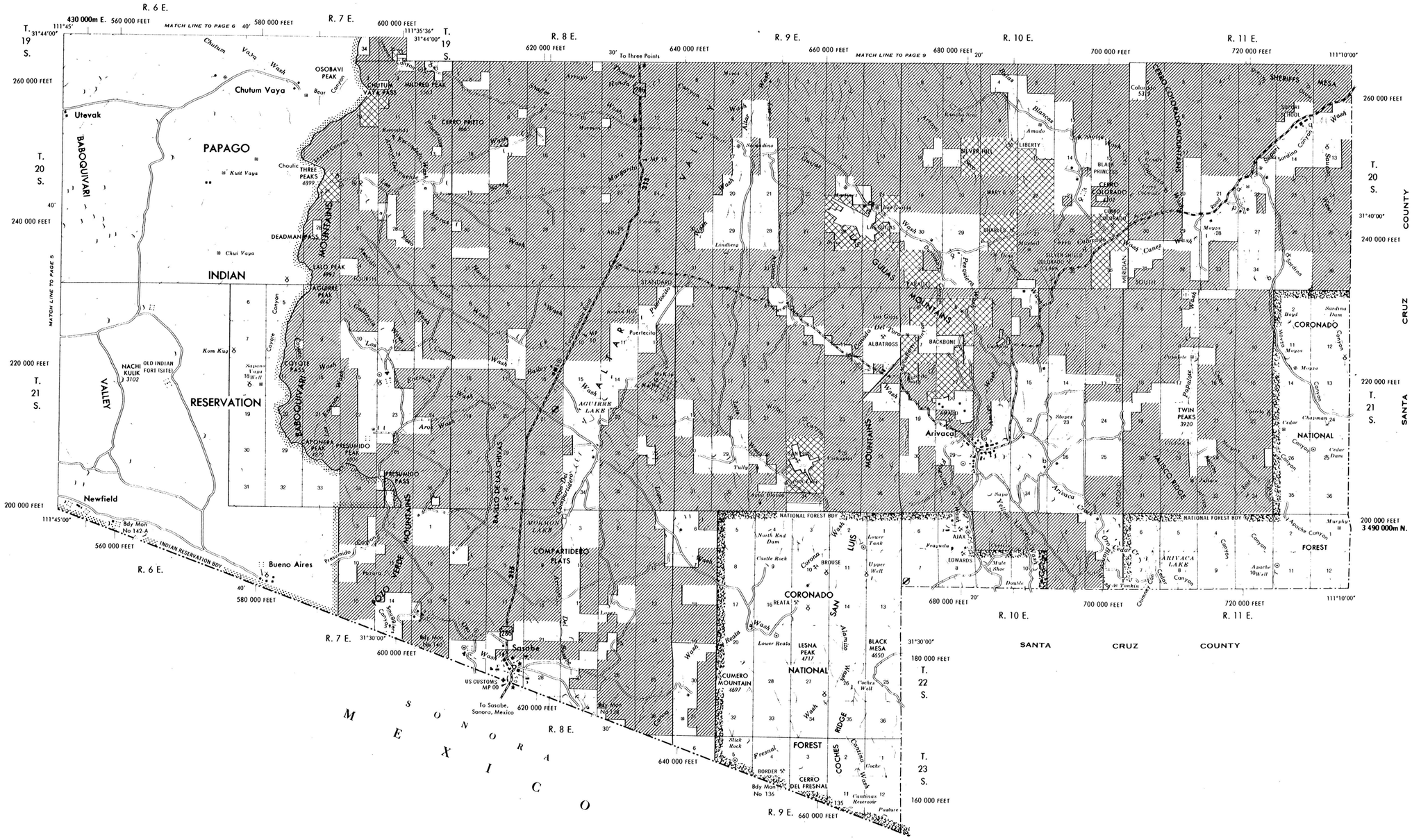
- STATE
- BLM
- OTHER (PRIVATE, IND. & MIL. RES., NAT'L. & ST. PARKS & MON'S., NAT'L FORESTS)

DATE 5/5/80

COUNTY SANTA CRUZ

SHEET 1

The Arizona State Land Department and The Bureau of Land Management make no warranties, implied or expressed, with respect to information shown on these maps.



ARIZONA STATE LAND DEPARTMENT

STATE TRUST LANDS

SURFACE

LEGEND

- STATE
- BLM
- OTHER (PRIVATE, IND. & MIL. RES., NAT'L. & ST. PARKS & MON'S., NAT'L FORESTS)

DATE 5/6/81

COUNTY PIMA

SHEET 10

The Arizona State Land Department and The Bureau of Land Management make no warranties, implied or expressed, with respect to information shown on these maps.

by screening to -0.09 inches with a 90% recovery by screening to +0.0117 inches. The sieve analysis or screening was done dry.

Sample Procedures

On Bend #3 approximately 150 pounds of material was panned and the panned concentrates saved for analysis. These pans were taken at random intervals from a gravel bar in the approximate center of the claim over a 50 foot length and to a depth of two feet.

On Bend #2 a bulk sample of approximately 50 pounds was taken from a two foot deep test pit from a gravel bar in the center of the claim.

On Bend #1 a bulk sample of approximately 50 pounds was taken from a two foot deep test pit from a gravel bar in the center of the claim.

The Golden Fleece and Strait #1 claims are being contested. However, we did take two pans from the Golden Fleece and four pans from Strait #1.

Remarks and Recommendations

The purpose and intent of this report is to determine if gold values are present and, if present, to make a judgement of the total amount of gold available. In making this determination, the assumption has been made that values are continuous both vertically and horizontally. It should be noted, however, that values in a placer deposit are very rarely continuous as assumed above. It should also be noted that the highest values should be at or near the bedrock horizon and this zone was not sampled.

I would recommend that a pilot study be done and a sample of several tons be taken by trenching to bedrock and dry screening to the proper size. This concentrate should be taken to a reputable metallurgical lab to determine the best method of economical recovery.

My personal opinion of this property is that it is a very valuable property. This is the first placer deposit I have seen where gold can be obtained seemingly at random.

Summary

Using the facts and values generated by our work, the property has an estimated total value of $3,678,398.10 (430,222 cu yd x $8.55/cu yd). The above figure is based on 100% recovery which is not a realistic figure. The recovery rate and more realistic values should be determined by a pilot study as recommended above.

U. S. MINING & MILLING CORPORATION
P. O. BOX 705
SOCORRO, NEW MEXICO 87801
(505) 835-3511

039333

July 14, 1980

Sample I.D.	Au (oz/t)	Ag (oz/t)
Bend # 1 +.0117	0.011	0
Bend # 2 +.0117	0.012	0
Bend # 2 +.0059	0.025	0.25
Bend # 2 -.0059	0.062	0.25
Bend # 1 +.0059	0.015	0.25
Bend # 1 -.0059	0.092	0.25
Golden Fleece 1.0 g	4.131	2.90
Bend #3 1.0 g	1.332	1.03
Strait # 1	16.426	6.51

Submitted: Robert W. Rathe

ANALYSIS REPORT

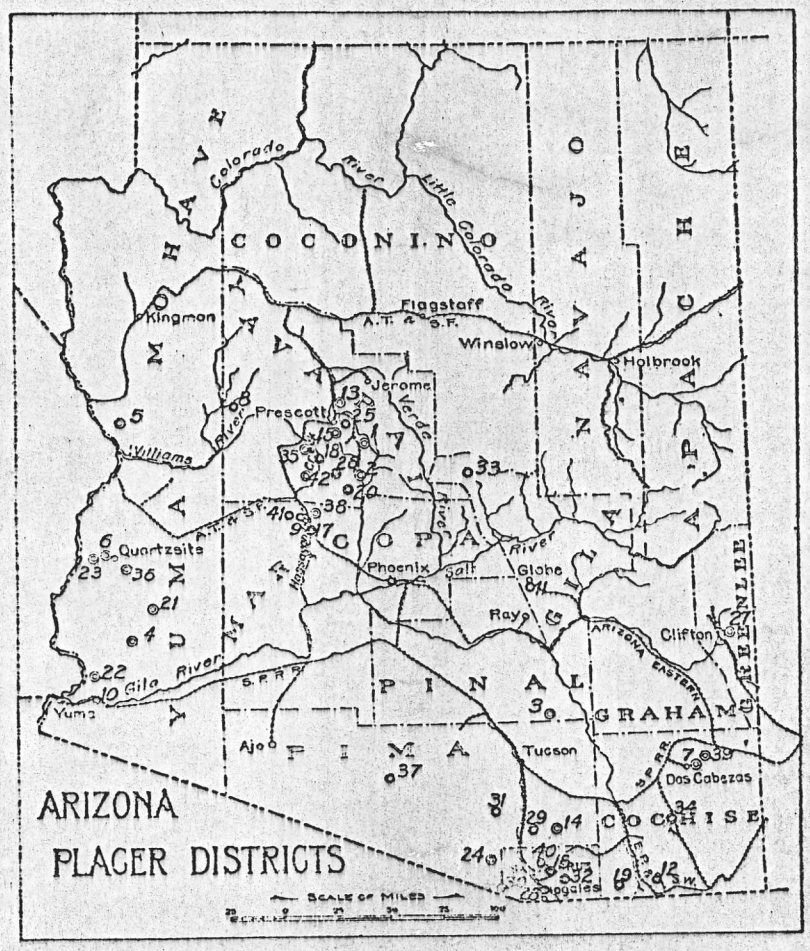
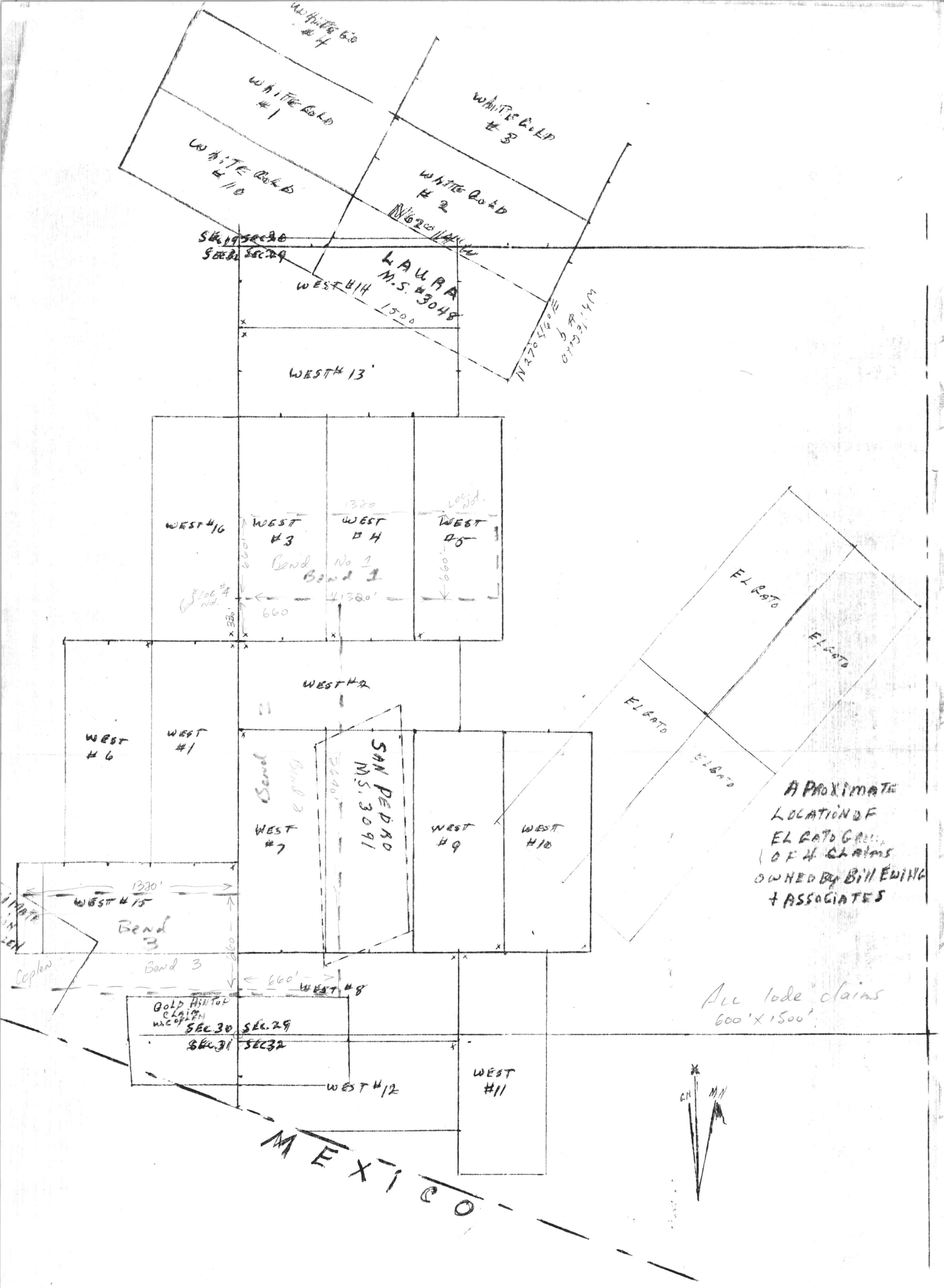
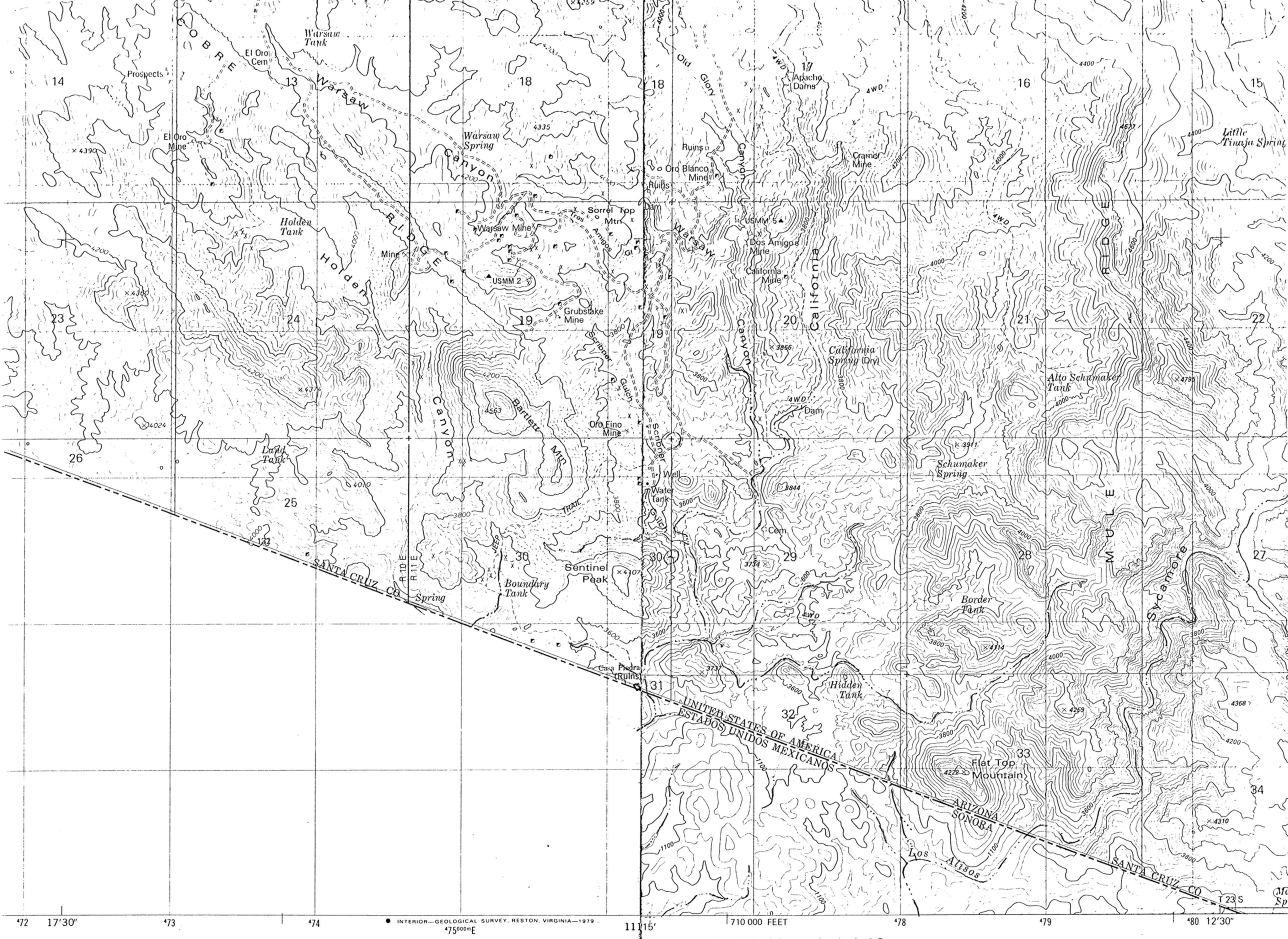


Fig. 1. Index map showing location of Arizona placer districts.

1—Big Bug
2—Black Canyon
3—Canada del Oro, or Old Hat
4—Castle Dome
5—Chemehuevis
6—Dome Rock
7—Dos Cabezas
8—Eureka
9—Garcia
10—Gila City
11—Globe
12—Gold Gulch, Bisbee
13—Granite Creek
14—Greaterville
15—Groom Creek
16—Harshaw
17—Hassayampa, Maricopa County
18—Hassayampa, Yavapai County
19—Huachuca
20—Humbug
21—Kofa, or S. H.
22—Laguna
23—La Paz
24—Las Guijas, or Arivaca
25—Lynx Creek
26—Minnehaha
27—Morenci
28—Nogales
29—Old Baldy
30—Oro Blanco
31—Papago
32—Patagonia
33—Payson
34—Pearce
35—Placeritas
36—Plomosa
37—Quijotoa
38—San Domingo
39—Teviston
40—Tyndall
41—Vulture
42—Weaver and Rich Hill.



MAP OF WEST CLAIMS
By CLEARL D. KILLGORE
1-23-83
1 INCH = 600 FT.
X LOCATION NOTICE POSTED



472 17'30" 473 474 475000mE 11 15' 710 000 FEET 478 479 480 12'30"

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1979

MILE

ARIZONA

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Primary highway, hard surface — Light-duty road, hard or improved surface

Secondary highway, hard surface — Unimproved road

Interstate Route — U. S. Route — State Route

BARTLETT MTN., ARIZ.

NE/4 ORO BLANCO 15' QUADRANGLE

N3122.5—W11115/7.5

1979

DMA 3746 IV NE—SERIES V898

Produced by the United States Geological Survey

Control by USGS, NOS/NOAA, International Boundary and Water Commission, and Dirección General de Geografia del Territorio Nacional (DIGETENAL)

U.S. portion compiled by photogrammetric methods from aerial photographs taken 1975. Field checked 1976. Map edited 1981

Mexico portion copied from DIGETENAL 1:50 000-scale map, La Bellotosa H12A39 dated 1979

Projection and 10,000-foot grid ticks: Arizona coordinate system, central zone (transverse Mercator)

1000-meter Universal Transverse Mercator grid, zone 12

1927 North American Datum

To place on the predicted North American Datum 1983 move the projection lines 9 meters south and 63 meters east as shown by dashed corner ticks

Certain land lines are omitted because of insufficient data

There may be private inholdings within the boundaries of the National or State reservations shown on this map

GN MN 0°06' 2 MILS 12½° 222 MILS

UTM GRID AND 1981 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

FOR S
AN

POM Notes Sat. 7 Hayden 6

10/20/82

Calif Gulch Proj. Oro Blanco Dist.

Harold Sauer
William H. Coplen
P.O. Box 92 Arivaca 85601

		Loc Date	Recorded BK Pg.
	White Gold #21	3/26/82	322/625
Sec. 29 T23S R11E	" " #9 & 10	12/25/81	317/675 & 678
	" " #13 thru #17	12/16/81	317/681-684
	" " #19 & 20	"	" 687-690
			" 693-696 699

Affidavit of L.
Will. H. Coplen White Gold #1 th. #21 328/688

Clearl D. Kilgore
Don Snodgrass } 3/22/82 322/433 thru 444

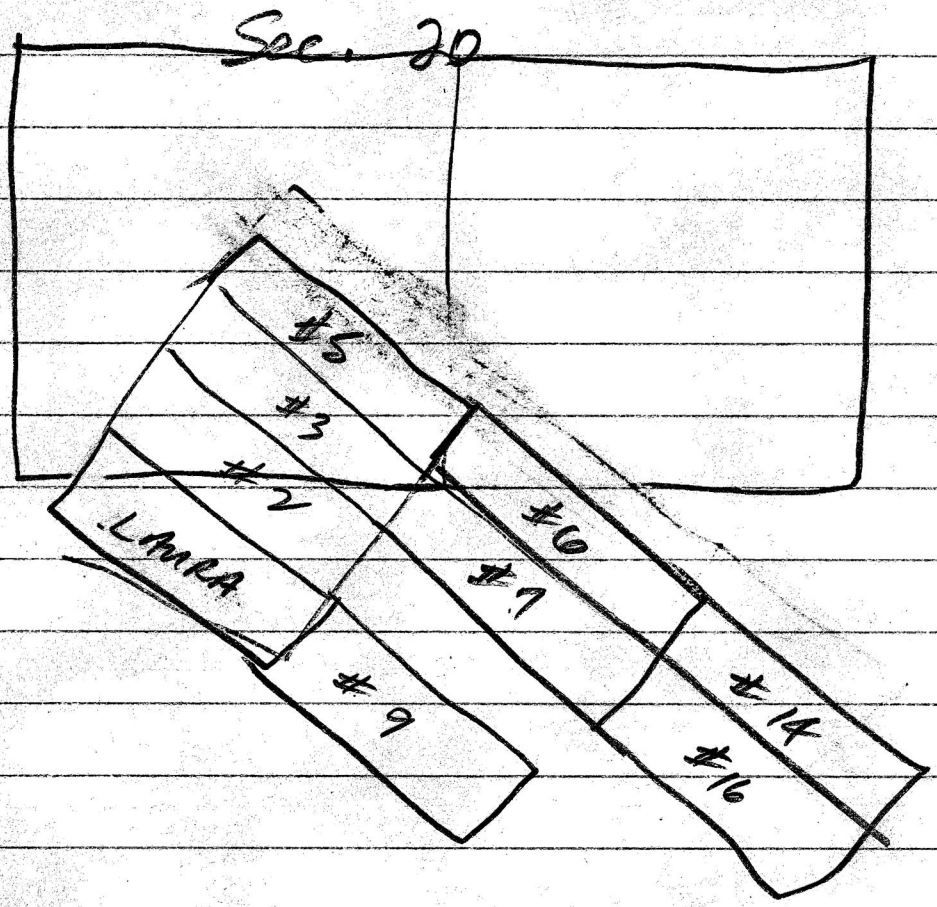
West #1 thru #11		
West #2	"	328/647
Bend #1 & 2	4/17/80	277/111 & 113
Strait #1 thru #3	"	277/115 & 119

Des Amigos Dist.?

Bend #3	6/13/80 ?	280/451
Grey Rock	" ?	" 453

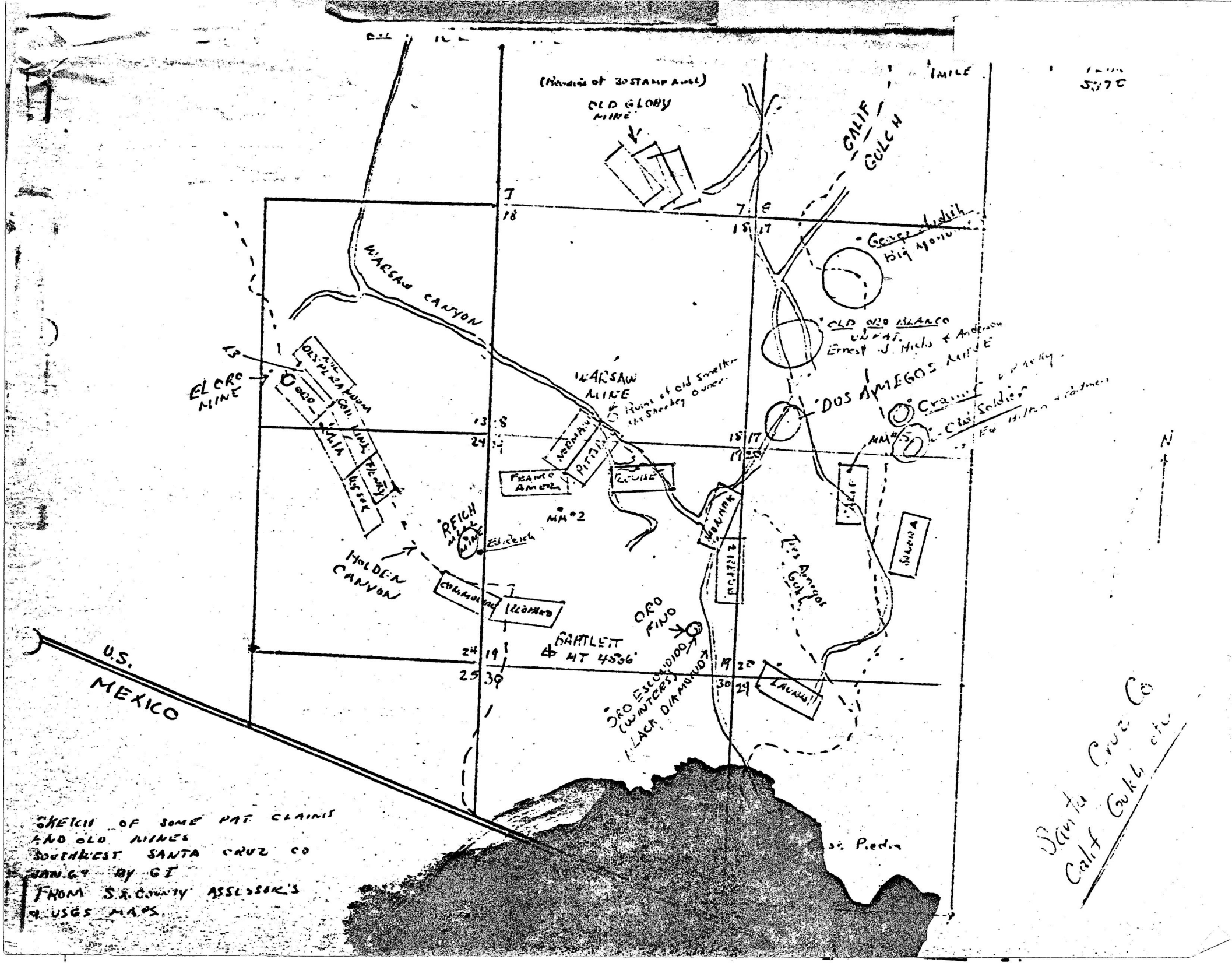
			1981	1982
Aff. of L. ✓	Oro Fino Dist. Bend #1 th 2	filed 1981	309/128	333/59
	Grey Rock	"	" 129	58
✓	Oro Fino Dist. Strait #1 #2 & 3	"	" 131	60
	Two ? Santa Cruz Dist.?	"	" 130	57

White Gold



San Pedro Pat. Mng. Claim
Sec. 29 T.23S. R.11E. Area 113
Flying X Ranches Inc. Parcel
Dale Smith 113-35-002
P.O. Box 367
Arivaca Az 85601 $2.60 /yr.

Laura Pat Mng. Claim
Portions of Sec. 20 & 29 $63.78 Taxes/yr.



SKETCH OF SOME PAT. CLAIMS AND OLD MINES SOUTHWEST SANTA CRUZ CO
JAN. 64 BY GT
FROM S.A. COUNTY ASSESSOR'S & USGS MAPS

Santa Cruz Co
Calif Gulch etc

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
NOGALES RANGER DISTRICT
2480 TUCSON-NOGALES HIGHWAY
NOGALES, ARIZONA 85621
281-2296

October 28, 1982

E. Grover Heinrichs
1802 W. Grant Road, Suite 110-4
Tucson, Arizona 85745

Thank you for notifying my office concerning your mining operation. Enclosed is an "Operating Plan" we ask each operator to fill out and return to this office. This plan will help us in evaluating your operation and in working with you in protecting the environment.

Also enclosed are two pamphlets that may answer some questions you have concerning mining on National Forest Land.

This office looks forward in hearing from you and meeting with you on your claims.

Sincerely,

William L. Russell

WILLIAM L. RUSSELL JR.
District Ranger

219/625-4211 GARY ~~[illegible]~~ Probst

Pipeline what goes to
% gross net product

BILL Copley 398-2538

#8000 CASH
300/mo. for 1 yr. 10,000 CASH

1/4 Section 29/20 Golden Fleece
2 claims
Big Boy

Creede
Ch. Ch. goff A
Cross Boulder

LIGHT DUTY RD.
UNIMPROVED ROAD
CONTOUR INTERVAL 10 FT
CREEK OR DRAINAGE
SECTION CORNER FOUND INFERRED

~~Credits and information supplied~~

Source of information

APRIL 1983

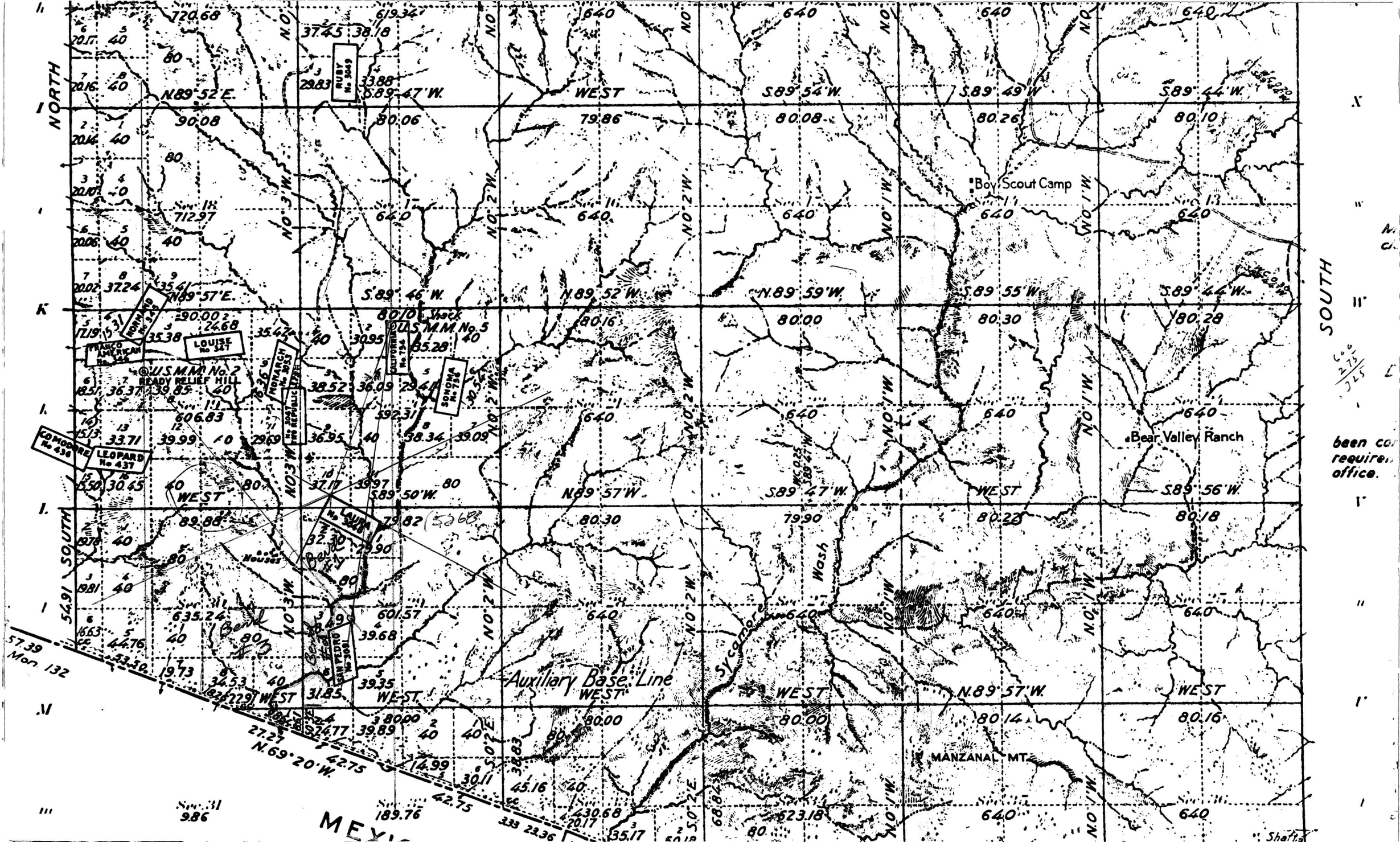
CALIFORNIA GULCH PLACER Proj.

Work Sheet

Scale 1" = 200'

all claim locations not surveyed & positions are tentative

~~See LaDoie~~ ~~$20/hr = $200.00~~ ~~Contract~~



NORTH
SOUTH
SOUTH
Boy Scout Camp
Bear Valley Ranch
MANZANAL MT.
Auxiliary Base Line
Sycamore Wash
U.S.M.M. No. 2
READY RELIEF HILL
U.S.M.M. No. 5
Shack
RUBY No. 3049
NORMAND No. 345
FRANCO AMERICAN No. 346
LOUISE No. 347
MONARCH No. 3053
CALIFORNIA No. 754
SONOMA No. 756
COMODORE No. 436
LEOPARD No. 437
LAURA No. 3048
SAN PEDRO No. 3081
Houses
Bend
N.89°52'E.
S.89°47'W.
WEST
S.89°54'W.
S.89°49'W.
S.89°44'W.
N.89°57'E.
S.89°46'W.
N.89°52'W.
N.89°59'W.
S.89°55'W.
S.89°44'W.
S.89°50'W.
N.89°57'W.
S.89°47'W.
S.89°56'W.
N.89°57'W.
N.69°20'W.
MEXI
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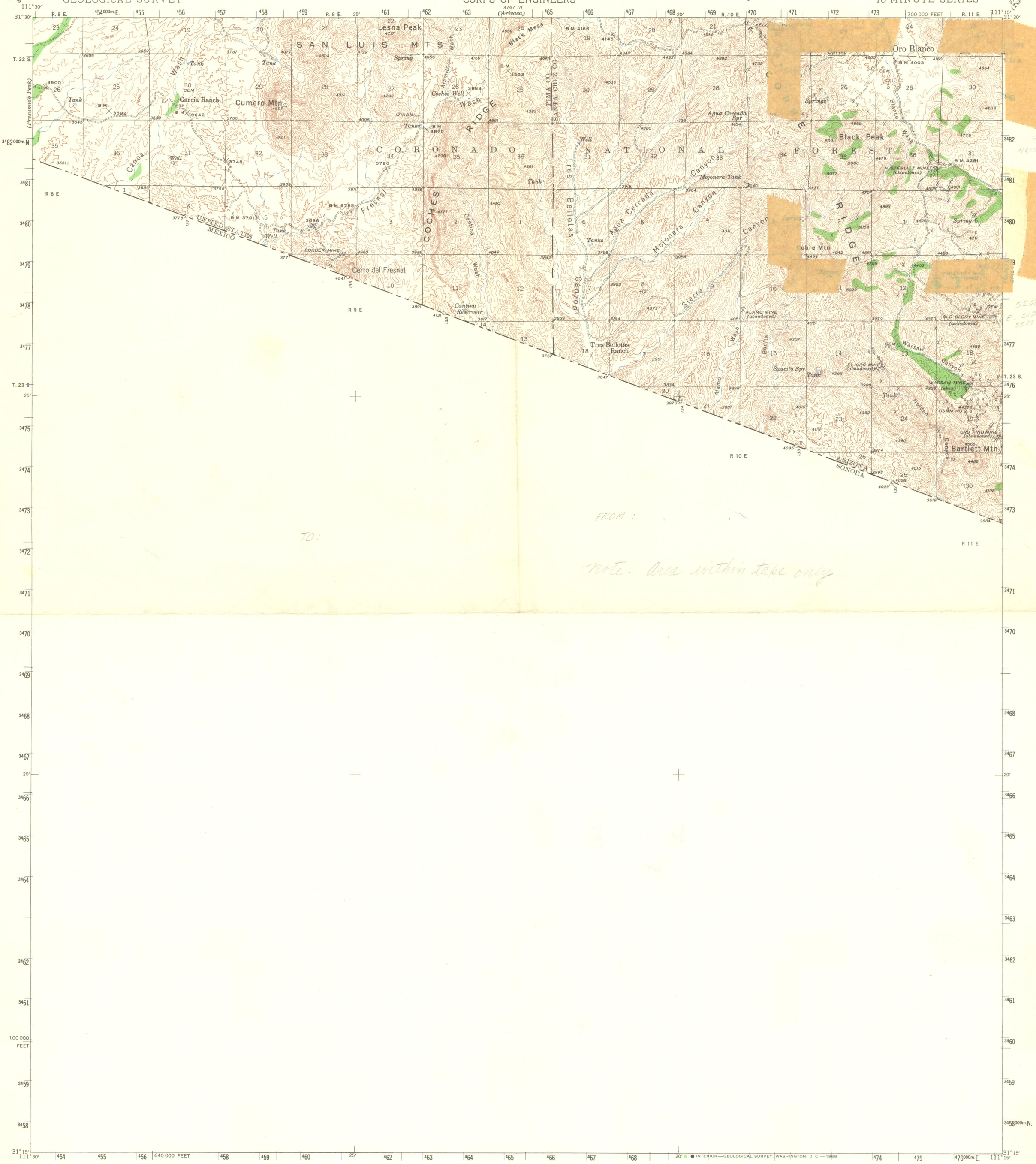
been co
require
office.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

ARIZONA
ORO BLANCO QUADRANGLE
15-MINUTE SERIES



FROM :

TO :

note: area within tape only

Topography by S. C. Kain
Surveyed in 1941–42

UTM GRID AND 1942 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:62500

CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona (Central) rectangular coordinate system
1000-meter Universal Transverse Mercator grid ticks, zone 12, shown in blue

ORO BLANCO, ARIZ.
N3115—W11115/15

1942

AMS 3746 IV—SERIES V798

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225 OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

AN EVALUATION OF
THE BEND PLACER CLAIMS
SANTA CRUZ COUNTY, ARIZONA

Michael R. Whyte
Geologist
July 16, 1980

Introduction

By definition, placer deposits are deposits of sand, gravel, or other alluvium, containing particles of valuable minerals in workable amounts. Presently native gold is the most important mineral found in placer deposits due to its high market value.

Placer mining includes the work of excavating and transporting placer gravels, and recovering their contained minerals, usually by screening and concentrating or "washing" the gravels in running water. There are several different types of placer deposits but for the purposes of this report we are dealing with gulch or creek placers. These placers are usually shallow gravel deposits either in, adjacent to, or at the level of small, dry, or intermittent streams.

Location and History

The property we are dealing with lies in the Oro Blanco Placer District approximately 60 miles south of Tucson, Arizona (see Figure 1). The majority of the placer deposits in Arizona were worked prior to 1875 when few records were kept. Therefore, any estimates on past production are essentially quesswork. The total production, including lode deposits from the Oro Blanco District through 1972 would amount to about 126.5 thousand ounces of gold and 4.6 million ounces of silver. The gold and silver of this district are combined, hence, the name Oro Blanco or White Gold. At the present time several lode deposits are being worked, but no information is available on their production.

Ore Calculations

Placer deposits are notoriously difficult to sample due to the modes of deposition. Values in this report are calculated in dollars per cubic yard based on gold values of $600 per ounce.

For the purpose of this report we will concern ourselves with the placer claims Bend #1, Bend #2 and Bend #3 (see Figure 2). These claims are properly owned by Don Kilgore to the best of my knowledge.

Method of Calculations

2 claims 1320 ft x 660 ft = 1,742,400 sq ft

1 claim 2460 ft x 660 ft = 1,742,400 sq ft

TOTAL = 3,484,800 cu ft @ 1 ft depth

Approximately one-third of the area contains placer gravels to a depth of 10 feet.

129,066.6 cu yds ÷ 3 = 43,022.2 cu yd/1 ft depth

43,022.2 cu yd/1 ft depth x 10 ft depth = 430,222 cu yd of total material

See the lab analysis from U. S. Mining and Milling Corporation on page 5.

Bend #1 = 0.00756 oz Au/cu yd	51.2 lbs sample weight
Bend #2 = 0.0072 oz Au/cu yd	49.6 lbs sample weight
Bend #3 = 0.028 oz Au/cu yd	150 lbs sample weight

1.5 cu yd = 1.0 ton Average value = 0.0143 oz/cu yd x $600/oz = $8.55/cu yd

The above values represent a re-calculation from pan concentrates and sieve analysis. It is apparent that 100% of the gold may be recovered