

**ORIGINAL**

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

FIELD NOTES  
OF  
THE  
DEPENDENT RESURVEY  
OF  
THE  
WEST BOUNDARY,  
**TOWNSHIP 22 NORTH, RANGE 27 EAST,**  
OF THE GILA AND SALT RIVER MERIDIAN,  
IN THE STATE OF ARIZONA

**EXECUTED BY**

**Jones Curtiss, Cadastral Surveyor**

Under Special Instructions dated and approved May 1, 2002, and Supplemental Special Instructions dated and approved September 23, 2002, which provided for the surveys included under Group No. 886, and assignment instructions dated May 1, 2002.

**Survey commenced December 10, 2002**

**Survey completed January 11, 2003**

**INDEX DIAGRAM**

TOWNSHIP 22 NORTH                  RANGE 27 EAST  
GILA AND SALT RIVER MERIDIAN, ARIZONA

8    6	5	4	3	2	1
7    7	8	9	10	11	12
7    18	17	16	15	14	13
6    19	20	21	22	23	24
5    30	29	28	27	26	25
4    31	32	33	34	35	36

**T. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona**

CHAINS

The following field notes describe the dependent resurvey of the west boundary, Township 22 North, Range 27 East, Gila and Salt River Meridian, Arizona.

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

The survey of the exterior boundaries of Township 22 North, Range 27 East, the north boundaries of Township 22 North, Ranges 26 and 28 East and the west boundary of Township 23 North, Range 27 East was done by Frank Follman in 1882. A dependent resurvey of a portion of the south boundary, Township 23 North, Range 28 East, and the south boundary, Township 23 North, Range 29 East was done by Sidney E. Blout in 1920. A dependent resurvey of the north boundaries, Township 21 North, Ranges 26 and 27 East was done by Ty White in 1947. A dependent resurvey of the north boundary, Township 21 North, Range 26 East was done by Stephen J. Malloy, Gary D. Johnson and Darren R. Breckenridge in 1990, under Group No. 685, Arizona. A dependent resurvey of a portion of the Seventh Guide Meridian East (west boundary), Township 22 North, Range 29 East was done by Joe. R. Salazar in 1993, under Group No. 685, Arizona.

The survey was executed in accordance with the specifications as set forth in the Manual of Instructions for the Survey of the Public Lands of the United States, 1973, and the Special Instructions dated and approved May 1, 2002 and the Supplemental Special Instructions dated and approved September 23, 2002, for Group No. 886, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation Model 5700 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's Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS) FLAGSTAFF, AZTEC AND PIE TOWN VLBA. The NAD83(CORS96)(EPOCH:2002) geographic position of the southwest corner of the township is as follows:

Latitude: 35°15'25.21" N.

Longitude: 109°31'37.96" W.

## T. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona

CHAINS

The mean magnetic declination is 11 1/2° E.

**Dependent Resurvey of the West Boundary,  
T. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona**

Restoring the survey executed by  
Frank Follman, in 1882

Beginning at the cor. of Tp. 21 and 22 N., Rs. 26 and 27 E., monumented with an iron post, 3 ins. diam., firmly set projecting 5 ins. above ground, with brass cap mkd. T22N R26E R27E S36 S31 S1 S6 T21N 1990 1947, from which the remains of 1947 bearing trees

A badly charred juniper stump, 9 ins. diam., bears N. 47 3/4° E., 5.14 chs. dist., with no remaining blaze or marks. (Record: 5.17 chs. dist.)

A juniper, 16 ins. diam., bears S. 54 3/4° E., 3.67 chs. dist., with illegible scribe marks on partially healed blaze.

A juniper, 15 ins. diam., bear S. 84 1/4° W., 2.09 chs. dist., with illegible scribe marks on open blaze.

A juniper stump, 13 ins. diam., bears N. 66 1/2° W., 1.53 chs. dist., with remains of an open blaze with no marks. (Record: N. 67 1/4° W.)

Add the marks 2002 to the brass cap.

Cor. is located 1 1/2 lks. N. of the corner post for barbed wire fences, 5 strands, extending E., S. and W.

N. 0°30' E., bet. secs. 31 and 36.

Over rolling land.

40.52

Point for the 1/4 sec. cor. of secs. 31 and 36, at proportionate dist.; 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.

T 22 N  
R 26 E      R 27 E  
          1/4  
S 36 | S 31

2003

**Dependent Resurvey of the West Boundary,  
T. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona**

CHAINS									
	Deposit a magnet in a white plastic case at the base of the stainless steel post.								
69.30	Graded road, 18 ft. wide, bears NE and SW.								
81.04	Point for the cor. of secs. 25, 30, 31 and 36, at proportionate dist.; 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.								
	<table style="margin: auto;"> <tr><td colspan="2">T 22 N</td></tr> <tr><td>R 26 E</td><td>R 27 E</td></tr> <tr><td>S 25</td><td>S 30</td></tr> <tr><td>S 36</td><td>S 31</td></tr> </table>	T 22 N		R 26 E	R 27 E	S 25	S 30	S 36	S 31
T 22 N									
R 26 E	R 27 E								
S 25	S 30								
S 36	S 31								
	2003								
	Deposit a magnet in a white plastic case at the base of the stainless steel post.								
	<hr/>								
	N. 0°30' E., bet. secs. 25 and 30.								
	Over rolling land.								
40.52	Point for the 1/4 sec cor. of secs. 25 and 30, at proportionate dist.; 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.								
	<table style="margin: auto;"> <tr><td colspan="2">T 22 N</td></tr> <tr><td>R 26 E</td><td>R 27 E</td></tr> <tr><td colspan="2">1/4</td></tr> <tr><td>S 25</td><td>S 30</td></tr> </table>	T 22 N		R 26 E	R 27 E	1/4		S 25	S 30
T 22 N									
R 26 E	R 27 E								
1/4									
S 25	S 30								
	2003								
	Deposit a magnet in a white plastic case at the base of the stainless steel post.								
81.04	Point for the cor. of secs. 19, 24, 25 and 30, at proportionate dist.; 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.								

**Dependent Resurvey of the West Boundary,  
T. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona**

CHAINS									
	<table style="margin: auto; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">T 22 N</td></tr> <tr><td style="text-align: center;">R 26 E</td><td style="text-align: center;">R 27 E</td></tr> <tr><td style="text-align: center;">S 24</td><td style="text-align: center;">S 19</td></tr> <tr style="border-top: 1px solid black;"><td style="text-align: center;">S 25</td><td style="text-align: center;">S 30</td></tr> </table> <p style="text-align: center; margin-top: 10px;">2003</p> <p>Deposit a magnet in a white plastic case at the base of the stainless steel post.</p> <hr style="width: 50%; margin: 10px auto;"/> <p>N. 0°30' E., bet. secs. 19 and 24.</p> <p>Over rolling land.</p>	T 22 N		R 26 E	R 27 E	S 24	S 19	S 25	S 30
T 22 N									
R 26 E	R 27 E								
S 24	S 19								
S 25	S 30								
6.40	Graded road, 15 ft. wide, bears NE and SW.								
40.52	<p>Point for the 1/4 sec. cor. of secs. 19 and 24, at proportionate dist.; there is no remaining evidence of the original cor.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.</p>								
	<table style="margin: auto; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">T 22 N</td></tr> <tr><td style="text-align: center;">R 26 E</td><td style="text-align: center;">R 27 E</td></tr> <tr><td colspan="2" style="text-align: center;">1/4</td></tr> <tr><td style="text-align: center;">S 24</td><td style="text-align: center;">S 19</td></tr> </table> <p style="text-align: center; margin-top: 10px;">2003</p> <p>Deposit a magnet in a white plastic case at the base of the stainless steel post.</p>	T 22 N		R 26 E	R 27 E	1/4		S 24	S 19
T 22 N									
R 26 E	R 27 E								
1/4									
S 24	S 19								
68.20	Graded road, 12 ft. wide, bears ESE and WNW.								
73.80	Barbed wire fence, 4 strands, bears SSE and NNW.								
81.04	<p>Point for the cor. of secs. 13, 18, 19 and 24, at proportionate dist.; there is no remaining evidence of the original cor.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.</p>								
	<table style="margin: auto; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">T 22 N</td></tr> <tr><td style="text-align: center;">R 26 E</td><td style="text-align: center;">R 27 E</td></tr> <tr><td style="text-align: center;">S 13</td><td style="text-align: center;">S 18</td></tr> <tr style="border-top: 1px solid black;"><td style="text-align: center;">S 24</td><td style="text-align: center;">S 19</td></tr> </table> <p style="text-align: center; margin-top: 10px;">2003</p>	T 22 N		R 26 E	R 27 E	S 13	S 18	S 24	S 19
T 22 N									
R 26 E	R 27 E								
S 13	S 18								
S 24	S 19								

Dependent Resurvey of the West Boundary,  
T. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p>Deposit a magnet in a white plastic case at the base of the stainless steel post.</p> <hr/> <p>N. 0°30' E., bet. secs. 13 and 18.</p> <p>Over rolling and broken land.</p>
18.20	The N. rim of Padres Mesa, bears E. and W.
25.30	The base of Padres Mesa, bears SSE and WNW, continue over rolling land.
40.52	<p>Point for the 1/4 sec. cor. of secs. 13 and 18, at proportionate dist.; there is no remaining evidence of the original cor.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <p>T 22 N R 26 E   R 27 E 1/4 S 13   S 18</p> <p>2003</p> </div>
	<p>Deposit a magnet in a white plastic case at the base of the stainless steel post.</p>
81.04	<p>Point for the cor. of secs. 7, 12, 13 and 14, at proportionate dist.; there is no remaining evidence of the original cor.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <p>T 22 N R 26 E   R 27 E S 12   S 7 S 13   S 18</p> <p>2003</p> </div>
	<p>Deposit a magnet in a white plastic case at the base of the stainless steel post.</p> <p>Cor. is located 2.05 chs. W. of a wash, 40 ft. wide, 10 ft. deep, drains NNW.</p> <hr/> <p>N. 0°30' E., bet. secs. 7 and 12.</p> <p>Over rolling land.</p>

**Dependent Resurvey of the West Boundary,  
T. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona**

CHAINS									
3.30	Wash, 40 ft. wide, 10 ft. deep, drains NNW.								
40.52	<p>Point for the 1/4 sec. cor. of secs. 7 and 12, at proportionate dist.; there is no remaining evidence of the original cor.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <table style="margin: auto;"> <tr><td colspan="2">T 22 N</td></tr> <tr><td>R 26 E</td><td>R 27 E</td></tr> <tr><td colspan="2">1/4</td></tr> <tr><td>S 12</td><td>S 7</td></tr> </table> <p>2003</p> </div> <p>Deposit a magnet in a white plastic case at the base of the stainless steel post.</p>	T 22 N		R 26 E	R 27 E	1/4		S 12	S 7
T 22 N									
R 26 E	R 27 E								
1/4									
S 12	S 7								
41.05	Navajo Route 9410, a graded road, 20 ft. wide, bears ENE and WSW.								
81.04	<p>Point for the cor. of secs. 1, 6, 7 and 12, at proportionate dist.; there is no remaining evidence of the original cor.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <table style="margin: auto;"> <tr><td colspan="2">T 22 N</td></tr> <tr><td>R 26 E</td><td>R 27 E</td></tr> <tr><td>S 1</td><td>S 6</td></tr> <tr><td>S 12</td><td>S 7</td></tr> </table> <p>2003</p> </div> <p>Deposit a magnet in a white plastic case at the base of the stainless steel post.</p> <hr/> <p>N. 0°30' E., bet. secs. 1 and 6.</p> <p>Over rolling land.</p>	T 22 N		R 26 E	R 27 E	S 1	S 6	S 12	S 7
T 22 N									
R 26 E	R 27 E								
S 1	S 6								
S 12	S 7								
40.52	<p>Point for the 1/4 sec. cor. of secs. 1 and 6, at proportionate dist.; there is no remaining evidence of the original cor.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.</p>								

**Dependent Resurvey of the West Boundary,  
T. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona**

CHAINS	
	T 22 N R 26 E      R 27 E 1/4 S 1   S 6  2003
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
76.96	Power line, bears SE and NW.
81.04	Point for the cor. of Tp. 22 and 23 N., Rs. 26 and 27 E., at proportionate dist.; 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.
	T 23 N R 26 E   R 27 E S 36   S 31 ----- S 1   S 6 T 22 N  2003
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	From this cor. point, the cor. of Tps. 22 and 23 N., Rs. 28 and 29 E., bears S. 88°35' E., 954.57 chs. dist., monumented with an iron post, 3 ins. diam., firmly set projecting 10 ins. above ground, with brass cap mkd. T23N R28E R29E S36 S31 S1 S6 T22N 1993 1920.
	from which the remains of the 1920 bearing trees
	A badly decayed piñon stump, 6 ins. diam., 3 1/2 ft. high, bears S. 62 1/2° E., 1.49 chs. dist., mkd. T22N R29E S6 BT on open blaze. (Record: 10 ins., S. 68° E.)
	A root hole, bears S. 24° W., 1.37 chs. dist., with a piñon, 8 ins. diam., mkd. T22N R28E S1 BT on partially healed blaze, lying alongside. (Record: S. 17° W., 1.50 chs.)
	A root hole, bears N. 30 1/2° W., 1.04 chs. dist., with a juniper, 12 ins. diam., alongside, mkd. N R28E S36 BT on open blaze, lying alongside. (Record: piñon, N. 35 1/2° W.)
	Add the marks 2002 to the brass cap.

**Dependent Resurvey of the West Boundary,  
T. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona**

CHAINS

The control line was fully retraced and no evidence of the intervening cors. was found.

From this same cor. point, the cor. of Tps. 22 and 23 N., Rs. 25 and 26 E., bears N. 89°52' W., 477.50 chs. dist., determined at the center of an embedded mound of stone, 3 ft. base, flush with the surface of the ground, and is accepted as the best available evidence of the position of the original cor.

At the corner point

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

	T 23 N	
R 25 E		R 26 E
S 36		S 31
S 1		S 6
	T 22 N	

2002

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

The control line was fully retraced and no evidence of the intervening cors. was found.

From this same cor. point, the cor. of secs. 19, 24, 25 and 30, T. 23 N., Rs. 26 and 27 E., bears North, 162.08 chs. dist., monumented with a sandstone, 14 x 11 x 8 ins., firmly set flush with the surface of the ground, mkd. 4 grooves on N. face and 2 grooves on S. face.

At the corner point

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

	T 23 N	
R 26 E		R 27 E
S 24		S 19
S 25		S 30

2002

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

Bury the original sandstone alongside the stainless steel post.

Dependent Resurvey of the West Boundary,  
T. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona

CHAINS

Cor. is located 2.15 chs. E. of a trail road, bears SE and NW.

The control line was fully retraced and no evidence of the intervening cors. was found.

---

GENERAL DESCRIPTION

---

The area surveyed is within the Navajo Indian Reservation and approximately 12 miles south of the community of Wide Ruins, Arizona. The terrain is rolling, except for some broken areas along the slope of Padres Mesa, which bears E. and W. and crosses the surveyed line between sections 13 and 18. The drainages are northwesterly and south.

The elevation varies from 6100 to 6600 feet above sea level. The soil is sand and sandy clay. There are scattered juniper trees throughout the surveyed area. Undergrowth principally consists of cacti, scattered brush and native grasses.

Principal access to the area is U. S. Highway 191, which runs north and south through the eastern portion of the township. Navajo Route 9410, a graded road which branches off the highway and crosses the surveyed line between sections 7 and 12. Much of the area is used for grazing livestock and there are scattered permanent residences in the township.

The mean magnetic declination of  $11\ 1/2^\circ$  E. was derived from the computer program GEOMAGIX, utilizing the World Magnetic Model for Epoch 2000 for the dates of survey.

---



## CERTIFICATE OF SURVEY

I, Jones Curtiss, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 1st day of May, 2002, and supplemental special instructions bearing date of the 23rd day of September, 2002, I have dependently resurveyed the west boundary, T. 22 N., R. 27 E., 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, supplemental 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.

March 07, 2005  
(Date)

Jones Curtiss  
(Cadastral Surveyor)

## CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT  
Phoenix, Arizona

The foregoing field notes of the dependent resurvey of the west boundary, T. 22 N., R. 27 E., Gila and Salt River Meridian, in the State of Arizona, executed by Jones Curtiss, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

March 22, 2005  
(Date)

Stephen K. Hansen  
(Acting 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. 22 N., R. 27 E., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.~~

~~\_\_\_\_\_  
(Date) \_\_\_\_\_ (Acting Chief Cadastral Surveyor of Arizona)~~