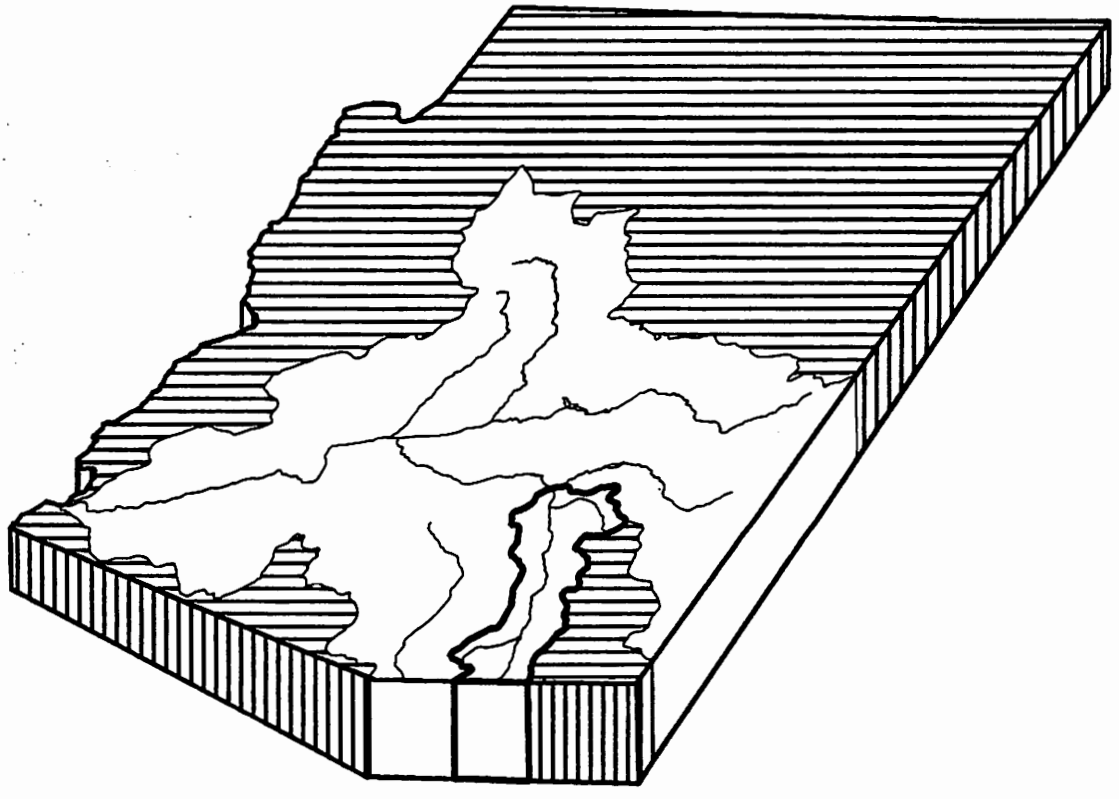
HYDROGRAPHIC SURVEY REPORT FOR THE SAN PEDRO RIVER WATERSHED

Volume 1A: General Assessment Plates

In Re The General Adjudication of the
Gila River System and Source



Arizona Department of Water Resources
Filed with the Court: November 20, 1991

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Plate 1

Delineation of well classification zones

R 14 E R 15 E R 16 E R 17 E R 18 E R 19 E R 20 E R 21 E R 22 E

T 5 S T 6 S T 7 S T 8 S T 9 S T 10 S T 11 S T 12 S T 13 S T 14 S T 15 S T 16 S T 17 S T 18 S T 19 S T 20 S T 21 S T 22 S T 23 S

Winkelman
Aravaipa
San Manuel
Benson
Sierra Vista
Palominas

Floodplain Aquifer

Zone 1

Zone 2

Zone 3 — Crystalline and consilidated sedimentary rocks

Zone 3 — Consolidated to semi-consolidated sedimentary rocks

Zone 3 — Non-tributary alluvial aquifer

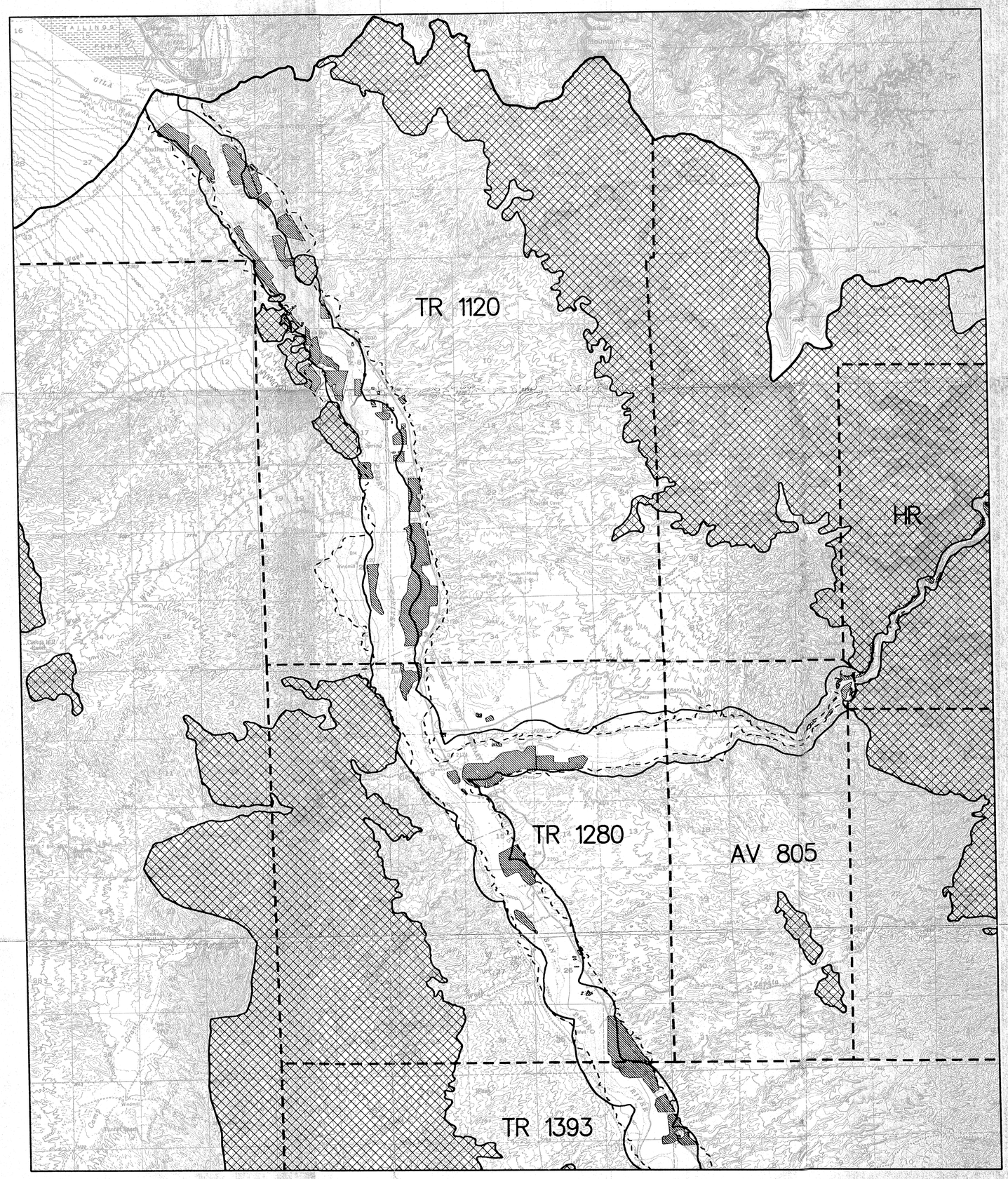
★ City or Town

N

3 0 3 6 Miles

3 0 3 6 9 Kilometers

Plate 2 Well classification strip map
San Pedro River
South of Winkelman



Basemap derived from 15-minute topographic quadrangles (USGS) at 1:62,500 scale.
Refer to text, Volume 1, Hydrographic Survey Report for the San Pedro River Watershed, Arizona Department of Water Resources (November 1991).

A-Value Prefix

- AV: Aravaipa A-value
- BR: Babocomari A-value
- CR: Confined-aquifer A-value
- FR: Freethey Model A-value
- HR: Hardrock-controlled A-value
- TR: Township A-value

- Zone 1
- Zone 3
- Irrigated Agriculture

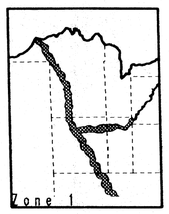
Zone 2 is area outside of Zones 1 and 3

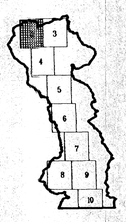
- Zone 1 A-Value Grid
- Floodplain Aquifer Boundary

PLATE 2

Hydrographic Survey Report for the San Pedro River Watershed

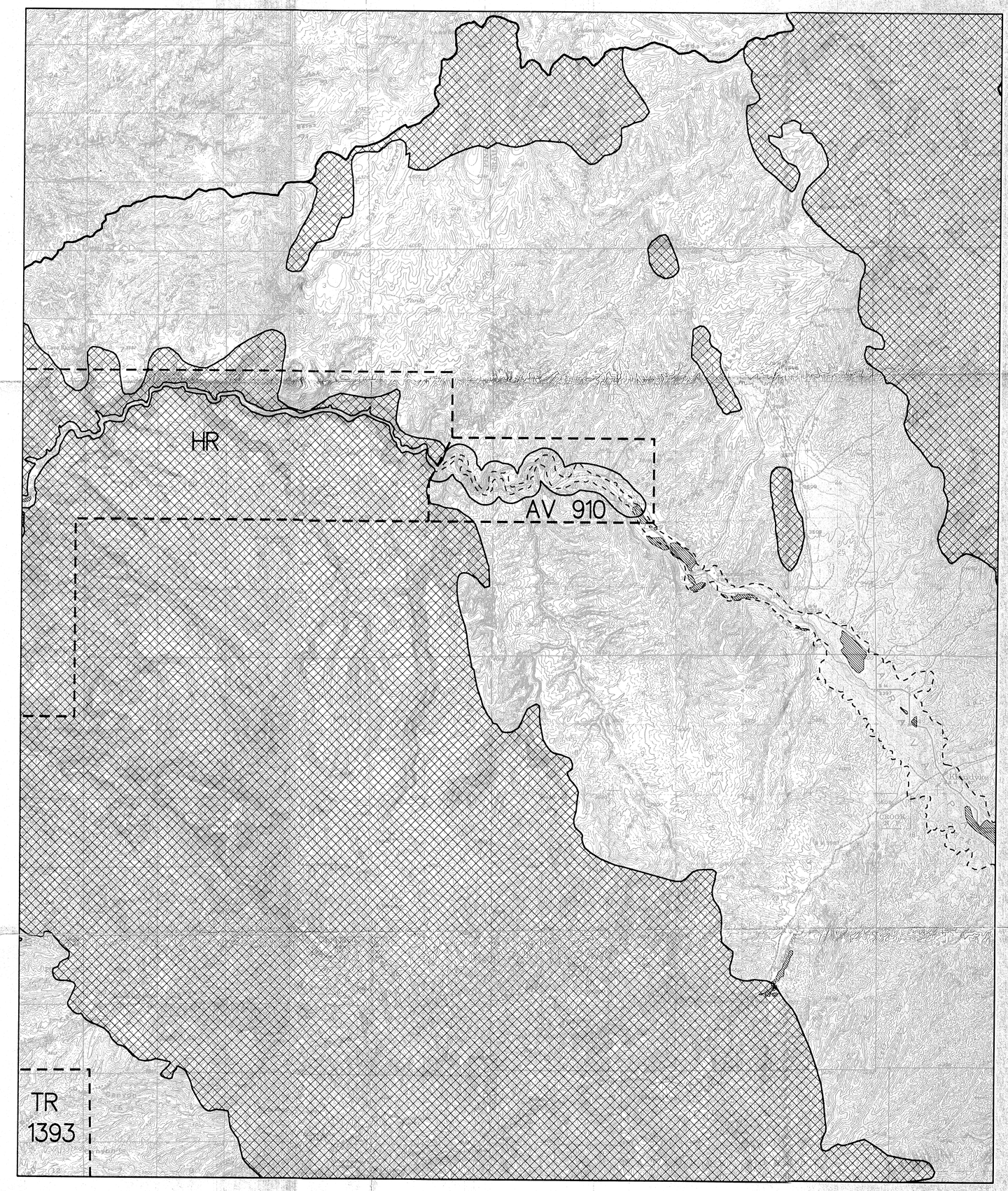
1 0 1 Mile
1 0 1 Kilometer





Plat@ 3

Well classification strip map
San Pedro River
Aravaipa Creek



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- Zone 1
- Zone 3
- Irrigated Agriculture

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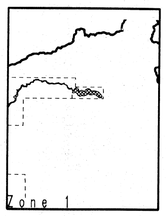
- Zone 1 A-Value Grid
- Floodplain Aquifer Boundary

PLATE 3

Hydrographic Survey Report for the San Pedro River Watershed

1 0 1 Mile
1 0 1 Kilometer



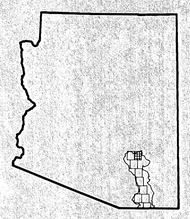
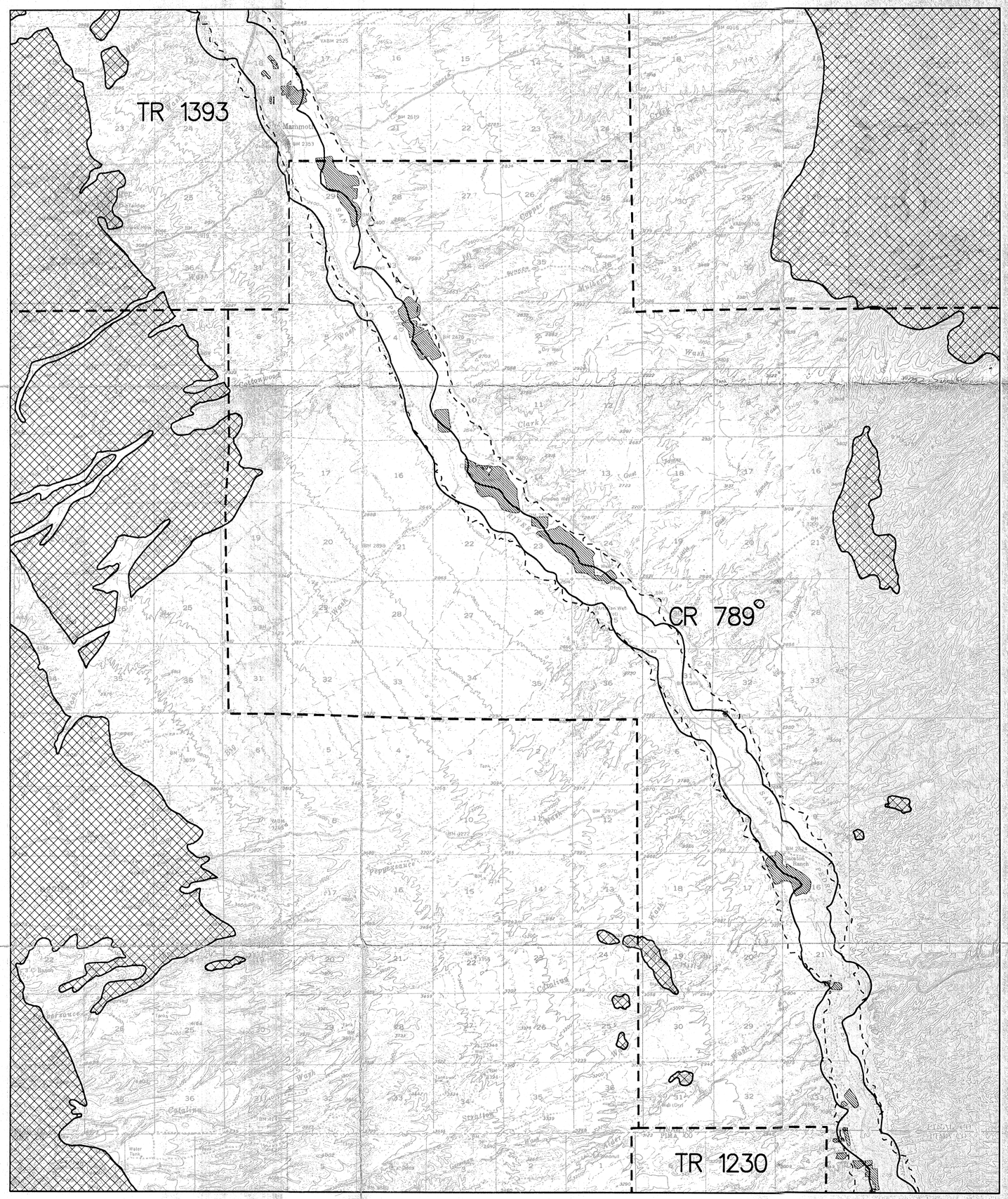


Plate 4 Well classification strip map
San Pedro River
South of Mammoth



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- Zone 1
- Zone 3
- Irrigated Agriculture

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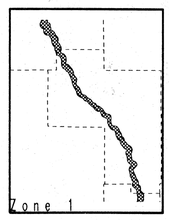
- Zone 1 A-Value Grid
- Floodplain Aquifer Boundary

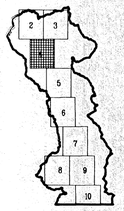
PLATE 4

Hydrographic Survey Report for the San Pedro River Watershed

1 0 1 Mile

1 0 1 Kilometer





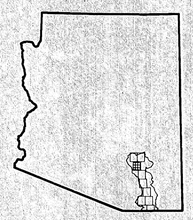
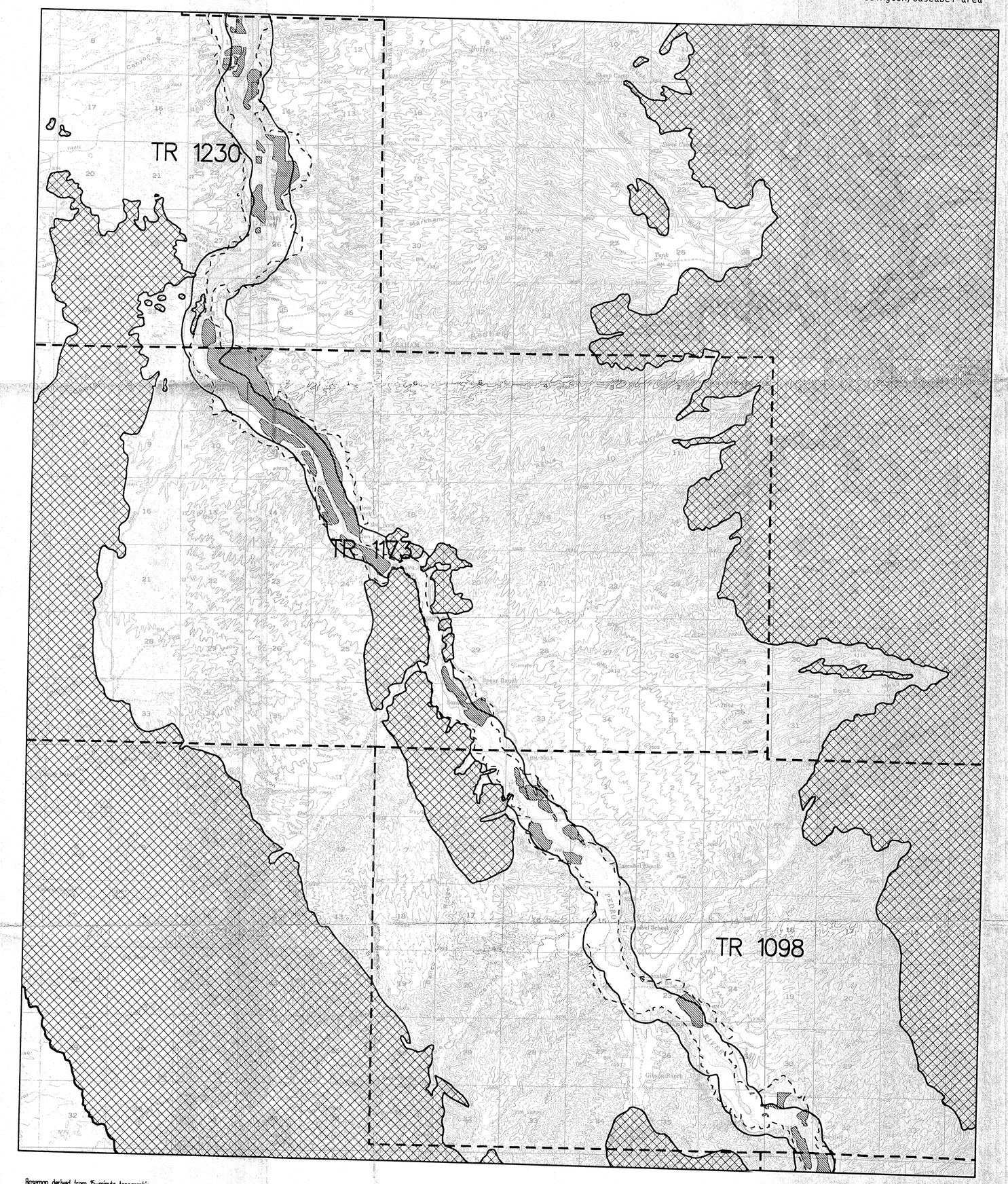


Plate 5 Well classification strip map
San Pedro River
Redington/Cascabel area



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- TR: Township A-value

- Zone 1
- Zone 3
- Irrigated Agriculture

Zone 2 is area outside of Zones 1 and 3

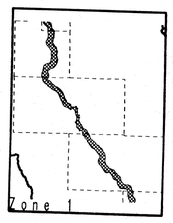
- Zone 1 A-Value Grid
- Floodplain Aquifer Boundary

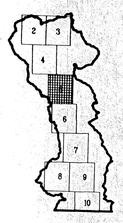
PLATE 5

Hydrographic Survey Report for the San Pedro River Watershed

1 0 1 Mile

1 0 1 Kilometer





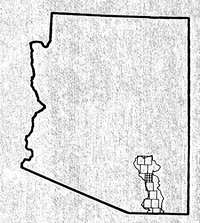


Plate 6 Well classification strip map
San Pedro River
North of Pomerene

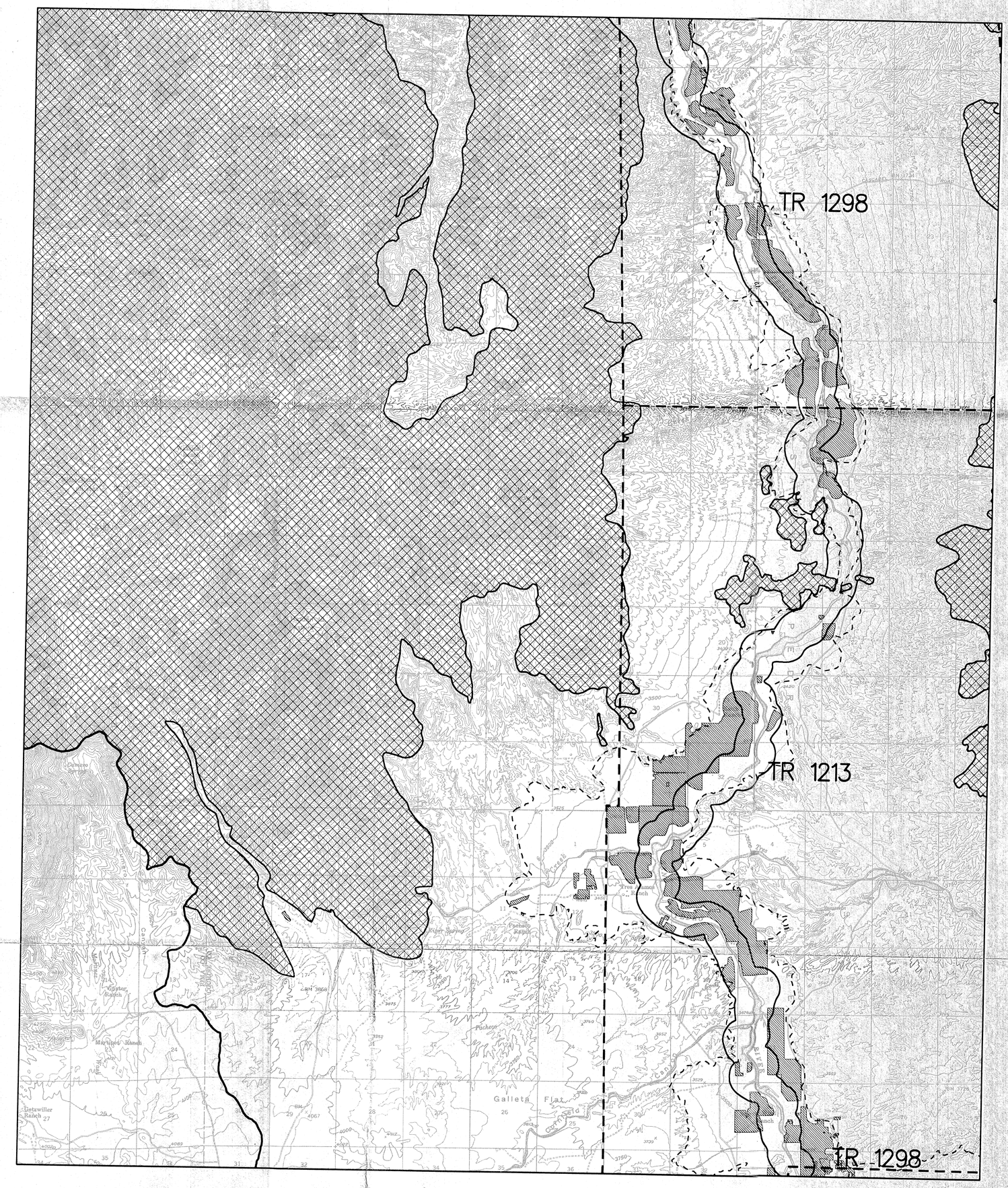
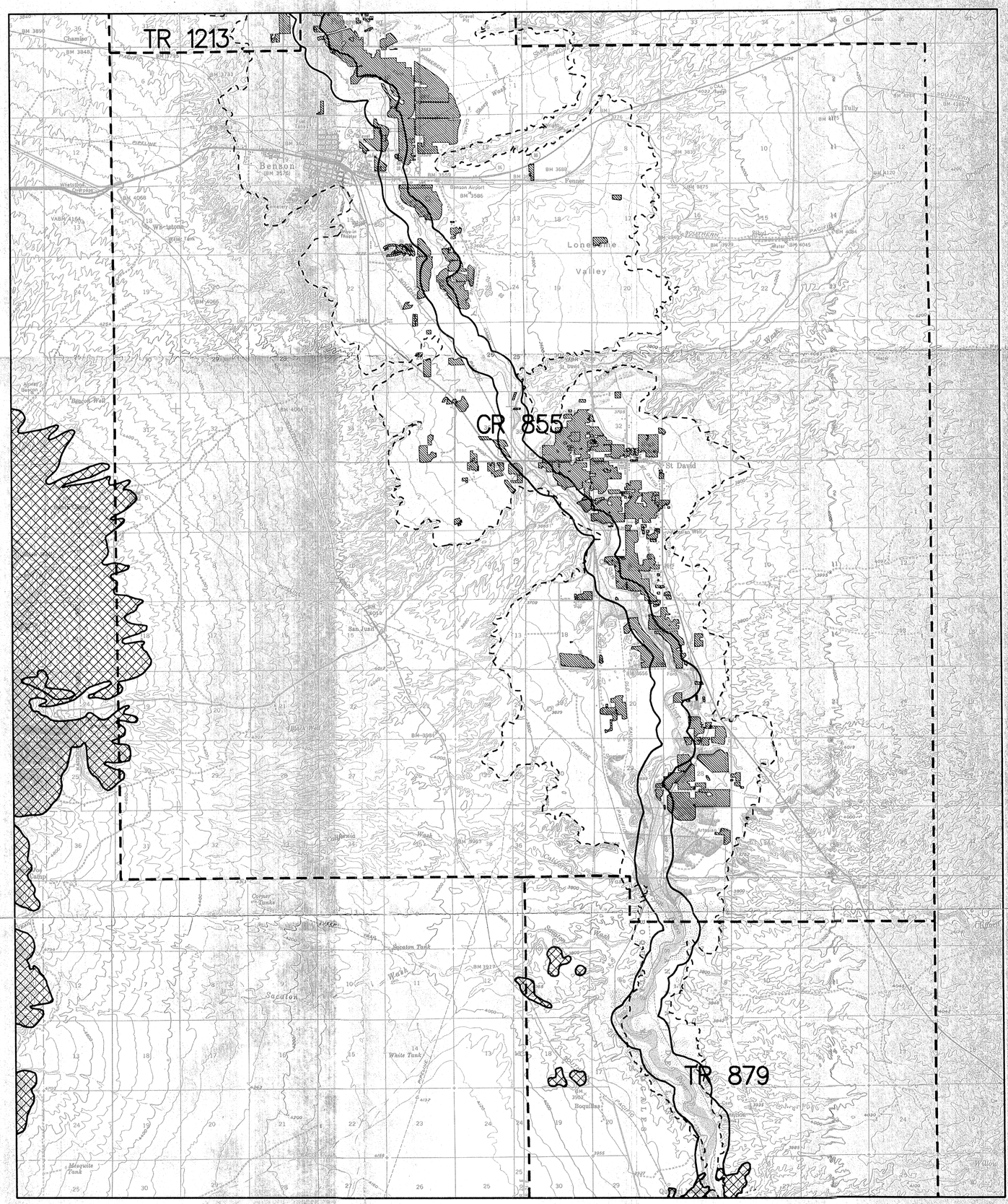

TR 1298
TR 1213
TR 1298
Galleta Flat
Pomerene
Cascabel
Dragoon Creek
Cochise County
Pinal County
Pima County
Cascabel Ranch
Vinton Ranch
Marshall Ranch
Getzwiller Ranch
Cross Lazy J Ranch
Fresnal Canyon
Fresnal Spring
Cottonwood Canyon
Post Office
Cemetery
Ranch
Tank
Spring
Canyon
Wash
Creek
Flat
Mine
Trail
Road
Fence
Corral
Windmill
Pasture
Pond
Reservoir
Dam
Gate
Cattle Guard
Fork
Forest Service Road
Dirt Road
Trail

Plate 7

Well classification strip map
San Pedro River
South of Pomerene



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- TR: Township A-value

- Zone 1
- Zone 3
- Irrigated Agriculture

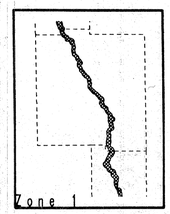
Zone 2 is area outside of Zones 1 and 3

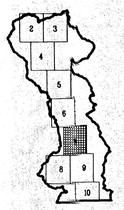
- Zone 1 A-Value Grid
- Floodplain Aquifer Boundary

PLATE 7

Hydrographic Survey Report for
the San Pedro River Watershed

1 0 1 Mile
1 0 1 Kilometer





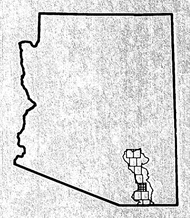
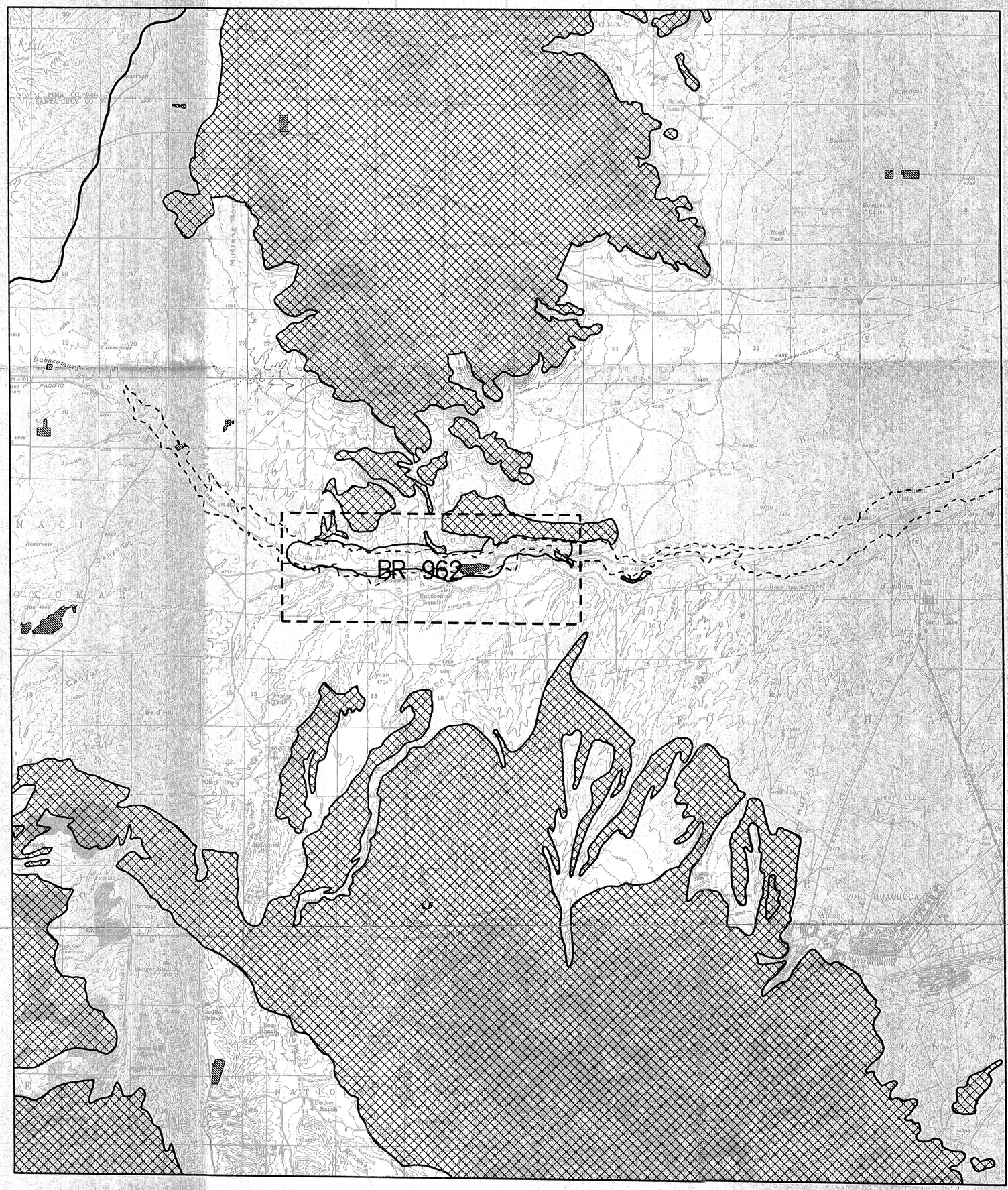


Plate 8 Well classification strip map
San Pedro River
Babocomari River



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- TR: Township A-value

- Zone 1
- Zone 3
- Irrigated Agriculture

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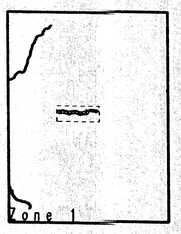
- Zone 1 A-Value Grid
- Floodplain Aquifer Boundary

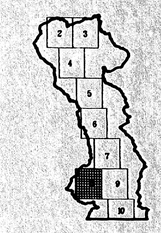
PLATE 8

Hydrographic Survey Report for the San Pedro River Watershed

1 0 1 Mile

1 0 1 Kilometer





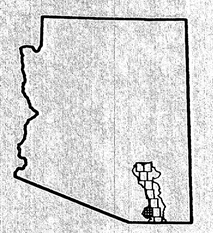
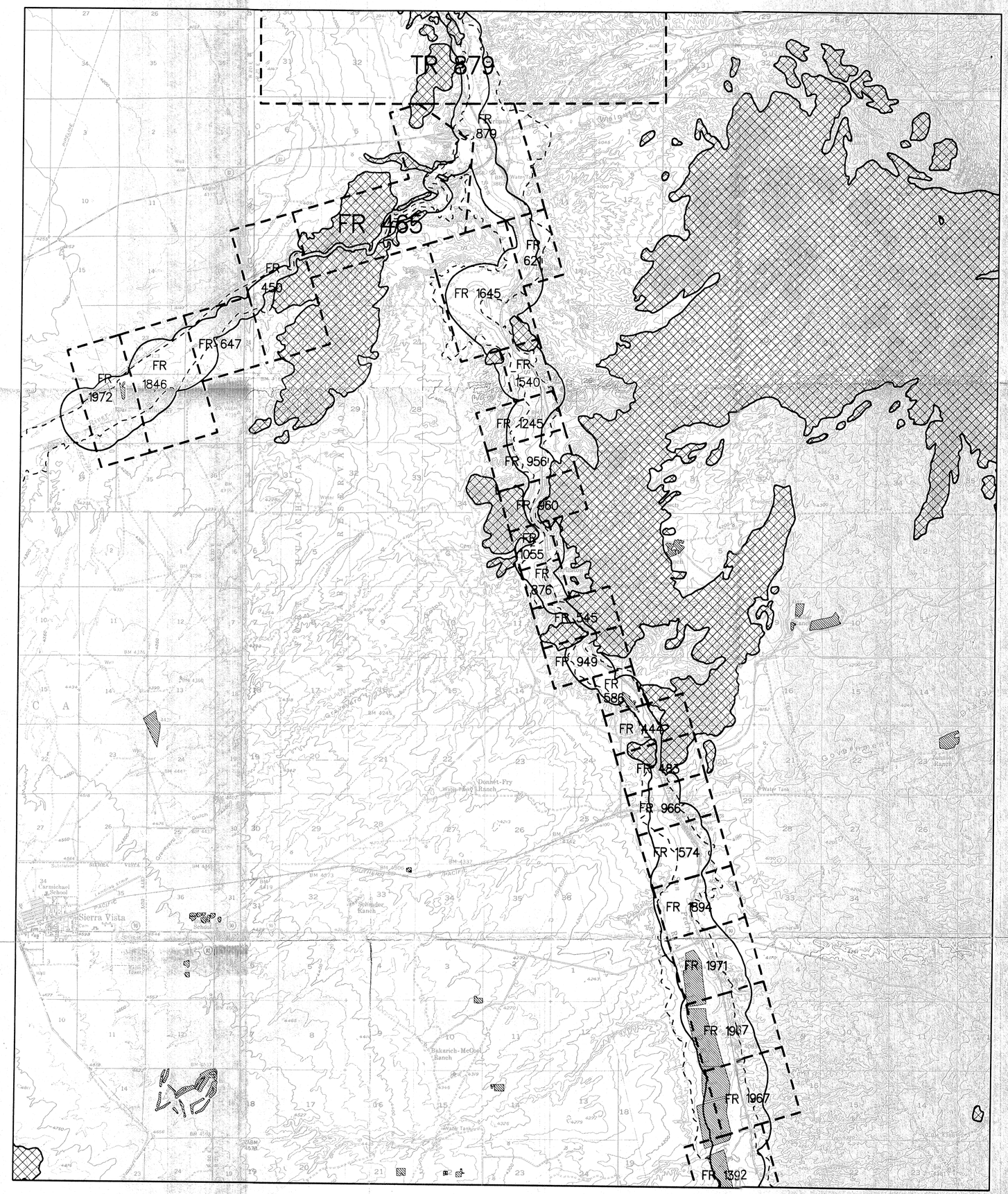


Plate 9 Well classification strip map
San Pedro River
Fairbank/Lewis Springs area



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- FR: Freethey Model A-value
- HR: Hardrock-controlled A-value
- TR: Township A-value

- Zone 1
- Zone 3
- Irrigated Agriculture

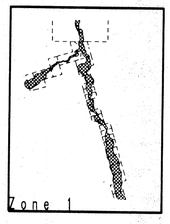
Zone 2 is area outside of Zones 1 and 3

- Zone 1 A-Value Grid
- Floodplain Aquifer Boundary

PLATE 9

Hydrographic Survey Report for the San Pedro River Watershed

1 0 1 Mile
1 0 1 Kilometer



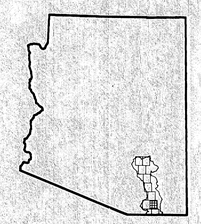
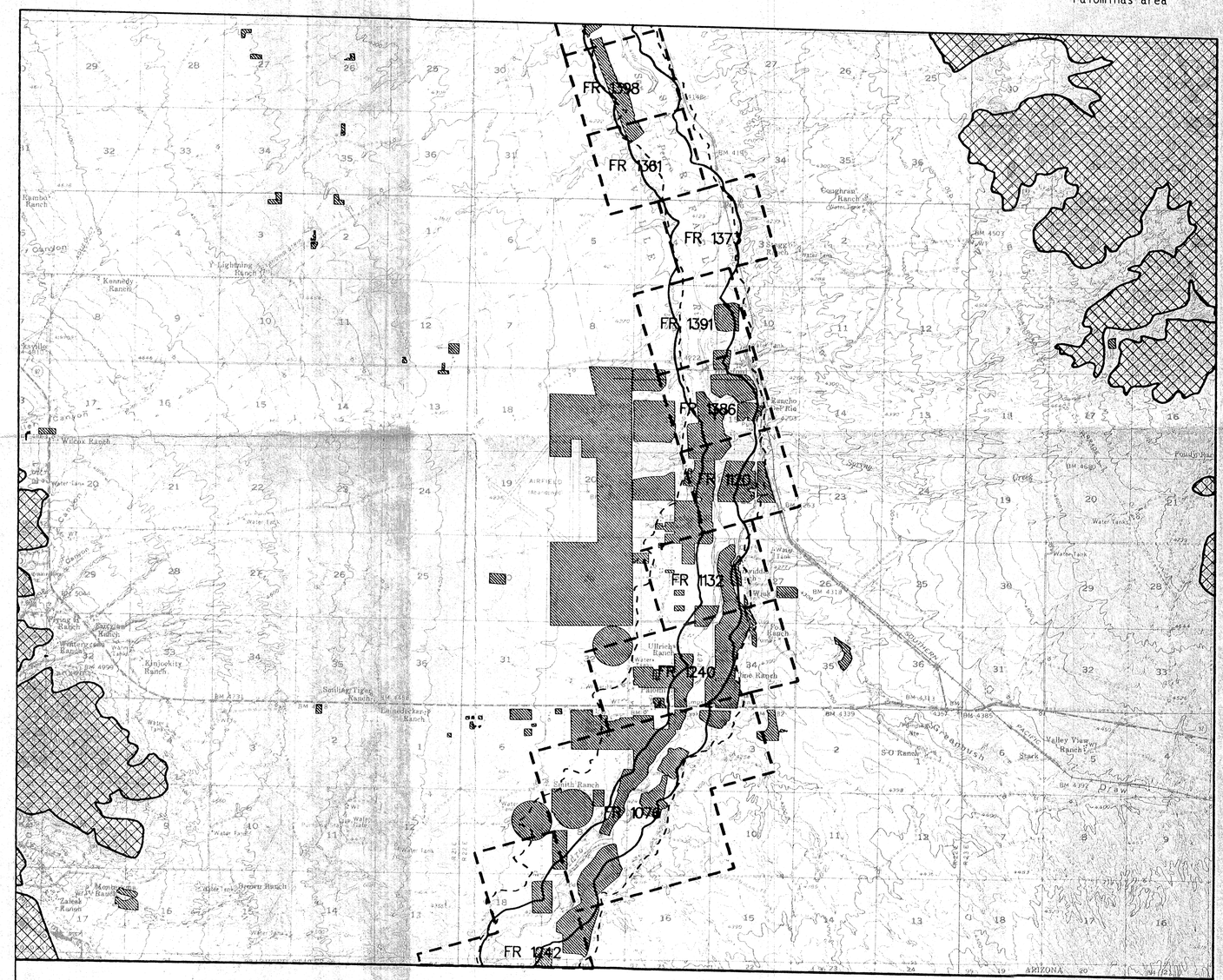


Plate 10 Well classification strip map
San Pedro River
Palominas area



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- HR: Hardrock-controlled A-value
- TR: Township A-value

- Zone 1
- Zone 3
- Irrigated Agriculture

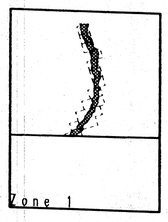
Zone 2 is area outside of Zones 1 and 3

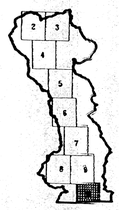
- Zone 1 A-Value Grid
- Floodplain Aquifer Boundary

PLATE 10

Hydrographic Survey Report for the San Pedro River Watershed

1 0 1 Mile
1 0 1 Kilometer





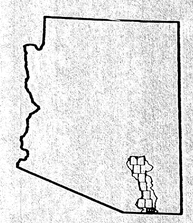


PLATE II. BABOCOMARI RIVER

GAGING STATION
DITCH / CANAL
PIPELINE
OLD DITCH / OLD CANAL
DIVERSION (D)
PUMP (P)
WELL (W)
INSTANTANEOUS GAGING SITE (G)
BOUNDARY

0 1 2 3 MILE
0 5280 10,560 15,840 FEET

SCALE 1: 48,738

Hydrographic Survey Report for the San Pedro River Watershed, Volume 1 (General Assessment), in Re The Gila General Adjudication of the Gila River System and Source. Arizona Department of Water Resources, August 1990.

WHETSTONE MOUNTAINS
HIGHWAY 82
HIGHWAY 90
GAS PIPELINE
SACATON
WASH
SOUTHERN PACIFIC RAILROAD
CLIFFORD WASH
HIGHWAY 80
HIGHWAY 82
FAIRBANK
SAN PEDRO RIPARIAN NATIONAL CONSERVATION AREA
MUSTANG MOUNTAINS
MUSTANG CORNER
ELGIN
SAN IGNACIO DEL BABOCOMARI LAND GRANT
BABOCOMARI CIENEGA
BABOCOMARI RIVER
VAUGHN CANYON
GANYON
HUACHUCA CITY
SAN PEDRO RIVER
CHARLESTON ROAD
CHARLESTON
FORT HUACHUCA MILITARY RESERVATION
LYLE CANYON
O'DONNELL CANYON
TURKEY CREEK
O'DONNELL CIENEGA
CANELO HILLS
HUACHUCA MOUNTAINS
CITY OF SIERRA VISTA
SIERRA VISTA EFFLUENT TREATMENT FACILITY

END OF CANAL (1923)

POMERENE CANAL (1923)

END OF CANAL (1989)

POMERENE

POMERENE RD

BENSON WASTEWATER TREATMENT FACILITY

I-10

BENSON

I-10

SOUTHERN PACIFIC RR

SAN PEDRO RIVER

SOUTHERN PACIFIC RR

STATE ROUTE 80

POMERENE CANAL

POMERENE DIVERSION

PLATE 12. BENSON / POMERENE

- GAGING STATION
- DITCH / CANAL
- PIPELINE
- OLD DITCH / OLD CANAL
- DIVERSION (D)
- PUMP (P)
- WELL (W)
- INSTANTANEOUS GAGING SITE (G)
- BOUNDARY

0 .5 1 MILE

0 2640 5280 FEET

SCALE 1:19,495

Hydrographic Survey Report for the San Pedro River Watershed, Volume 1 (General Assessment), in Re The Gila General Adjudication of the Gila River System and Source. Arizona Department of Water Resources, August 1990.

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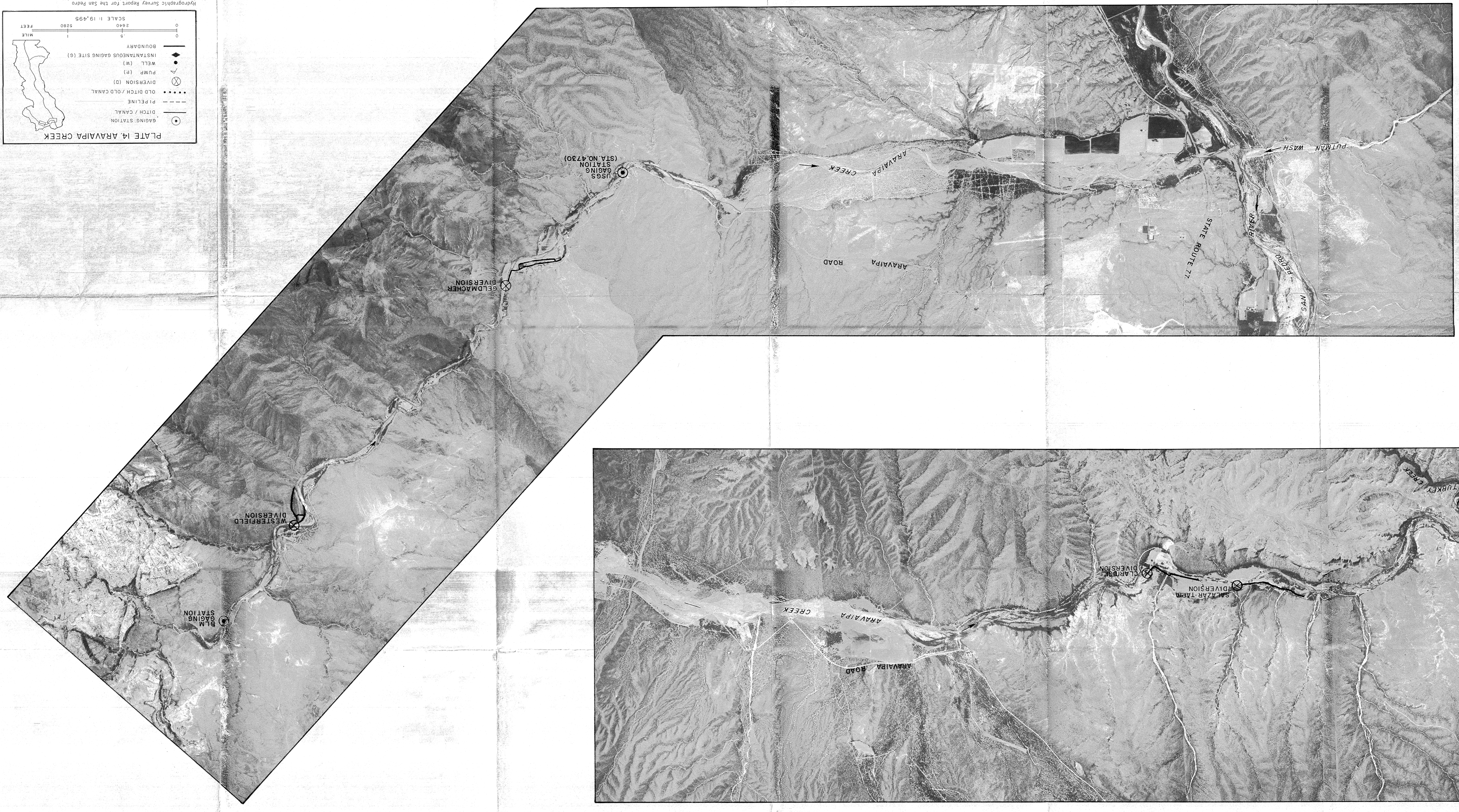

PLATE 14. ARAVAIPA CREEK

GAGING STATION
DITCH / CANAL
PIPELINE
OLD DITCH / OLD CANAL
DIVERSION (D)
PUMP (P)
WELL (W)
INSTANTANEOUS GAGING SITE (G)
BOUNDARY

SCALE 1: 19,995

0 2640 5280 FEET
0 .5 1 MILE

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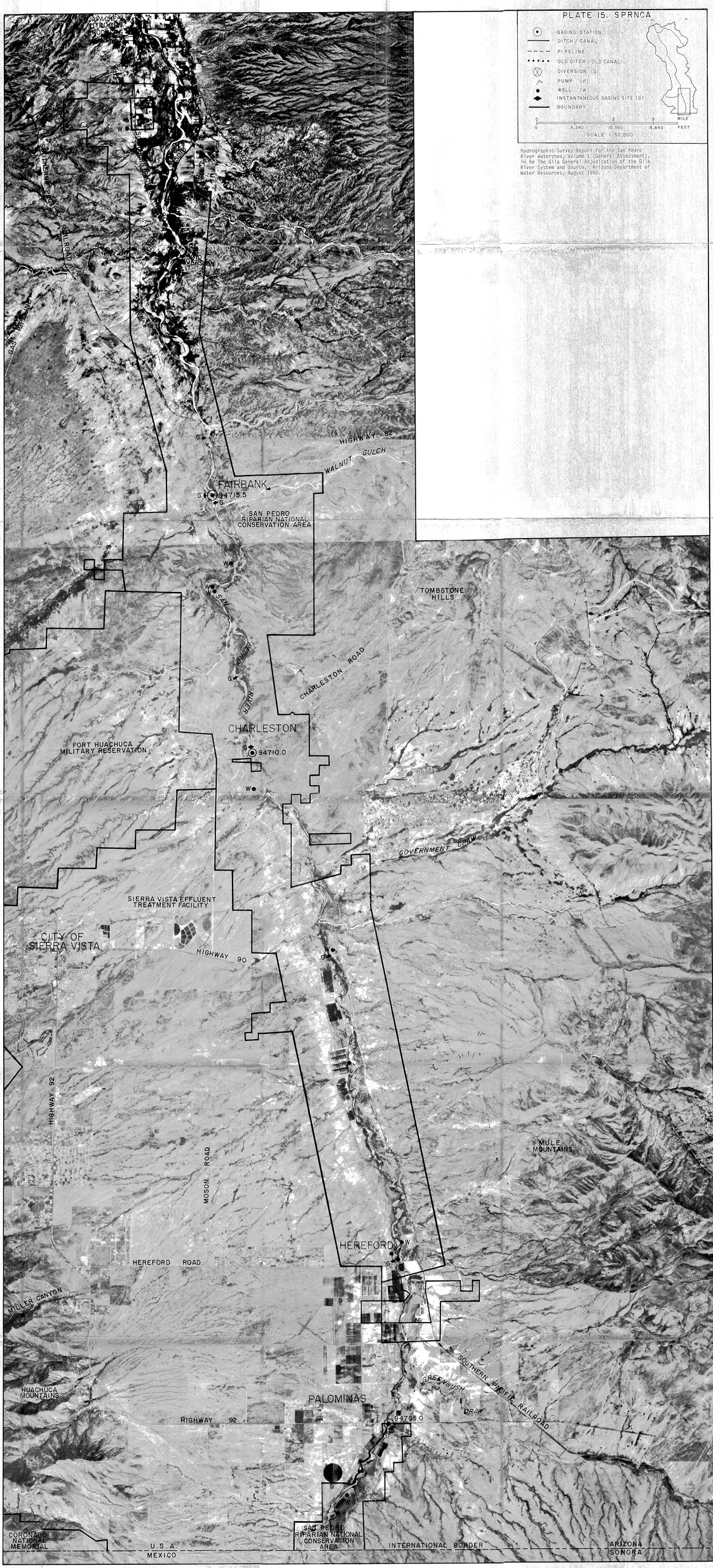


PLATE 15. SPRNCA
GAGING STATION
DITCH / CANAL
PIPELINE
OLD DITCH / OLD CANAL
DIVERSION (D)
PUMP (P)
WELL (W)
INSTANTANEOUS GAGING SITE (G)
BOUNDARY
0 1 2 3 MILE
0 5,280 10,560 15,840 FEET
SCALE 1 : 52,800
Hydrographic Survey Report for the San Pedro River Watershed, Volume 1 (General Assessment), in Re The Gila General Adjudication of the Gila River System and Source. Arizona Department of Water Resources, August 1990.
APACHE POWDER CO.
HIGHWAY 82
WALNUT GULCH
FAIRBANK
9471S.S
SAN PEDRO RIPARIAN NATIONAL CONSERVATION AREA
TOMBSTONE HILLS
CHARLESTON ROAD
CHARLESTON
9471O.O
FORT HUACHUCA MILITARY RESERVATION
GOVERNMENT DRAW
SIERRA VISTA EFFLUENT TREATMENT FACILITY
CITY OF SIERRA VISTA
HIGHWAY 90
HIGHWAY 92
MOSON ROAD
MULE MOUNTAINS
HEREFORD
HEREFORD ROAD
MILLER CANYON
HUACHUCA MOUNTAINS
PALOMINAS
HIGHWAY 92
9471O5.O
GREENBUSH DRAW
SOUTHERN PACIFIC RAILROAD
CORONADO NATIONAL MEMORIAL
U.S.A.
MEXICO
SAN PEDRO RIPARIAN NATIONAL CONSERVATION AREA
INTERNATIONAL BORDER
ARIZONA
SONORA

PLATE 16.

San Pedro River National Conservation Area

T 18 S

T 19 S

T 20 S

T 21 S

T 22 S

T 23 S

T 24 S

R 21 E

R 22 E

SDID Diversion

San Juan de las Boquillas y Nogales

State Route 80

Fairbank

Tombstone

Babocomari River

Charleston

San Rafael del Valle

San Pedro River

Hereford

Palominas

Route 92

Irrigated Fields (includes discontinued irrigation)

Diversion

Township boundary

River

Road

SPRNCA boundary

Land Grant boundary

Perennial reach

Ditch

Town

Well

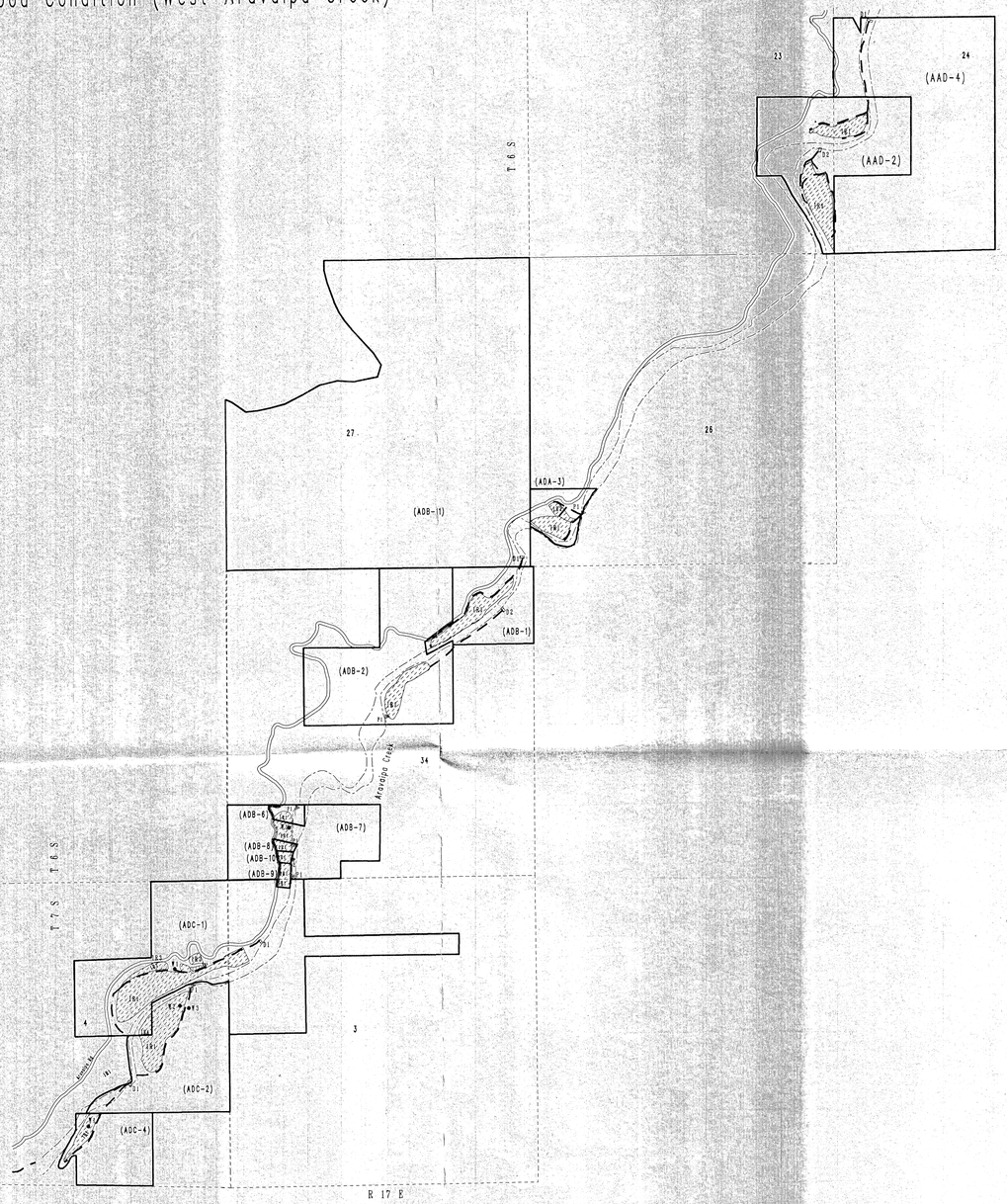
N

Hydrographic Survey Report for the San Pedro River Watershed, Volume I (General Assessment), in Re The Gila General Adjudication of the Gila River System and Source. Arizona Department of Water Resources, August 1990.

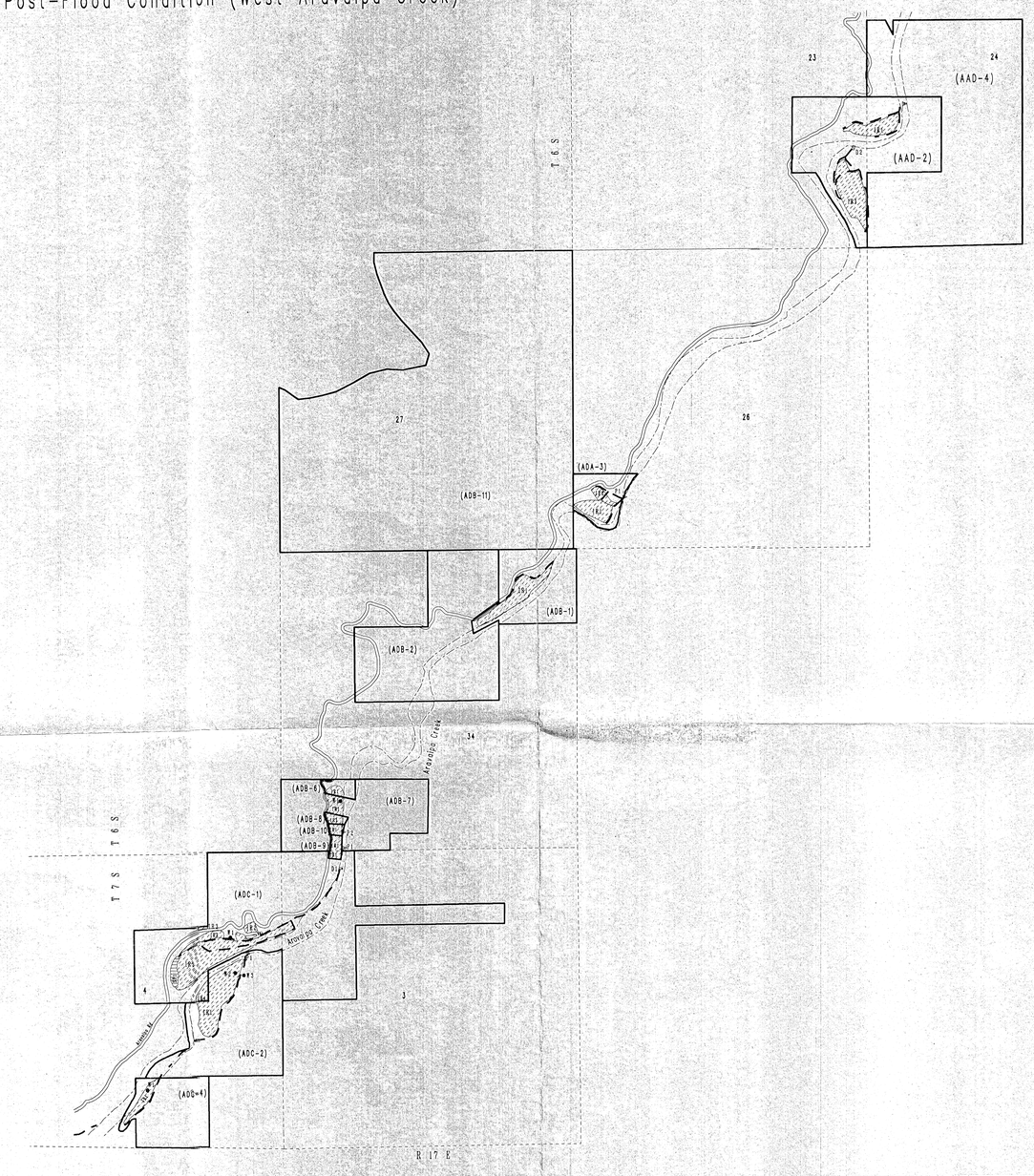
1 0 1 2 Miles

2 0 2 4 6 Kilometers

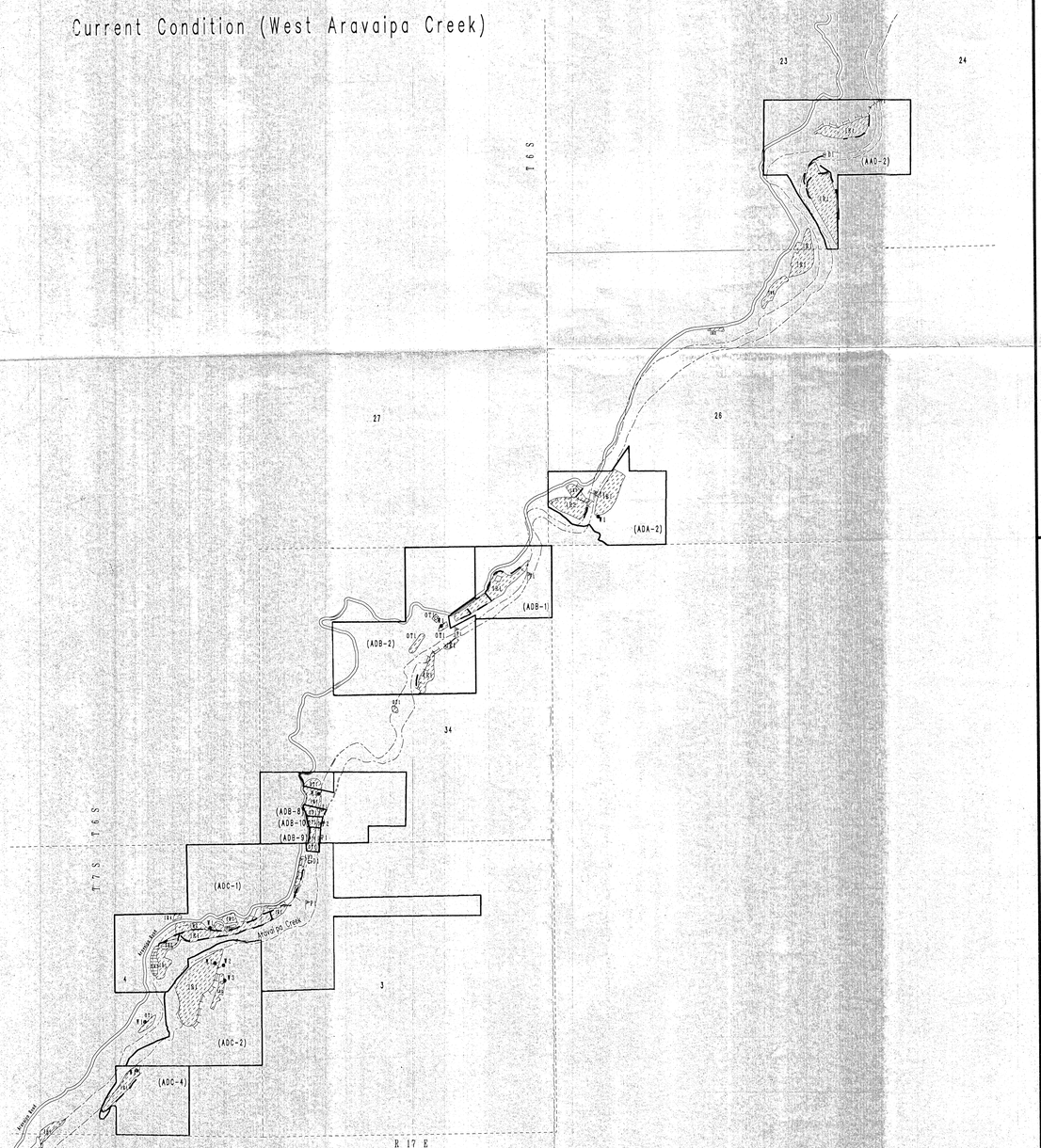
Pre-Flood Condition (West Aravaipa Creek)



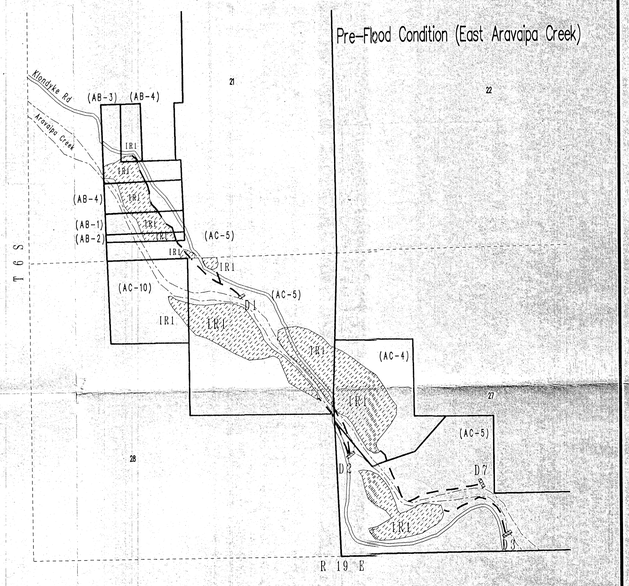
Post-Flood Condition (West Aravaipa Creek)



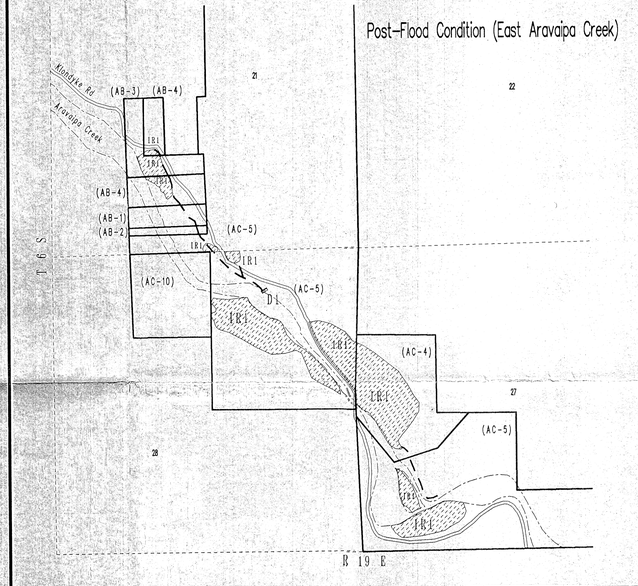
Current Condition (West Aravaipa Creek)



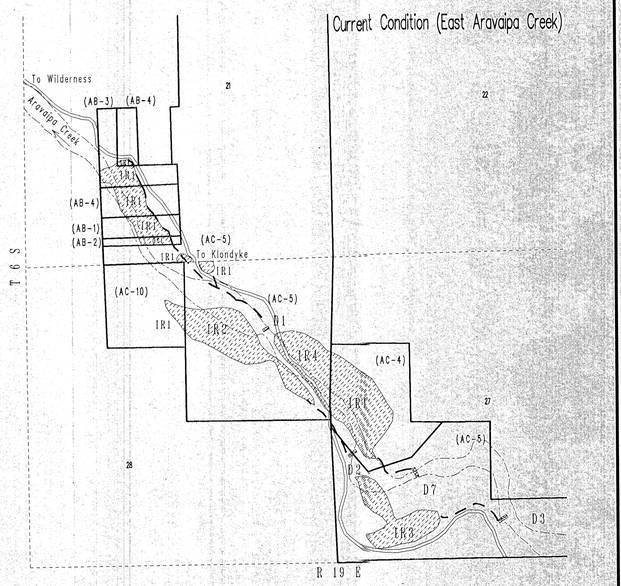
Pre-Flood Condition (East Aravaipa Creek)



Post-Flood Condition (East Aravaipa Creek)



Current Condition (East Aravaipa Creek)



1/8 0 1/8 1/4 Mile

1/8 0 1/8 1/4 3/8 Kilometer

Ownership Boundary
Canal or Ditch
Pipeline
River or Wash
Roads or Highways

Irrigation (IR)

Diversion (D)

Well

Instream Pump

N

OWNER LIST (East Aravaipa Creek)

AB-1) SALAZAR, EPIGMENIO C
AB-2) PACHECO, ALEX & CHRISTINE
AB-3) MORANDA, LILIA A &LIMA & MIGUEL & PATRO & IGNACIO
AB-3) SANCHEZ, FRANCISCA C/O MIKE MIRANDA
AB-4) FRASER, SANDRA TAPIA,DANIEL & CINDY & DALE & LISA &
AB-4) JOSE LUPINE, NORMA
AC-1) VALENZUELA, CARLOS Y & CRUZ Y & MANUEL Y ET AL
AC-4) CLARIDGE, WILFORD H
AC-5) THE NATURE CONSERVANCY
AC-10) BLM / TAPIA, JOSE S

OWNER LIST (West Aravaipa Creek)

AAD-1) O'NEIL, JAMES T & MARY E
AAD-2) LIEBERMAN, HENRI A & SUSAN E
ADB-2) WHITE, JEFTHA O & PEGGY M
ADB-2) BARASSI, LOUIS W & HENRITTA E
ADB-6) YOUNG, MARGARET B
ADB-7) YOUNG, MARY LOUISE L
ADB-8) YOUNG, LESTER & THELMA LEE
ADB-9) RICHARDSON, ANTHONY Y & BARBARA L
ADB-10) YOUNG, HAROLD D & NANCY L
ADC-1) OLDMACHER, D G & BEVERLY ANN
ADC-2) FARNEY, WILLIAM CHARLES
ADC-4) WALLACE, A N & K

Plate 17

Aravaipa Creek
Flood Damage Report

Plate 18

MAGMA COPPER COMPANY

SAN MANUEL OPERATION

- Settling Ponds
- Tailings
- Minesite
- Millsite
- Golf Course
- Solvent Extraction/ Electro-winning Plant
- Town of San Manuel
- Mine Shafts
- Younger Alluvium
- TRS
- Zone 1
- River
- Slurry Pipe
- Mine Water Pipe
- Well Water Pipe
- Return Pipe
- Major Roads
- Well

Mine Shafts

Mine Road

AZ 77

San Manuel Road

San Pedro River

W1 W2 W3 W4 W5 W6 W7 W8 W9 W10 W11 W12

WFR NO.
113-08-AC-1

WFR NO.
113-08-3

Arizona Water Company San Manuel System Service Area

San Manuel

N

1/4 0 1/4 1/2 Mile

T 9 S

T 10 S

R 16 E

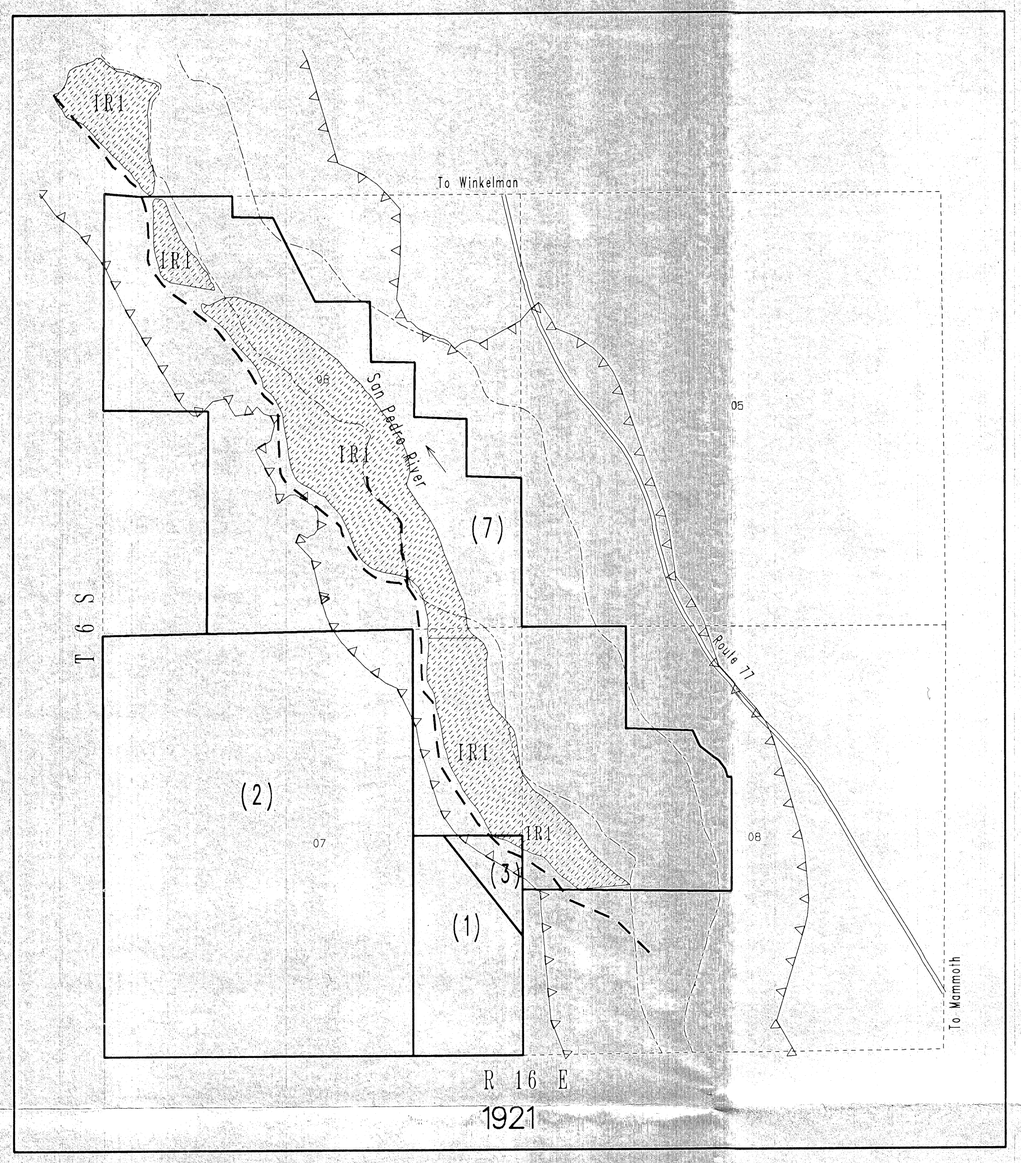
R 17 E

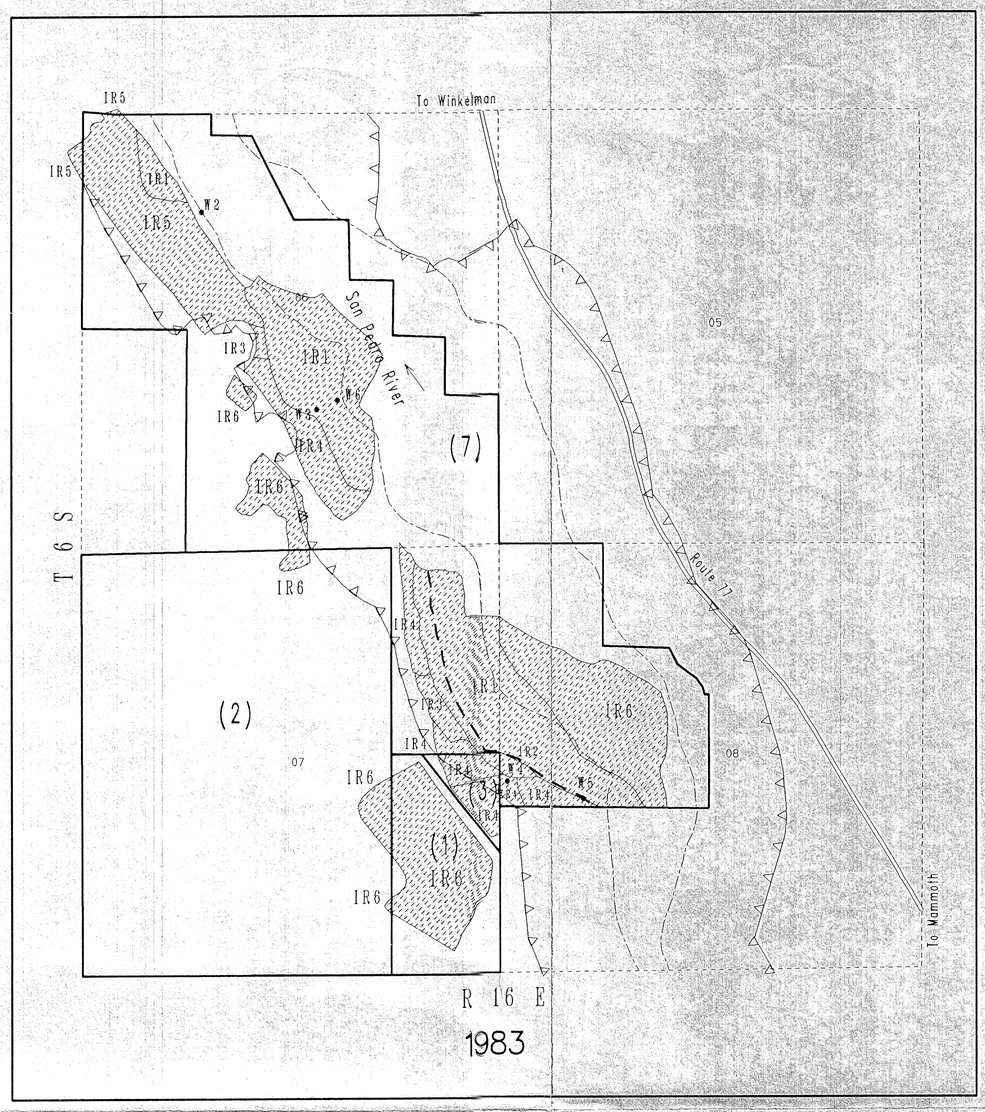
R 17 E

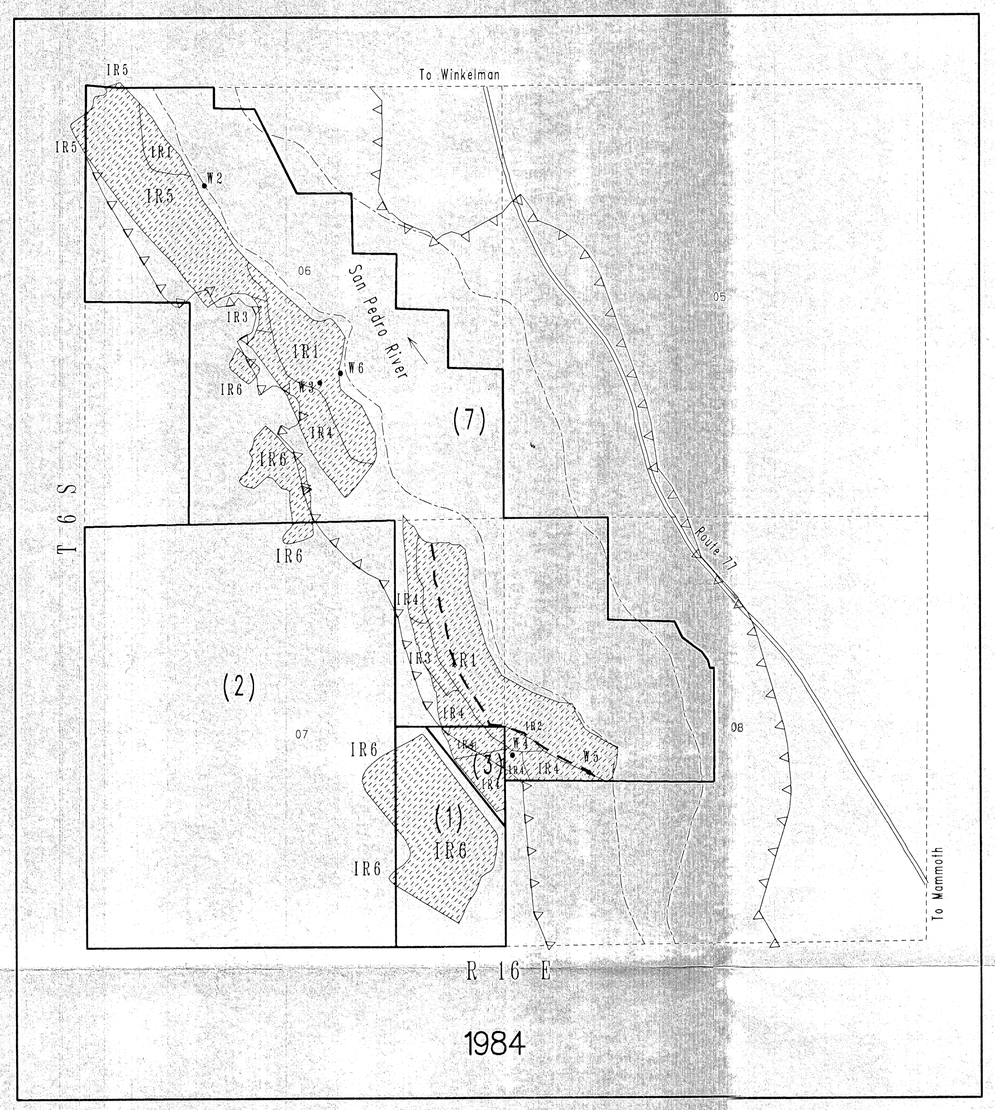
R 18 E

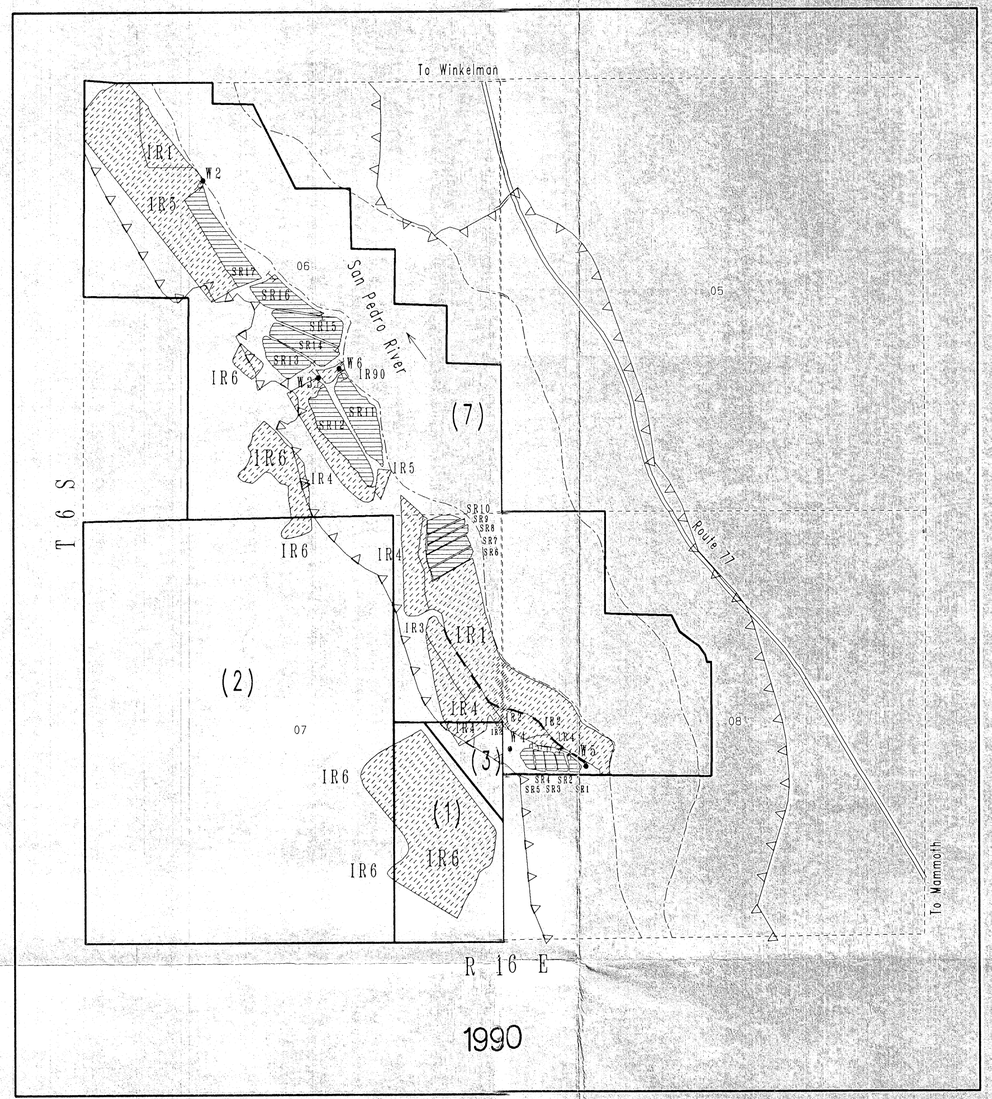
Plate 19

Paul L. Sale
Investment Company









Ownership Boundary
Irrigation Boundary
Pipeline
Section Boundary
Roads or Highways
Canal or Ditch
River or Wash
Zone 1
Irrigation
Reservoir or Stockpond
Well (W)

OWNERS

1,2,3 SLD/ PAUL L SALE INVEST CO
7 PAUL L SALE INVESTMENT CO

N

1/8 0 1/8 1/4 Miles
1/8 0 1/8 1/4 3/8 Kilometer