BOOK 5305 ORIGINAL

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES OF THE

DEPENDI	INT RESURVEY OF A PORTION OF THE SUBDIVISIONAL LINES
	AND
A PORTION OF T	THE 1960-61 MEANDERS OF THE LEFT BANK OF THE COLORADO RIVER
	AND
	THE SURVEY OF THE FIXED AND LIMITING BOUNDARY
	OF
	THE 1902-03 LEFT BANK OF THE COLORADO RIVER
	TOWNSHIP 7 SOUTH, RANGE 22 WEST
	<u> </u>
Of the	Sila and Salt River Meridian
In the State of	rizona
	EXECUTED BY
Stephen J. Mall	oy , Cadastral Surveyor
Under special instru	ctions dated <u>October 30</u> , 1986, approved <u>October 30</u> 198
	, which provided for the surveys included under Group Number
682 and assi	gnment instructions dated <u>November 4</u> , 1986.
	Survey commenced November 25 , 1986
	Survey completed January 6 , 1987

INDEX DIAGRAM

TOWNSHIP 7 SOUTH , RANGE 22 WEST ,

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Adjusted 1960-61 neanders Lt bank: 11-12 Fixed and limiting bdy, Lt bank: 12-14

T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes are those of the dependent resurvey of a portion of the subdivisional lines and a portion of the 1960-61 meanders of the left bank of the Colorado River, and the survey of the fixed and limiting boundary of the 1902-03 left bank of the Colorado River, Township 7 South, Range 22 West, Gila and Salt River Meridian, Arizona.

The south and east boundaries were originally surveyed by T. F. White, deputy surveyor, in 1874. The fractional township was partially subdivided by W. H. Elliott, Deputy Surveyor, in 1905, as shown upon the plat approved March 15, 1907. Section 23 was surveyed by A. C. Horton, Jr., Assistant Supervisor of Surveys, in 1914, as shown upon the plat approved June 23, 1915. A dependent resurvey of portions of the south and east boundaries and those subdivisional lines previously surveyed and; the survey of the subdivisional lines of sections 1, 12, 13, 14, 15, and the meander of the Colorado River along these sections, was executed by Robert S. Kaiser and Donald B. Cannon, Cadastral Surveyors, under the supervision of Robert C. Yundt, Cadastral Surveyor, in 1960 and 1961, as shown on the plat accepted July 20, 1961, and which plat was suspended October 31, 1979.

In 1979, pursuant to Secretarial Order dated December 20, 1978, and the Director's Instruction Memorandum No. 79-203, dated January 19, 1979 and under the joint sps surveys in sections 14 and 15. This plat does not allow for the sovereign rights of the States of Arizona and California to the abandoned 1902-03 Colorado River channel or the right of the Quetchan (sic) Tribe of Indians (Fort Yuma Indian Reservation) to the lands westerly of the right bank of the 1902-03 Colorado River channel."

T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

CHAINS

The Laguna Dam was constructed across the Colorado River in 1909. At that time the river was diverted from it's natural bed into a new channel in the immediate vicinity of the dam. It is determined that this reconciliations of the river was in the nature of an avulsion in that the river did not change position by the natural process of erosion and accretion. It is further determined that the best available evidence of the last natural position of the Colorado River at the south boundary of section 15, is the 1905 meander line through section 22, T 7 S, R 22 W, it is also determined that certain map entitled "Plan and Profile of Colorado River from Black Canyon, Arizona-Nevada to Arizona-Sonora Boundary, Sheet P", surveyed by the U.S. Geological Survey in 1902-03 determines the best available evidence of the last natural left bank of the Colorado River north of the termination of the 1905 meander line.

The survey was executed in accordance with the specifications as set forth in the Manual of Surveying Instructions, 1973, and the Special Instructions dated October 30, 1986, for Group No. 682, 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 observations on a U.S. Coast and Geodetic Survey triangulation network, confirmed by hour angle observations on the sun, and refer to the true meridian. Distances and angles were measured with a Geodimeter 140 total station.

The geographic position of the 1/4 sec. cor. of section 23 and 24, as determined from a tie made to U.S. Coast and Geodetic Survey triangulation station "BDRY REF PT BOLT A LAGUNA DAM", located in the W. end of Laguna Dam, is as follows:

NAD 27: Latitude: 32°48'28.04" N. Longitude: 114°28'41.92" W

The magnetic declination as taken from quadrangle map LAGUNA DAM, ARIZ.-CALIF, published in 1955 and photorevised in 1979, by U.S. Geological Survey, is 13 1/2° E.

Dependent Resurvey, Portion of the Subdivisional Lines, T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

CHAINS

Restoring the survey executed by Robert S. Kaiser, Donald A. Cannon and Robert C. Yundt in 1960-61

Beginning at the 1/4 sec. cor. of secs. 23 and 24, monumented with an iron post, 1 in. diam., firmly set, projecting 26 ins. above ground, in a mound of stone, 3 ft. base, 1 1/2 ft. high, with brass cap mkd.

1/4 S23 S24

from which a bearing object established by persons unknown

A railroad spike, bears N. 22 1/2° W, 13 lks. dist., add the marks X BO on top.

Add marks 1986 to the brass cap.

Cor. is located on the N. side of a small drainage, sloping NE.

From this point U.S.C.& G.S. triangulation station "BDY REF PT BOLT A LAGUNA DAM, 1964", bears N. 40°33.4' W, (Forward Bearing),146.128 chs. dist., a 3/4 in. bolt, projecting 1 in. above Laguna Dam weir.

N. 0°04' E., bet. secs. 23 and 24.

Over rolling desert land.

The cor. of secs. 13, 14, 23, and 24, determined by a mound of stone, 4 ft. base, 3 ft. high, on a NE slope. This point coincides with the 1960-61 topographic calls N. and E; is harmoniously related with other original cors. to the N. and W. This is accepted as the best available evidence of the original cor. position.

From this point an iron post, 36 ins. long, 2 ins. diam., projecting 28 ins. above ground, loosely set in a mound of stone, 2 ft. base, 2 ft. high, with brass cap mkd. as described in the field notes of the 1914 survey bears N. 30°27' E., 3.87 chs. dist.

This position does not conform to topographic calls or other calls of record and is rejected as the original position.

At the cor. point

Dependent Resurvey, Portion of the Subdivisional Lines, T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

CHAINS	T.7 S., R.22 W., Gila and Salt River Meridian, Arizona
	Reset the iron post 4 ins. in the ground, in a mound of stone, 7 ft. base, to top, with brass cap mkd.
	T7S R22W S14 S13
	S23 S24 1986 1914
	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 near the cor.
	Cor. is located 20 lks. W. of a wash, 20 lks. wide, drains NW.
	N. 0°01' E., bet. secs. 13 and 14.
	Descend over broken N. slope, through desert land.
0.60	Wash, 20 lks. wide, drains NW.
1.20	Spur, slopes W.
1.90	Wash, 20 lks. wide, drains E.
10.40	Spur, slopes NE.
40.00	Point for the 1/4 sec. cor of secs. 13 and 14, 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.
	T7S R22W
	1/4 S14 S13 1986
	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 near the cor.

Dependent Resurvey, Portion of the Subdivisional Lines, T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

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CHAINS	
42.06	Point for the witness 1/4 sec. cor. of. secs. 13 and 14 at proportionate dist.; there is no remaining evidence of orginal cor.
	Not monumented.
65.66	The meander cor. of secs. 13 and 14, monumented with an iron post, 30 ins. long, 2 1/2 ins. diam., bent over, set 5 ins. below the surface of the ground, brass cap missing.
	At the cor. point
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, over a steel fence post, with brass cap mkd.
	M C
	S14 S13 1986
	Bury the iron post alongside the cor.
	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 near the cor.
	Cor. is located on the S. bank of slough.
	From the cor. of secs. 13, 14, 23, and 24.
	S 89°44' W, bet. secs. 14 and 23.
	Over steep desert mountains.
22.50	Ridge, bears NW and S.
39.36	Point for the witness 1/4 sec. cor of secs. 14 and 23, at proportionate dist.; there is no remaining evidence of the orginal cor.
	This point is located on a steep rock quarry wall, slopes W., unsuilable for monumentation.
40.22	Point for the 1/4 sec. cor of secs. 14 and 23, at proportionate dist.
	Point is located in a rock quarry. where it is impracticable to establish a permament monument.

BOOK 5305

Dependent Resurvey, Portion of the Subdivisional Lines,
T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

CHAINS	T./ S., R.22 W., Gila and Sait River Meridian, Arizona
CHAINS	
44.70	Point selected for the witness 1/4 sec. cor. for secs. 14 and 23.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with brass cap mkd.
	W C T7S R22W S14 1/4 → S23 1986
	from which
	A paloverde, 4 ins. diam., bears S. 28° E, 48 lks. dist., mkd. X BT.
	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 near the cor.
	Cor is located on the W. side of a gravel road, 15 lks. wide, bears N. and S.
48.50	Spur, slopes N.
80.44	The cor. of secs. 14, 15, 22, and 23, determined from the 1960-61 reference monuments
	An iron post, 2 1/2 ins. diam., firmly set, 18 ins. below the ground, bears N. 31° E, 50 ft. dist., with brass cap mkd. T7S R22W S14 RM 50 FT 1960, and an arrow pointing to the cor. Set a steel fence post alongside the RM.
	An iron post, 2 1/2 ins. diam., firmly set, 24 ins. below the ground, bears N. 37° W, 50 ft. dist., with brass cap mkd. T7S R22W S15 RM 50 FT 1960, and an arrow pointing to the cor. Set a steel fence post alongside the RM.
	This is accepted as the best available evidence of the original cor. position.
	At the cor. point
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 30 ins. below the ground, with brass cap mkd.

Dependent Resurvey, Portion of the Subdivisional Lines, T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

CHAINS	

	R22W S14
S22	s23
198	36

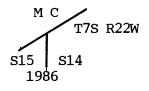
Deposit a magnet in a $1 \times 1 \times 2 = 5/8$ ins. white plastic case beneath the stainless steel post.

N. 0°03' W., bet. secs. 14 and 15.

Over nearly level land through dense undergrowth.

Point for the meander cor. of secs. 14 and 15, on the left bank of the Colorado River determined from Sheet P, Plan and Profile of the Colorado River, surveyed in 1902-03 by the U.S. Geological Survey

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

Set a steel fence post near the cor.

40.00 True point for the 1/4 sec. cor. of secs. 14 and 15, impractical to monument.

The witness 1/4 sec. cor. for. secs. 14 and 15, suspended in 1979, monumented with an iron post, 2 1/2 ins. diam., bent over 18 ins. below the ground, with brass cap mkd. as described in the field notes of the 1960-61 dependent resurvey of a portion of the subdivision, T 7 S, R 22 W.

At the cor. point

Reset the iron post, 28 ins. long, 24 ins. in the ground; the cap is now mkd.

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Dependent Resurvey, Portion of the Subdivisional Lines, T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

	1.7 5., 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 iron post.
	N. 0°03' E., beginning new measurement
	Over nearly level land through dense undergrowth.
16.12	The meander cor. of secs. 14 and 15, suspended in 1979, monumented with a brass tablet, 3 1/2 ins. diam., firmly set in concrete in Laguna Dam, mkd. AM 1979 1961. This monument is under water at this time.
	From the cor. of secs. 14, 15, 22, and 23.
	West, bet. secs. 15 and 22, on record bearing.
	Over nearly level farmland.
33.49	Point for the meander cor. of sec. 15 only, on the fix and limiting bdy., on the left bank of the Colorado River determined from Sheet P, Plan and Profile of the Colorado River, surveyed in 1902-03 by the U.S. Geological Survey
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 56 ins. below the ground, with brass cap mkd.
	MC S15
	S22 1986
	Deposit two magnets each in a 1 x 1 x 2 $5/8$ ins. white plastic case beneath the stainless steel post.
38.14	Point for, the 1960-61, meander cor. of secs. 15 and 22, left bank Colorado River, at record dist.; there is no remaining evidence of the original monument This cor. now functions as the meander cor. of sec. 22 only.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 56 ins. below the ground, with brass cap mkd.
	T7S R22W S22 1986

Dependent Resurvey, Portion of the Subdivisional Lines, T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

CHAINS

from which

The most northerly power pole, bears N. 16 1/4° E, 72 lks. dist.

The most southerly power pole, bears N. 36 1/2° E, 41 lks. dist.

Deposit two magnets in $1 \times 1 \times 2 = 5/8$ ins. white plastic cases beneath the stainless steel post.

Adjusted 1960-61 Meanders, Left Bank, Colorado River, Sec. 14, T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

Restoring the survey executed by Robert S. Kaiser, Donald A. Cannon and Robert C. Yundt in 1960-61

From the meander cor of sec. 13 and 14, hereinbefore described.

With the adjusted 1960-61 meanders of the left bank of the Colorado River in sec. 14.

S 63°07' W, 4.13 chs.

S 63°53' W, 6.79 chs.

S 50°10' W, 2.50 chs.

S 72°04' W, 3.48 chs.

S 72°43' W, 7.27 chs.

S 86°17' W. 5.23 chs.

N 79°08' W, 10.26 chs.

N 80°09' W, 8.83 chs.

Point for the auxiliary meander cor. at intersection with the left bank of the Colorado River determined from Sheet P, Plan and Profile of the Colorado River, surveyed in 1902-03 by the U.S. Geological Survey. Located in a slough where it is impracticable to establish a permament monument.

Adjusted 1960-61 Meanders, Left Bank, Colorado River, Sec. 14, T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

CHAINS

N 80°09' W, 2.10 chs.

N 85°44' W, 11.99 chs.

N 78°16' W, 8.95 chs.

S 73°16' W, 3.58 chs.

S 71°13' W, 1.06 chs.

S 57°16' W, 8.67 chs.

The 1960-61 meander cor. of sec. 14 and 15, on Laguna Dam, hereinbefore described.

Survey of the Fixed and Limiting Boundary, 1902-03 Left Bank of the Colorado River, T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

MEMORANDUM

The fixed and limiting boundary of the left bank is determined from Sheet P, Plan and Profile of the Colorado River, surveyed in 1902-03 by the U.S. Geological Survey

From the true point for the auxiliary meander cor., at intersection with the 1960-61 meander of the left bank of the Colorado River in sec. 14.

With the fixed and limiting bdy. of the 1902-03 left bank of the Colorado River in sec. 14.

S. 44°39' W., 0.29 chs.

Point selected for the witness cor. for the auxiliary meander cor.

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

WC AMC

T7S R22W S14 1986 Survey of the Fixed and Limiting Boundary, 1902-03 Left Bank of the Colorado River,

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	1.7 5., R.22 W., GIIa 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.
		Set a steel fence post near the cor.
	9.02 chs.	Point for Angle Point 1.
		Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 28 ins. in the ground, with brass cap mkd.
		AP 1 T7S R22W S14 1986
		from which
		The NW corner of a headgate, bears N 23°W, 30 lks. dist., mkd. X BO
		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 near the cor.
		Cor. is located on the S. edge of an irrigation ditch.
	S 55°24' W, 17.825 chs.	Point for a witness point on line 1-2.
		Set a brass tablet, 3 1/4 ins. diam., 3 1/2 in. stem, in a drill hole in solid rock, with top mkd.
		WP/
		T7S R22W
		S14 1986
		Cor. is located on Laguna Dam weir.

Survey of the Fixed and Limiting Boundary, 1902-03 Left Bank of the Colorado River,

CHAINS	T./ S., R.22 W., Gila and	Salt River Meridian, Arizona
CHAINS		
	S 55°24' W, 20.092 chs.	Point for Angle Point 2.
		Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, over a steel fence post, with brass cap mkd.
		AP 2 T7S R22W S14 1986
		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 near the cor.
	S 41°15' W, 16.70 chs.	The meander cor. of secs. 14 and 15, hereinbefore described.
	With the fixed and limiting Colorado River in sec. 15.	bdy. of the 1902-03 left bank of the
	S 41°15' W, 11.50 chs.	Point for Angle Point 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.
		AP 1 T7S R22W S15 1986
		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 near the cor.
	S 54°30' W, 27.00 chs.	Point for Angle Point 2.

Survey of the Fixed and Limiting Boundary, 1902-03 Left Bank of the Colorado River, T.7 S., R.22 W., Gila and Salt River Meridian, Arizona

CHAINS		
		Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 56 ins. below the ground, with brass cap mkd.
		AP 2 T7s R22W S15 1986
		Deposit two magnets each in a 1 x 1 x 2 5/8 in. white plastic case beneath the stainless steel post.
	s 42°31' W, 5.78 chs.	The meander cor. on the S. bdy. of sec. 15 only. hereinbefore described.
	GENERAL	DESCRIPTION
	River with the terrain vary	s survey is located along the Colorado ring from nearly level to steep desert consists of a dense undergrowth of low.
	Various roads throughout th Laguna Dam located in the w	ne immediate area provide access to vestern part of sec. 14.

B00K 5305

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Timothy J. Moore	Surveying Technician
Matthew G. Hense	Surveying Technician

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CERTIFICATE OF SURVEY

I, Stephen J. Malloy, Cadastral Surveyor, HEREBY CERTIFY upon honor that, in pursuance of special instructions bearing date of the 30th day of October, 1986, I have dependently resurveyed a portion of the subdivisional lines and a portion of the 1960-61 meanders of the left bank of the Colorado River, and surveyed the fixed and limiting boundary of the 1902-03 left bank of the Colorado River, of Township 7 South, Range 22 West, of the 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.

2/1/9/ (Date) Styl J Malloy (Cadastral Sarveyor)

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 subdivisional lines and a portion of the 1960-61 meanders of the left bank of the Colorado River, and the survey of the fixed and limiting boundary of the 1902-03 left bank of the Colorado River, of Township 7 South, Range 22 West, Gila and Salt River Meridian, Arizona, executed by Stephen J. Malloy, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

2/8/9/ (Date)

(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.7 S., R.22 W., Gila and Salt River Meridian, Arizona is a true copy of the original field notes.

2/8/9/ (Date) (Chief Cadastral Surveyor of Arizona)