**ORIGINAL** 

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF

THE DEPENDENT RESURVEY OF

THE WEST BOUNDARY,

TOWNSHIP 11 SOUTH, RANGE 22 WEST,

AND

THE WEST BOUNDARY,

TOWNSHIP 12 SOUTH, RANGE 22 WEST,

OF THE GILA AND SALT RIVER MERIDIAN,

IN THE STATE OF ARIZONA

#### **EXECUTED BY**

#### R. Edward Patton, Jr., Cadastral Surveyor

Under Special Instructions dated January 4, 2006, approved January 4, 2006, which provided for the surveys included under Group No. 971, and assignment instructions dated January 4, 2006.

Survey commenced January 24, 2006

Survey completed April 23, 2006

#### INDEX DIAGRAM

# TOWNSHIPS 11 & 12 SOUTH RANGE 22 WEST GILA AND SALT RIVER MERIDIAN, ARIZONA

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#### Tps. 11 and 12 S., R. 22 W., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of the west boundary, Township 11 South, Range 22 West, and the west boundary, Township 12 South, Range 22 West, Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this survey is as follows:

William H. Thorn, Cadastral Engineer, and William D. Wilson, Temporary Transitman, surveyed the west boundary and the subdivisional lines, Township 12 South, Range 22 West; and resurveyed the north boundary and surveyed the west and south boundaries and subdivisional lines, Township 11 South, Range 22 West, in 1920. In 1980, Paul L. Reeves, Cadastral Surveyor, resurveyed a portion of the west boundary, Township 11 South, Range 22 West.

The survey was executed in accordance with the specifications as set forth in the <u>Manual of Instructions for the Survey of the Public Lands of the United States, 1973</u>, and the Special Instructions dated January 4, 2006, for Group No. 971, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation 4700 model receivers.

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

Geodetic control was derived from Global Positioning System (GPS) static observations post processed by National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS) VALLECITO\_CS2004 CORS ARP, P066 JACUMBAAP\_CS2004 CORS ARP, and BUCKEYE CORS ARP. NAD The (CORS96)(EPOCH:2006.0650), geographic position of the corner of sections 19, 24, 25, and 30, is as follows:

Latitude: 32°27'04.32" N. Longitude: 114°33'44.87" W.

The mean magnetic declination is 12° E.

CHAINS

Restoring the survey executed by William H. Thorn and William D. Wilson, in 1920 and the resurvey executed by Paul L. Reeves, in 1980

Beginning at the cor. of Tps. 10 and 11 S., Rs. 22 and 23 W., monumented with an iron post, 3 ins. diam., firmly set, projecting 3 ins. above the ground, with brass cap mkd. T10S R23W R22W S36 S31 S1 S6 T11S 2006 1920.

Cor. is located 29 lks. W. of the center of a graded dirt road, 16 ft. wide, bears N. and S.; and 76 lks. W. of a power line, 4-wire, bears N. and S.

S.  $0^{\circ}01'$  W., bet. secs. 1 and 6, on the W. bdy. of the Tp.

Over gently rolling terrain.

40.00

Point for the 1/4 sec. cor. of secs. 1 and 6, at single proportionate dist. bet. the cor. of Tps. 10 and 11 S., Rs. 22 and 23 W., and the witness point of secs. 1 and 6; there is no remaining evidence of the position of the orig. cor. The bent remains of the 1920 iron post was recovered nearby, loosely set in the ground. The 1980 iron post was not recovered. Cor. point falls on E. edge of a graded dirt road.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, encircled with a collar of stone, 2 ft. base, to top, with brass cap mkd.

2006

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Deposit the 1920 iron post alongside the stainless steel post.

Cor. is located 24 lks. E. of the center of a graded dirt road, 16 ft. wide, bears N. and S.

74.21

The witness point of secs. 1 and 6, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 6 ins. above the ground, with brass cap mkd. WP T11S R23W R22W S1 S6 1980.

Add the marks 2006 to the brass cap.

Cor. is located 24 lks. E. of the center of a graded dirt road, 12 ft. wide, bears N. and S.

South, beginning new measurement.

5.80

The cor. of secs. 1, 6, 7, and 12, monumented with an iron post, 2 ins. diam., firmly set, projecting 18 ins. above the ground and bent over to the NW, with brass cap mkd. T11S R23W R22W S1 S6 S12 S7 1920.

Excavate soil around the 1920 iron post; the bottom portion is vertical and appears undisturbed.

At the center of the undisturbed base of the 1920 iron post

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, encircled with a collar of stone, 2 ft. base, to top, with brass cap mkd.

2006

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Deposit the 1920 iron post alongside the stainless steel post.

Cor. is located 36 lks. E. of the center of a graded dirt road, 12 ft. wide, bears N. and S.; and 76 lks. W. of a power line, 4-wire, bears N. and S.

S. 0°01' W., bet. secs. 7 and 12.

40.01

The 1/4 sec. cor. of secs. 7 and 12, monumented with an iron post, 1 in. diam., firmly set, projecting 18 ins. above the ground and bent over to the E., with brass cap mkd. 1/4 S12 S7 1920.

Excavate soil around the 1920 iron post; the bottom portion is vertical and appears undisturbed.

At the center of the undisturbed base of the 1920 iron post

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, encircled with a collar of stone, 3 ft. base, with brass cap mkd.

CHAINS

T 11 S 1/4 R 23 W | R 22 W S 12 | S 7

2006

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Deposit the 1920 iron post alongside the stainless steel post.

Cor. is located 83 lks. E. of the center of a graded dirt road, 12 ft. wide, bears N. and S.

S. 0°01' E., beginning new measurement.

40.00

The cor. of secs. 7, 12, 13, and 18, monumented with an iron post, 2 ins. diam., firmly set, projecting 7 ins. above the ground and leaning to the N., with brass cap mkd. T11S R23W R22W S12 S7 S13 S18 1920.

Rehabilitate the iron post by returning to vertical position, and raise a mound of stone, 2 1/2 ft. base, to top, around iron post.

Add the marks 2006 to the brass cap.

Cor. is located 1.17 chs. E. of the center of a graded dirt road, 12 ft. wide, bears N. and S.; and 1.21 chs. N. of the center of a graded dirt road, 12 ft. wide, bears E. and W.

S. 0°01' E., bet. secs. 13 and 18.

40.02

The 1/4 sec. cor. of secs. 13 and 18, monumented with the remains of the 1920 iron post, 1 in. diam., 20 ins. long, lying on the surface of the ground, with brass cap mkd. 1/4 S13 S18 1920, and an iron reinforcing rod, 1/2 in. diam., projecting 2 ins. above the ground, alongside the iron post.

Excavate the soil alongside the iron reinforcing rod; below the surface of the ground, fragmentary rusted remains of the 1920 iron post were recovered.

At the center of the rusted remains of the 1920 iron post

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 21 ins. in the ground, encircled with a collar of stone, 3 ft. base, to top, with brass cap mkd.

	T. 11 S., R. 22 W., Gila and Salt River Meridian, Arizona
CHAINS	
	T 11 S 1/4 R 23 W   R 22 W S 13   S 18
	2006
	Deposit a magnet, in a white plastic case, at the base of the stainless steel post.
	Deposit the 1920 iron post alongside the stainless steel post.
	Cor. is located 2.83 chs. W. of the center of a graded dirt road, 12 ft. wide, bears N. and S.
	S. 0°01' E., beginning new measurement.
39.99	The cor. of secs. 13, 18, 19, and 24, monumented with an iron post, 2 ins. diam., firmly set, projecting 18 ins. above the ground, with brass cap mkd. T11S R23W R22W S13 S18 S24 S19 1920.
	Add the marks 2006 to the brass cap.
	Cor. is located 6.67 chs. W. of the center of a graded dirt road, 12 ft. wide, bears N. and S.
	From this cor. point, a brass tablet, 3 1/2 ins. diam., firmly set flush in a concrete base, 13 ins. diam., 3 ins. high, bears N. 61°36' E., 1.07 chs. dist., mkd. BOR H423V 303 MESA6 BM.
	From this same cor. point, a brass tablet, 4 ins. diam., firmly set flush in a concrete base, 6 ins. diam., 3 ins. high, bears S. 42°11' E., 75 lks. dist., mkd. BOR PF22 1978 BM.
	S. 0°02' E., bet. secs. 19 and 24.
40.02	The 1/4 sec. cor. of secs. 19 and 24, monumented with an iron post, 1 in. diam., firmly set, projecting 5 ins. above the ground, with brass cap mkd. 1/4 S24 S19 1920.
	Add the marks T11S R23W R22W and the date 2006 to the brass cap.
	Cor. is located 2.17 chs. W. of the center of a graded dirt road, 12 ft. wide, bears N. 24° E. and S. 24° W.
	S. 0°02' E., beginning new measurement.
39.99	The cor. of secs. 19, 24, 25, and 30, monumented with an iron post, 2 ins. diam., firmly set, projecting 4 ins. above the ground, with brass cap mkd. T11S R23W R22W S24 S19 S25 S30 1920.

CHAINS

Add the marks 2006 to the brass cap.

Cor. is located 50 lks. E. of the center of a graded dirt road, 12 ft. wide, bears N. and S.

S. 0°03' E., bet. secs. 25 and 30.

40.01

The 1/4 sec. cor. of secs. 25 and 30, monumented with the top portion of an iron post, 1 in. diam., lying on the surface of the ground, with brass cap mkd. 1/4 S25 S30 1920.

Excavate soil below the iron post; rusted fragmentary remains of the base of the iron post were recovered 24 ins. below the surface of the ground.

At the center of the rusted remains of the 1920 iron post

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, encircled with a collar of stone, 2 1/2 ft. base, to top, with brass cap mkd.

2006

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Deposit the 1920 iron post alongside the stainless steel post.

Cor. is located 1.74 chs. E. of the center of a graded dirt road, 12 ft. wide, bears N. and S.

S. 0°01' E., beginning new measurement.

40.00

The cor. of secs. 25, 30, 31, and 36, monumented with an iron post, 2 ins. diam., loosely set, projecting 25 ins. above the ground, with brass cap mkd. T11S R23W R22W S25 S30 S36 S31 1920.

The iron post was recovered in poor condition, with the lower 5 ins., including the flanges, rusted into fragments.

At the corner point

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 21 ins. in the ground, encircled with a collar of stone, 3 ft. base, to top, with brass cap mkd.

CHAINS

2006

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Deposit the 1920 iron post alongside the stainless steel post.

Cor. is located 14 lks. E. of the center of a graded dirt road, 12 ft. wide, bears N. 10° E. and S. 20° E., in curve.

S. 0°01' E., bet. secs. 31 and 36.

40.00

The 1/4 sec. cor. of secs. 31 and 36, monumented with an iron post, 1 in. diam., firmly set, projecting 2 ins. above the ground, with brass cap mkd. 1/4 S36 S31 1920.

Add the marks T11S R23W R22W 2006 to the brass cap.

Cor. is located 33 lks. E. of the center of a graded dirt road,  $12 \ \text{ft.}$  wide, bears N. and S.

S. 0°01' E., beginning new measurement.

39.95

The cor. of Tps. 11 and 12 S., Rs. 22 and 23 W., monumented with an iron post, 3 ins. diam., lying horizontally, 6 ins. below the surface of the ground, with brass cap mkd. T11S R23W R22W S36 S31 S1 S6 T12S 1920.

The cor. point falls on the E. edge of a graded dirt road, and the monument appears to have been disturbed. The nearest corners to the E. and W. were recovered in order to evaluate whether the cor. point was lost. The base of the monument is within 4 lks. of the 1920 record position, and is therefore accepted as the true cor. point.

At the corner point

Reset the 1920 iron post, 36 ins. long, 3 ins. diam., 42 ins. in the ground.

from which

CHAINS

- A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 23 ins. in the ground for a reference monument, bears N. 43°16' E., 61.0 ft. dist., encircled with a collar of stone, 1 1/2 ft. base, with brass cap mkd. RM T11S R22W S31 61.0 FT TO COR 2006 and an arrow pointing to the cor. Deposit a magnet, in a white plastic case, at the base of the stainless steel post.
- A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 22 ins. in the ground for a reference monument, bears S. 44°11' E., 61.1 ft. dist., encircled with a collar of stone, 1 1/2 ft. base, with brass cap mkd. RM T12S R22W S6 61.1 FT TO COR 2006 and an arrow pointing to the cor. Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Deposit a magnet, in a white plastic case, at the base of the iron post.

Add the marks 2006 to the brass cap.

Cor. is located 8 lks. E. of the center of a graded dirt road, 12 ft. wide, bears N. and S.

From this cor. point, the 1/4 sec. cor. of secs. 6 and 31, Tps. 11 and 12 S., R. 22 W., bears S. 89°57' E., 37.87 chs. dist., monumented with the rusted remains of an iron post, 1/2 in. diam., lying horizontally, 3 ins. below the surface of the ground, with brass cap mkd. 1/4 S31 S6 1920. The nearest cor. to the E. was recovered in order to determine if the cor. point had been disturbed. An excavation of the ground below the iron post recovered rusted fragments of the remainder of the iron post.

At the center of the rusted fragments

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, encircled with a collar of stone, 2 ft. base, to top, with brass cap mkd.

2006

Deposit a magnet, in a white plastic case, at the base of the stainless steel post. Deposit the 1920 iron post alongside the stainless steel post.

CHAINS

From the 1/4 sec. cor. of secs. 6 and 31, Tps. 11 and 12 S., R. 22 W., the cor. of secs. 5, 6, 31, and 32, Tps. 11 and 12 S., R. 22 W., bears S. 89°55' E., 39.97 chs. dist., monumented with an iron post, 2 ins. diam., firmly set, projecting 14 ins. above the ground, with brass cap mkd. T11S R22W S31 S32 S6 S5 T12S 1920. Add the marks 2006 to the brass cap.

From the cor. of Tps. 11 and 12 S., Rs. 22 and 23 W, the 1/4 sec. cor. of secs. 1 and 36, Tps. 11 and 12 S., R. 23 W., bears S.  $89^{\circ}57'$  W., 40.02 chs. dist., monumented with an iron post, 1 in. diam., firmly set, projecting 9 ins. above the ground, with brass cap mkd. 1/4 S36 S1 1920. Add the marks T11S R23W T12S 2006 to the brass cap.

## Dependent Resurvey of the West Boundary, T. 12 S., R. 22 W., Gila and Salt River Meridian, Arizona

Restoring the survey executed by William H. Thorn and William D. Wilson, in 1920

From the cor. of Tps. 11 and 12 S., Rs. 22 and 23 W., hereinbefore described.

South, bet. secs. 1 and 6, on the W. bdy. of the Tp.

18.03

Point for the closing cor. of secs. 1 and 6, at intersection with the 60 ft. International Boundary Reserve, determined by a line parallel with, and 60.00 ft. northerly of, the line between International Boundary Monuments No. 199 and 200; there is no remaining evidence of the position of the orig. cor. Cor. point falls in disturbed area at the intersection of graded dirt roads.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 37 ins. in the ground, with brass cap mkd.

from which

CI	ΗA	II.	V:

- A stainless steel post, 28 ins. long, 2 1/2 ins. diam., set 25 ins. in the ground for a reference monument, bears N. 18°04' E., 85.0 ft. dist., encircled with a collar of stone, 1 1/2 ft. base, with brass cap mkd. RM T12S R22W CC S6 IBR 85.0 FT TO COR 2006 and an arrow pointing to the cor. Deposit a magnet, in a white plastic case, at the base of 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 N. 78°53' E., 100.2 ft. dist., encircled with a collar of stone, 2 ft. base, with brass cap mkd. RM T12S R22W 100.2 FT TO COR S6 CC IBR 2006 and an arrow pointing to the cor. Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Cor. is located at the intersection of graded dirt roads, 12 ft. wide, bears N., and 20 ft. wide, bears S.  $70^{\circ}$  E., and N.  $70^{\circ}$  W.; and 89 lks. N. of a fence, barbed wire, 6-strand, extends S.  $70^{\circ}$  E., and N.  $70^{\circ}$  W.

18.95

The orig. closing cor. of secs. 1 and 6, monumented with an iron post, 3 ins. diam., firmly set, flush with the surface of the ground, with brass cap mkd. T12S R23W R22W S1 S6 US CC MEXICO 1920.

Add the marks AM 2006 to the brass cap.

Cor. is located 26 lks. S. of the center of a graded dirt road, 20 ft. wide, bears S. 70° E., and N. 70° W.; and 3 lks. S. of a fence, barbed wire, 6-strand, extends S. 70° E., and N. 70° W.

18.99

Intersect the International Boundary between the United States and Mexico, determined by a line between International Boundary Monuments No. 199 and 200.

Cor. not monumented.

From this cor. point, International Boundary Monument No. 199, monumented with an iron obelisk, 12 ins. square at base, 6 1/2 ft. high, bears S. 70°20′ E., 291.52 chs. dist., mkd. 199.

CHAINS

From this same cor. point, International Boundary Monument No. 200, monumented with an iron obelisk, 12 ins. square at base, 6 1/2 ft. high, bears N. 70°20' W., 84.22 chs. dist., mkd. 200.

#### GENERAL DESCRIPTION

The purpose of this survey is to locate the boundary of the Barry M. Goldwater Bombing Range for the United States Marine Corps, Yuma Air Station, located just east of the city of Yuma, Arizona. Access is provided by County Avenue 4E. There are several graded dirt roads meandering easterly off of County Avenue 4E into the Range, which are patrolled and maintained by the United States Border Patrol. The S. end of County Avenue 4E intersects a graded dirt patrol road which runs parallel with the International Border with Mexico.

The elevation varies from 300 ft. above sea level on the N. boundary of the tp. to 200 ft. near the International Border. The vegetation is primarily desert scrub brush, creosote, and a variety of native grasses and cacti.

The mean magnetic declination of  $12^{\circ}$  E. was derived from the National Geophysical Data Center's magnetic declination calculator, GEOMAG V 6.0, utilizing the International Geomagnetic Reference Field model for years 2005 through 2010, for the dates of survey.

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

#### FIELD ASSISTANTS

NAN 6776	
NAMES	CAPACITY
Geoffrey A. Graham	Cadastral Surveyor
Leon F. Strohman	Surveying Technician
Ronald W. Windes	Surveying Technician
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#### CERTIFICATE OF SURVEY

I, R. Edward Patton, Jr., Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 4th day of January, 2006, I have dependently resurveyed the west boundary, T. 11 S., R. 22 W., and the west boundary, T. 12 S., R. 22 W., 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. 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, 1973, and in specific manner described in the foregoing field notes.

Navember 8, 2006

(Date)

R. Edward Pth

(Cadastral Survey)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT Phoenix, Arizona

The foregoing field notes of the dependent resurvey of the west boundary, T. 11 S., R. 22 W., and the west boundary, T. 12 S., R. 22 W., Gila and Salt River Meridian, in the State of Arizona, executed by R. Edward Patton, Jr., Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

August 8, 2007  (Date)	Acting (Chief Cadastral Surveyor of Arizona)	
	CERTIFICATE OF TRANSCRIPT	
described surveys in Tps	going transcript of the field notes of the a . 11 and 12 S., R. 22 W., Gila and Salt R Tue copy of the original field notes.	bove iver
(Date)	(Chief Cadastral Surveyor of Arizona)	