ORIGINAL

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BOOK 5380

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE DEPENDENT RESURVEY,

A PORTION OF THE FOURTH STANDARD PARALLEL NORTH THROUGH RANGE 21 WEST,
THE 1963 PARTITION LINE, (IDENTICAL TO A PORTION OF THE NORTH BOUNDARY),
THE EAST BOUNDARY, THE SUBDIVISIONAL LINES AND
A PORTION OF THE ADJUSTED 1906 MEANDERS AND A SURVEY OF
OF A PORTION OF THE FIXED AND LIMITING BOUNDARY OF THE LEFT BANK OF
THE ABANDONED CHANNEL OF THE COLORADO RIVER, SURVEY OF ACCRETED LANDS AND
A METES-AND-BOUNDS SURVEY OF A PORTION OF THE HAVASU FISH AND WILDLIFE BOUNDARY,
TOWNSHIP 16 NORTH, RANGE 22 WEST
Of theGila and Salt River Meridian,
In the State of Arizona
EXECUTED BY
Clyde J. King, Cadastral Surveyor

Under Special Instructions dated <u>February 6, 1992</u>, approved <u>February 6, 1992</u>, which provided for the surveys included under Group Number <u>740</u> and assignment instructions dated <u>February 6, 1992</u>.

Survey commenced February 10, 1992
Survey completed November 3, 1992

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TOWNSHIP 16 NORTH, RANGE 22 WEST

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BOOK 5380

T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the Fourth Standard Parallel North through Range 21 West, the 1963 partition line, (identical to a portion of the north boundary), the east boundary, the subdivisional lines, and a portion of the adjusted 1906 meanders, a survey of a portion of the fixed and limiting boundary of the left bank of the abandoned channel of the Colorado River and a survey of accreted lands and a metes-and-bounds survey of a portion of the Havasu Fish and Wildlife Boundary, Township 16 North, Range 22 West, Gila and Salt River Meridian, Arizona.

The boundaries, subdivisional lines, and meander lines were surveyed by John J. Fisher in 1906. The accretion between T. 17 N. R. 21 W. and T. 16 N. R. 22 W. and south line of sec. 31, T. 17 N. R. 22 W. were surveyed by Robert C. Yundt and Donald A. Cannon in 1960-62.

When originally surveyed, the township consisted of fractional sections 1 and 12., which were bounded by the Colorado River to the North and West. The westerly movement of the river created accretion in front of the lands originally returned. In 1910 section 12 was set aside as an addition to the Fort Mojave Indian Reservation by executive order 1267. In 1941 the perimeter of the Havasu Fish and Wildlife Area was described in a metes-and-bounds description contained in executive order 8647. In this description, all of section 1 except portions of lots 3 and 4 were set aside for the Fish and Wildlife Area. In 1942, when the property was acquired though warranty deed from the Cotton Land Co., the government received all of section 1. discrepancy between the description and the warranty deed leaves a small portion of BIM land defined as the northerly portions of lots 3 and 4 in section 1. Since these portions of lots 3 and 4 were originally bounded by the river they have riparian rights The intention of the following survey is to determine the accretion out to the Left bank of the Colorado River as it existed prior to channelization. Lack of physical evidence of the prechannelized river resulted in aerial photographs being utilized to determine the left bank of the river prior to channelization.

BOOK 5380

T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona

CHAINS

The survey was executed in accordance with the specifications as set forth in the <u>Manual of Surveying Instructions</u>, 1973, and the Special Instructions dated February 6, 1992, for Group No. 740, Arizona.

Preliminary to the resurvey, the lines of the original survey were retraced and search was made for all corners and other calls of the record. Identified corners were remonumented in their original positions; lost corners were restored and monumented at proportionate positions based on the original record. The retracement data were thoroughly verified and only the true line field notes are given herein.

The directions of all lines were determined by direct hour angle observations on the sun, and refer to the true meridian. Distances and angles were measured with a Topcon GTS-3B total station instrument.

The geographic position of the NE cor. of sec. 1, as determined from a tie made to U.S. Geological Survey triangulation station "FIELD", is as follows:

Latitude: 34°48'28.93" N. Longitude: 114°33'07.72" W. NAD27

The mean magnetic declination as taken from quadrangle map Needles, CALIF/ARIZ., published in 1970 by U.S. Geological Survey, is 14° E.

Dependent Resurvey of a Portion of The 4th Standard Parallel North, Through Range 21 West, Gila and Salt River Meridian, Arizona

Restoring the resurvey executed by Robert C. Yundt and Donald A. Cannon in 1960-62

Beginning at the stan. cor. of secs. 31 and 32, T. 17 N., R. 21 W., monumented with an iron post, 2 1/2 ins. diam., firmly set, encased in concrete in a vitrified clay pipe, 8 ins. diam., projecting 12 ins. above the ground, with brass cap mkd., T17N R21W SC S31 S32 1961, not remonumented.

From this cor. point, U.S. Geological Survey triangulation station "FIELD", with published latitude of 34°47'19.238" N. and longitude of 114°33'50.266" W., NAD27, bears S. 26°44'20" W., 119.526 chs. dist., monumented with a standard brass disk, 3 ins. diam., seated in a 12 in. diam. concrete cylinder, flush with the ground, with top of disk mkd. FIELD 1964 and a triangle.

Dependent Resurvey of A Portion of the 4th Standard Parallel North, Through Range 21 West, Gila and Salt River Meridian, Arizona

	Inrough Range 21 West, Gila and Salt River Meridian, Arizona
CHAINS	
	West, on the N. bdy. of sec. 6, T. 16 N. R. 21 W.
37.31	Point for the closing corner of secs. 1 and 6, Tps. 16 N. Rs. 21 and 22 W., determined at record bearing and dist.
	"NOTE" This cor. now functions as a cor. of minimum control for the cor. of Tps. 16 N., Rs. 21 and 22 W. on the 4th. Standard Parallel North.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.
	T17N R21W S31
	S 1 S 6 R22W R21W T16N 1992
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
	Cor. is located in a barbed wire fence, 4 strands, bears E. and W. and 14 lks. N. of the N. edge of a cleared fire line, bears E and W.
	West, on the N. bdy. of Sec. 1, T. 16 N., R. 22 W.
0.85	Point for the meander cor. for sec. 1, T. 16 N., R.22 W., and sec. 31, T. 17 N., R. 21 W., identical to a witness point, determined at record bearing and dist. An iron post, 28 ins. long 2 1/2 ins. diam., encased in concrete in a vitrified clay pipe, 8 ins. diam., 40 ins. long, was lying on top of the ground nearby, with brass cap mkd., T17N R21W S31 S1 WP T16N R22W 1961. There is no remaining evidence of the original cor. position.

Dependent Resurvey of A Portion of the 4th Standard Parallel North, Through Range 21 West, Gila and Salt River Meridian, Arizona

CHAINS

Reset the iron post, 34 ins. in the ground, remarked the brass cap to read

WP T17N R21W S31

S 1 T16N R22W 1992

1961

Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the iron post.

Cor. is located in a barbed wire fence, 4 strands, bears E. and W. and 9 lks. N. of the N. edge of a cleared fire line, bears E. and W.

Dependent Resurvey, of the 1963 Partition Line, (Identical to a Portion of the N. Bdy.), T. 16 N. R. 22 W., Gila and Salt River Meridian, Arizona

Restoring the survey executed by Robert C. Yundt and Donald A. Cannon in 1960-62

From the 1906 meander cor of secs. 1 and 31, identical to a witness point, hereinbefore described.

N. 50°39' W., bet. sec. 1, T. 16 N., R. 22 W., and Sec. 31, T. 17 N., R. 21 W.

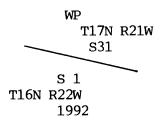
Over nearly level land, through scattered willows and dense arrowweed.

30.00 Point for a witness point.

7

Dependent Resurvey, of the 1963 Partition Line, Identical to a Portion of the N. Bdy., T. 16 N. R. 22 W., Gila and Salt River Meridian, Arizona

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, with brass cap mkd.

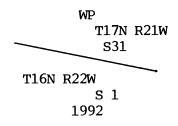


Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.

60.00

Point for a witness point.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.

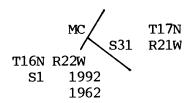


Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.

97.76

Point for the meander cor., established in 1963 on the fixed and limiting boundary of the left bank of the abandoned channel of the Colorado River, determined at record bearing and dist. An iron post, 28 ins. long, 2 1/2 ins. diam., encased in concrete in a vitrified clay pipe, 8 ins. diam., 40 ins. long, is lying on top of the ground, with brass cap mkd., T17N MC S31 R22W 1962. There is no remaining evidence of the original cor. position.

Reset the iron post, 32 ins. in the ground, remarked the brass cap to read



Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the iron post.

8

Dependent Resurvey, of the 1963 Partition Line, Identical to a Portion of the N. Bdy.,

T. 16 N. R. 22 W., Gila and Salt River Meridian, Arizona

CHAINS

Set a steel fence post alongside the cor.

Cor. is located 10 lks. East of a trail road, 15 lks. wide, bears NNE and SSW.

From this cor. point, the left bank of the channelized Colorado River, bears West, 34.64 chs. dist.

From this same cor. point, the cor. of secs. 4, 5, 32, and 33, T. 8 N. R. 23 E., San Bernardino Meridian, California, bears N. 80°45.8' W., 102.343 chs. dist., monumented with a iron post, 2 1/2 ins. diam., firmly set, projecting 6 ins. above ground, with brass cap mkd., T9N R23E S33 S32 S5 S4 T8N 1961.

Dependent Resurvey of the East Boundary T. 16 N. R. 22 W., Gila and Salt River Meridian, Arizona

Restoring the survey executed by John J. Fisher, in 1906

From the cor. of secs. 1 and 6, Tps. 16 N. Rs. 21 and 22 W., hereinbefore described.

South, bet. secs. 1 and 6.

Over nearly level land, through dense willow, creosote and undergrowth.

40.00

Point for the 1/4 sec. cor. of sec. 1 and 6, determined at record bearing and dist.; there is no remaining evidence of the original cor.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.

T16N R22W R21W 1/4 S1 | S6 1992

Deposit a magnet in a $1 \times 1 \times 2$ 5/8 ins. white plastic case beneath the stainless steel post.

	Dependent Resurvey, the East Boundary T. 16 N. R. 22 W., Gila and Salt River Meridian, Arizona
CHAINS	
80.00	Point for the cor. of secs. 1, 6, 7, and 12 determined at record bearing and dist.; there is no remaining evidence of the original cor.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	T16N R21W R22W S1 S6 S12 S7
	1992
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
	South, bet. secs. 7 and 12.
	Continue, over nearly level land, through dense willow, creosote and undergrowth.
25.30	Point for the meander cor., established in 1906, for secs. 7 and 12, determined at record bearing and dist. This point now functions as a witness point.; there is no remaining evidence of the original cor.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.
	WP T16N R22W R21W
	S12 S7
	1992
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
	From this cor. point, center of a water well, inside a metal shed 10 x 30 ft., long side bears S. 70° E., bears N. 35°24' W., 29 chs. dist.

Dependent Resurvey, the East Boundary, T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona

CHAINS

From this same cor. point, the most northerly cor. of a chain link fence surrounding a maintenance yard, extending S. 60° W., 6 chs. dist. and S. 30° E., 5 chs. dist., bears S. 77°08' W., 40.35 chs. dist.

Dependent Resurvey of the Subdivisional Lines T. 16 N. R. 22 W., Gila and Salt River Meridian, Arizona

> Restoring the survey executed by John J. Fisher, in 1906

From the cor. of secs. 1, 6, 7, and 12, on the E. bdy. of the Tp., hereinbefore described.

West, bet. secs. 1 and 12.

Over nearly level land, through dense willow, creosote and undergrowth.

32.12 Point for the meander cor., established in 1906, for secs. 1 and

12, determined at record bearing and dist. This point now functions as a witness point; there is no remaining evidence of the original cor.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.

> T16N R22W 1992

Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.

Cor. is located 17 lks. W. of a cut bank, 5 ft. high, bears NNE and SSW.

11

Portion of the Adjusted 1906 Meanders, The Left Bank of the Abandoned Channel of the Colorado River T. 16 N. R. 22 W., Gila and Salt River Meridian, Arizona

•	The Left Bank of the Abandoned Channe T. 16 N. R. 22 W., Gila and Salt Ri	
CHAINS		
	Restoring the meando John J. Fisher,	-
	From the witness point, identical t secs. 7 and 12, hereinbefore descri	
	Thence upstream with the adjusted 1 of the Colorado River	1906 meanders of the left bank
	Thence in section 12.	
	N. 64°38' W., 6.19 chs.	
	N. 50°06' W., 13.97 chs.	
	N. 49°36' W., 15.17 chs.	
	N. 47°51' W., 5.75 chs.	At end of course, witness point, identical to the 1906 meander cor. for secs. 1 and 12, hereinbefore described.
	Thence in section 1.	
	N. 50°45' W., 1.80 chs.	
	N. 46°14' W., 11.89 chs.	
	N. 50°30' W., 7.69 chs.	
	N. 46°44' W., 7.19 chs.	
	N. 43°14' W., 6.19 chs.	
	N. 42°29' W., 12.39 chs.	
	N. 37°29' W., 17.98 chs.	At 15.30 chs. on this course witness point at the intersection of the abandoned left bank and 1906 left bank of the Colorado River, hereinafter described.
	N. 24°58' W., 3.50 chs.	
	N. 9°57' W., 6.99 chs.	

Portion of the Adjusted 1906 Meanders, The Left Bank of the Abandoned Channel of the Colorado River T. 16 N. R. 22 W., Gila and Salt River Meridian, Arizona

	T. 16 N. R. 22 W., Gila and Salt	River Meridian, Arizona
CHAINS		
	N. 0°03' E., 11.99 chs.	
	N. 5°03' E., 7.90 chs.	
	N. 48°04' E., 14.80 chs.	At 3.18 chs., on this course, witness point at the intersection of the abandoned left bank and 1906 left bank of the Colorado River, hereinafter described.
		At 5.17 chs., on this course, intersect the Havasu Fish and Wildlife Boundary, not monumented.
	N. 89°02' E., 13.21 chs.	
	s. 50°30' E., 11.31 chs.	At 10.56 chs. on this course, witness point in sec. 1, hereinafter described.
	S. 49°30' E., 2.60 chs.	
	S. 55°45' E., 2.90 chs.	
	S. 83°28' E., 17.12 chs.	
	N. 89°02' E., 12.31 chs.	
	N. 65°33' E., 12.41 chs.	At end of course, witness point, identical to the meander cor. established in 1906 for sec. 1, T. 16 N., R. 22 W., and sec. 31, T. 17 N., R. 21 W., on the N. bdy. of the Tp., hereinbefore described.

CH	AINS

The following field notes describe a portion of the left bank of the Colorado River as it existed prior to channelization. The fixed and limiting boundary was determined by photogrammetric methods.

Section 1

From the meander cor., established in 1962, on the line bet. sec. 1, T. 16 N., R. 22 W., and sec. 31, T.17 N., R. 21 W., on the N. bdy. of the Tp., hereinbefore described.

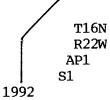
Thence, downstream.

S. 23°58' W., on the line between the meander cor. and AP 1.

Over nearly level land, through scattered willow, creosote and dense undergrowth

2.53 | Point for AP 1.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, over a steel fence post, with brass cap mkd.



Deposit 5, 60D nails beneath the stainless steel post.

Cor. is located on the top of a 15 ft. high bank, bears NNE and SSW.

From this cor. point, the left bank of the channelized Colorado River, bears West, 33 chs. dist.

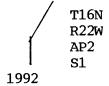
CHAINS

S. 10°10' W., on the line between AP 1 and AP 2.

10.28

Point for AP 2.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.



Deposit a magnet in a $1 \times 1 \times 2 = 5/8$ ins. white plastic case beneath the stainless steel post.

Cor. is located on the top of a 12 ft. high bank, bears NNE and S.

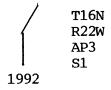
From this cor. point, the left bank of the channelized Colorado River, bears West, 39 chs. dist.

S. 0°07' E., on the line between AP 2 and AP 3.

2.64

Point for AP 3.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.



Deposit 5, 60D nails beneath the stainless steel post.

Cor. is located on the top of a 12 ft. high bank, bears N. and S. $\,$

From this cor. point, the left bank of the channelized Colorado River, bears West, 28 chs. dist.

CHAINS S. 1°42' W., on the line between AP 3 and AP 4. 13.29 Point for AP 4. Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 28 ins. in the ground, with brass cap mkd. T16N R22W S1AP4 Deposit 5, 60D nails beneath the stainless steel post. Cor. is located on the top of a 10 ft. high bank, bears N. and S. and 7 lks. N. of a trail road, 12 lks. wide, bears NE. and SSW. From this cor. point, the left bank of the channelized Colorado River, bears West, 25 chs. dist. S. 18°45' W., on the line between AP 4 and AP 5. 8.47 Point for AP 5. Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd. T16N R22W AP5 1992 Deposit 5, 60D nails beneath the stainless steel post. Cor. is located on the top of a 7 ft. high bank, bears NNE and SSW. From this cor. point, left bank of the the channelized Colorado River, bears West, 21 chs. dist.

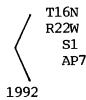
CHAINS S. 21°43' W., on the line between AP 5 and AP 6. 0.86 Point for a special meander cor. on the line between lots 9 and 14, sec. 1, determined at proportionate dist. Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd. R22W Deposit 5, 60D nails beneath the stainless steel post. Cor. is located on the top of a 7 ft. high bank, bears NNE and SSW. From this cor. point, the left bank of the channelized Colorado River, bears West, 21 chs. dist. 7.34 Point for AP 6. Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 27 ins. in the ground, with brass cap mkd. R22W Deposit 5, 60D nails beneath the stainless steel post. Cor. is located on the top of a 3 ft. high bank, bears NNE and SSE. From this cor. point, the left bank of the channelized Colorado River, bears West, 16 chs. dist.

CHAINS

S. 18°33' E., on the line between AP 6 and AP 7.

7.70 | Point for AP 7.

Sct a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.



Deposit 5, 60D nails beneath the stainless steel post.

From this cor. point, the left bank of the channelized Colorado River, bears West, 17 chs. dist.

S. 26°20' E., on the line between AP 7 and AP 8.

11.44 Point for AP 8.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.



Deposit 5, 60D nails beneath the stainless steel post.

From this cor. point, the left bank of the channelized Colorado River, bears West, 20 chs. dist.

S. 29°15' E., on the line between AP 8 and AP 9.

0.95 | Intersect the Fish and Wildlife Boundary, not monumented.

From this point, the point of intersection of the adjusted 1906 meander line and the north line of Havasu Fish and Wildlife Bdy., bears N. 88°41' E., 2.20 chs. dist.; not monumented.

CHAINS

2.42 Point for a witness point at intersection with the adjusted 1906 meander line of the left bank of the abandoned channel of the Colorado River.

Set an stainless steel, 28 ins. long 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.



Deposit 5, 60D nails beneath the stainless steel post.

Cor. is located in a 112 lk. wide cleared fire line, bears E. and W.

From this cor. point, the left bank of the channelized Colorado River, bears West, 21 chs. dist.

6.23 | Point for AP 9.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.



Deposit 5, 60D nails beneath the stainless steel post.

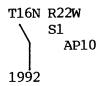
From this cor. point, the left bank of the channelized Colorado River, bears West, 22 chs. dist.

S. 36°20' E., on the line between AP 9 and AP 10.

5.96 | Point for AP 10.

CHAINS

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.



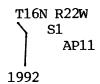
Deposit 5, 60D nails beneath the stainless steel post.

From this cor. point, the left bank of the channelized Colorado River, bears West, 24 chs. dist.

S. 23°57' E., on the line between AP 10 and AP 11.

3.57 | Point for AP 11.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.



Deposit 5, 60D nails beneath the stainless steel post.

From this cor. point, the left bank of the channelized Colorado River, bears West, 25 chs. dist.

S. 8°07' E., on the line between AP 11 and AP 12.

5.77 | Point for AP 12.

CHAINS

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.



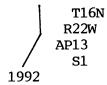
Deposit 5, 60D nails beneath the stainless steel post.

From this cor. point, the left bank of the channelized Colorado River, bears West, 25 chs. dist.

S. 21°48' W., on the line between AP 12 and AP 13.

9.76 | Point for AP 13.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.



Deposit 5, 60D nails beneath the stainless steel post.

From this cor. point, the left bank of the channelized Colorado River, bears West, 19 chs. dist.

S. 19°08' W., on the line between AP 13 and AP 14.

Point for a witness point at intersection with the adjusted 1906 meander line of the abandoned channel of the left bank of the Colorado River, bears NW and SE.

CHAINS

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.

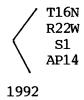


Deposit 5, 60D nails beneath the stainless steel post.

From this cor. point, the left bank of the channelized Colorado River, bears West, 15 chs. dist.

11.14 | Point for AP 14.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.



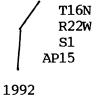
Deposit a magnet in a $1 \times 1 \times 2$ 5/8 ins. white plastic case beneath the stainless steel post.

From this cor. point, the left bank of the channelized Colorado River, bears West, 13 chs. dist.

S. 9°37' W., on the line between AP 14 and AP 15.

4.13 | Point for AP 15.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.



CHAINS

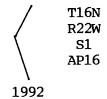
Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.

From this cor. point, the left bank of the channelized Colorado River, bears West, 12 chs. dist.

S. 0°37' W., on the line between AP 15 and AP 16.

6.35 | Point for AP 16.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 12 ins. below the ground, with brass cap mkd.



from which

- A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 25 ins. in the ground, for a reference monument, bears S. 58° 22' W., 60.4 ft. dist., with cap mkd. RM 60.4 FT TO COR 1992, and an arrow pointing to the cor. Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
- A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 25 ins. in the ground, for a reference monument, bears S. 31° 19' W., 59.8 ft. dist., with cap mkd. RM S1 59.8 FT TO COR 1992, and an arrow pointing to the cor. Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.

Deposit a magnet in a $1 \times 1 \times 2$ 5/8 ins. white plastic case beneath the stainless steel post.

Cor. is located in the center of a graded gravel road, bears NNW and SSE.

From this cor. point, the left bank of the channelized Colorado River, bears West, 10 chs. dist.

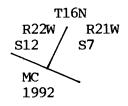
	T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona
CHAINS	
	S. 16°10' E., on the line between AP 16 and AP 17.
5.88	Point for AP 17.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.
	T16N R22W S1 AP17
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
	Set a steel fence post alongside the cor.
	Cor. is located 38 lks. East of a graded gravel road, 35 lks. wide, bears NNW and SSE.
	From this cor. point, the left bank of the channelized Colorado River, bears West, 10 chs. dist.
	S. 21°57' E., on the line between AP 17 and AP 18.
6.33	Point for AP 18.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.
	T16N R22W S1 AP18
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
	From this cor. point, the left bank of the channelized Colorado River, bears West, 11 chs. dist.

	T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona
CHAINS	
	S. 31°12' E., on the line between AP 18 and AP 19.
11.52	Point for AP 19.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.
	T16N R22W S1 AP19
	1992
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
	From this cor. point, the left bank of the channelized Colorado River, bears West, 13 chs. dist.
	S. 27°52' E., on the line between AP 19 and AP 20.
17.92	Point for AP 20.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.
	T16N R22W S1 AP20
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
	From this cor. point, the left bank of the channelized Colorado River, bears West, 14 chs. dist.

	T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona
CHAINS	
	S. 22°47' E., on the line between AP 20 and AP 21.
10.18	Point for AP 21.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.
	T16N R22W S1 AP21
	1992
	Deposit a magnet in a 1 x 1 x 2 $5/8$ ins. white plastic case beneath the stainless steel post.
	From this cor. point, the channelized left bank of the Colorado River, bears West, 13 chs. dist.
	S. 21°01' E., on the line between AP 21 and AP 22.
3.26	Point for a meander cor. bet. secs. 1 and 12, determined at proportionate dist
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.
	T16N R22W
	,S1 /
	MC S12
	1992
	Deposit 5, 60D nails beneath the stainless steel post.
	From this cor. point, the left bank of the channelized Colorado River, bears West, 12 chs. dist.

T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona			
CHAINS	In Sec. 12		
	From the meander cor. bet. secs. 1 and 12.		
	S. 21°01' E., on the line between the MC and AP 22.		
	Over nearly level land, through scattered willow, creosote and dense undergrowth		
6.95	Point for AP 22, not monumented.		
	S. 19°19' E., on the line between the AP 22 and AP 23.		
8.70	Point for AP 23, not monumented.		
	S. 25°59' E., on the line between the AP 23 and AP 24.		
5.64	Point for AP 24, not monumented.		
	S. 43°32' E., on the line between the AP 24 and AP 25.		
18.66	Point for AP 25, not monumented.		
	S. 60°52' E., on the line between the AP 25 and AP 26.		
4.93	Point for the meander cor., bet. secs. 7 and 12, determined at proportionate dist., .		
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, with brass cap mkd.		

CHAINS



Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.

From this cor. point, a witness point at the intersection of the adjusted 1906 meanders and the left bank of the abandoned channel of the Colorado River, bears S. 51°56' E., 103.58 chs. dist., monumented with a stainless steel post, projecting 4 ins. from the ground, with brass cap mkd. WP T16N R21W S17 1992, executed concurrently under this same group.

Survey of Accreted Lands, T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona

From a witness point determined at the intersection of the United States Fish and Wildlife Service Havasu boundary and the 1906 adjusted meanders, of lot 3, sec. 1, of the Left Bank of the abandoned channel of the Colorado River.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.



Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.

Survey of Accreted Lands, T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona

	T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona			
CHAINS				
	N. 39°30' E., on the partition line, normal to the adjusted 1906 meanders of the left bank.			
Over nearly level land, through scattered willow, creosote, dense arrowweed.				
9.70 Point for AP 1				
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.			
	T16N R22W			
	s 1			
	AP1			
	1992			
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.			
	N. 68°17' W., normal to the left bank of the abandoned channel prior to channelization.			
	Continue over nearly level land, through scattered willow, creosote, and dense arrowweed.			
25.74	Point for a witness point.			
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.			
	WP			
	T16N R22W			
	S 1			
	1992			
	· · · · · · · · · · · · · · · · · · ·			

Survey of Accreted Lands, T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona

	T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona
CHAINS	
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
45.74	Special meander cor., on the fixed and limiting bdy. of the left bank of the abandoned channel of the Colorado River, hereinbefore described.
	From this cor. point, AP6, bears S. 21°43' W., 5.62 chs. dist., hereinbefore described.
	From the witness point, identical to the meander cor. established in 1906 for secs. 1 and 12, hereinbefore described.
	S. 50°20' W., bet. secs. 1 and 12 .
27.60	Meander cor., on the fixed and limiting bdy, of the abandoned channel of the left bank of the Colorado River, hereinbefore described.
	From a witness point, identical to the meander cor. established in 1906 for secs. 7 and 12, hereinbefore described.
	S. 45°22' W., bet. secs. 7 and 12 .
39.87	Meander cor., on the fixed and limiting bdy. of the left bank of the abandoned channel of the Colorado River, hereinbefore described.

Metes-and-Bounds Survey, Portion of the Havasu Fish and Wildlife Boundary T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona

CHAINS			
	In 1941 the perimeter of the Havasu Fish and Wildlife Area was described in a metes-and-bounds description contained in executive order 8647. The following field notes described a portion of northerly boundary of the Havasu Fish and Wildlife Area.		
From a witness point, identical to the meander cor. establin 1906 for the cor. of sec. 1, T. 16 N., R. 22 W., and s T. 17 N., R. 21 W., hereinbefore described.			
	N. 89°29' W., on the north line of the Havasu Fish and Wildlife Boundary.		
	Over nearly level land, through scattered willow and arrowweed.		
45.56	Witness point, at the intersection with the adjusted 1906 meanders of the left bank of the Colorado River, hereinbefore described.		
67.72	Point for an Angle Point.		
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.		
	AP T16N R22W S 1		
	1992		
	Deposit 5, 60D nails beneath the stainless steel post.		
	S. 88°41' W., beginning new measurement.		
	Continue over nearly level land, through scattered willow and arroweed		
6.37	Intersect the 1906 adjusted meanders of the left bank of the Colorado River, not monumented.		
8.57	Intersect the fixed and limiting bdy. of the left bank of the abandoned channel of the Colorado River, between AP 8 and AP9, not monumented.		

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Metes-and-Bounds Survey,
Portion of the Havasu Fish and Wildlife Boundary
T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona

CHAINS				
	From this cor. point, AP 8, bears N. 29°15' W., 95 lks. dist., hereinbefore described.			
	From this same cor. point, AP 9, bears S. 29°15' E., 5.28 chs. dist., hereinbefore described.			
29.10	Left bank of the channelized Colorado River. bears NNW and SSE.			
35.20	Right bank of the channelized Colorado River. bears NNW and SSE.			
49.23	The E 1/16 cor. of secs. 4 and 9, T. 8 N., R. 23 E., San Bernardino Meridian, California, monumented with a iron post, 2 1/2 ins. diam., firmly set, projecting 8 ins. above ground, with brass cap mkd., T8N R23E E 1/16 S4 S9 1961.			
	From this cor. point, an iron post, 2 1/2 ins. diam., bears, S. 78°02' W., 1.14 chs. dist., set by the Fish and Wildlife Service, with brass cap mkd. 16 S4 S9 R23E T8N 1947, projecting 5 1/2 ins. above ground in a concrete pillar, .			
	GENERAL DESCRIPTION			
	This survey is located in the Havasu Fish and Wildlife Area approximately 2 miles from the town of Needles Calif. The clevation ranges from 400 to 500 feet above sea level. The soil ranges from a sandy loam to a swampy peat along the			
	marshes. Vegetation consists of creosote, willow, arrow weed and salt cedar.			
	The geographic position of the following point was determined by differential positioning using Ashtech MXII Geodetic Positioning System. U.S. Geological Survey triangulation stations "BREEZE", "FIELD" and "ARIZ 97" were used as control stations. Coordinates refer to the top of the monument.			
	Station Latitude Longitude			
	S 1/16 th secs. 9 and 10 34°47'48.70 N 114°34'24.47" W T 8N R23 E SBM.			

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UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Cheryl A. Baier	Surveying Technician
Wallace R. Ott	Surveying Technician
Mark R. Searles	Surveying Aid

CERTIFICATE OF SURVEY

I, Clyde J. King, Cadastral Surveyor, HEREBY CERTIFY upon honor that, in pursuance of Special Instructions bearing date of the 6th day of February, 1992, I have dependently resurveyed a portion of the Fourth Standard Parallel North, through Range 21 West, the 1963 partition line, (identical to a portion of the North Boundary), the east boundary, the subdivisional lines, and a portion of the adjusted 1906 meanders, and a survey of a portion of the fixed and limiting boundary of the left bank of the abandoned channel of the Colorado River and a survey of accreted lands and a Metes-and-Bounds Survey of a portion of the Havasu Fish and Wildlife Boundary, Township 16 North, Range 22 West, Gila and Salt River Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction; and that said survey has been made in strict conformity with said special instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in specific manner described in the foregoing field notes.

#13/93 (Date)

(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT Arizona State Office Phoenix, Arizona

The foregoing field notes of the dependent resurvey of a portion of the Fourth Standard Parallel North through Range 21 West, the 1963 partition line, (identical with a portion of the North Boundary), the east boundary, the subdivisional lines, and a portion of the adjusted 1906 meanders, and a survey of a portion of the fixed and limiting boundary of the left bank of the abandoned channel of the Colorado River, and a survey of accreted lands and a Metes-and-Bounds survey of a portion of the Havasu Fish and Wildlife Boundary, in Township 16 North, Range 22 West, Gila and Salt River Meridian, Arizona, executed by Clyde J. King, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

APR 14 1993

(Chief Cadastral Surveyor of Arizona)

CERTIFICATE OF TRANSCRIPT

I CERTIFY that the foregoing transcript of the field notes of the above-described surveys in T. 16 N., R. 22 W., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.

(Date) (Chief Cadastral Surveyor of Arizona)