

ORIGINAL

BOOK 5390

1

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FIELD NOTES
OF THE

DEPENDENT RESURVEY

OF THE

FIFTH STANDARD PARALLEL NORTH

(SOUTH BOUNDARY) THROUGH TOWNSHIP 21 NORTH, RANGE 31 EAST

Of the Gila and Salt River Meridian,
In the State of Arizona

EXECUTED BY
Stephen J. Malloy, Cadastral Surveyor

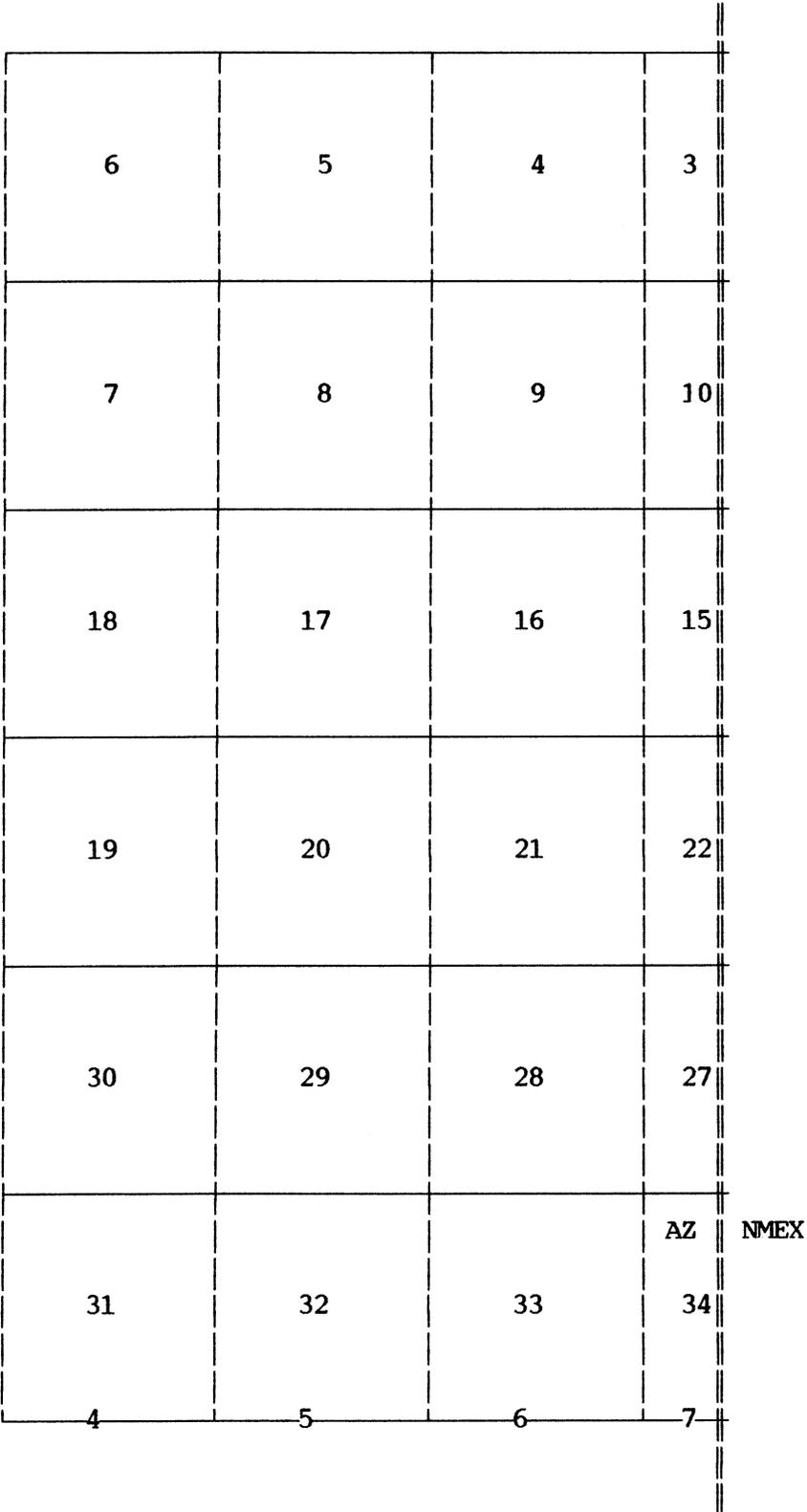
Joe R. Salazar, Cadastral Surveyor

Under Special Instructions dated January 12, 1987, approved February 23, 1987, and Supplemental Special Instructions dated February 29, 1988, approved February 29, 1988, which provided for the surveys included under Group Number 687 and assignment instructions dated July 11, 1988 and February 12, 1993.

Survey commenced July 11, 1988
Survey completed April 5, 1993

INDEX DIAGRAM

TOWNSHIP 21 NORTH, RANGE 31 EAST,



T. 21 N., R. 31 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes are those of the dependent resurvey of the Fifth Standard Parallel North (south boundary) through Township 21 North, Range 31 East, Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this dependent resurvey is as follows: The Arizona and New Mexico State Boundary was surveyed by Chandler Robbins in 1875. The Fifth Standard Parallel North (south boundary) was surveyed by W. R. Fitzgerald in 1882. The Fifth Standard Parallel North (south boundary) and a portion of the Arizona and New Mexico State Boundary was dependently resurveyed by Ty White in 1947. The Arizona and New Mexico State Boundary was retraced by Gilbert V. Olson, in 1977, during the dependent resurvey of T. 11 N., R. 21 W., New Mexico Principal Meridian, New Mexico.

The survey was executed in accordance with the specifications as set forth in the Manual of Surveying Instructions, 1973, and the Special Instructions dated January 12, 1987, and the Supplemental Special Instructions dated February 29, 1988, for Group No. 687, 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.

The geographic position of the standard closing cor. of T. 21 N., R. 31 E., at intersection with the Arizona and New Mexico State Line determined by the technique of relative positioning using the Ashtech GPS Geodetic System. Crafton and Beacon were used as the control stations. Elevations and coordinates refer to the top of the monument.

Elevation	Latitude	Longitude	
6,974 ft.	35°09'59.72" N.	109°02'43.30" W.	NAD 27

The mean magnetic declination as taken from quadrangle map CHAFIN WELL, ARIZ., published in 1971 by U.S. Geological Survey, is 13 1/2° E.

Dependent Resurvey, Fifth Standard Parallel North (south boundary),
T. 21 N., R. 31 E., Gila and Salt River Mer., Arizona

CHAINS	
	<p style="text-align: center;">Restoring the resurvey executed by Ty White, in 1947</p> <hr style="width: 20%; margin: auto;"/>
27.85	<p>Beginning at the stan. cor. of Tps. 21 N., Rs. 30 and 31 E., monumented with an iron post 3 ins. diam., firmly set, projecting 8 ins. above ground, with brass cap mkd., SC T21N R30E R31E S36 S31 1947 1993, from which the remaining bearing tree mkd. in 1947</p> <p style="padding-left: 40px;">A juniper, 5 ins. diam., bears N. 55 3/4° E., 19 lks. dist., mkd. BT on nearly healed blaze.</p> <p>S. 89°23' E., on the S. bdy. of sec. 31.</p> <p>Over gently rolling land through dense junipers.</p> <p>Point for a witness point on the S. bdy. of sec. 31.</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>
40.65	<p style="text-align: center;">WP T21N R31E S31</p> <hr style="width: 10%; margin: auto;"/> <p style="text-align: center;">1993</p> <p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>Set a steel fence post alongside the cor.</p> <p>The stan. 1/4 sec. cor. of sec. 31 only, monumented with an iron post, 1 in. diam., firmly set, projecting 9 ins. above ground, with brass cap mkd. SC 1/4 S31 1947.</p> <p>Add the marks 1993 to the brass cap.</p>
24.87	<hr style="width: 20%; margin: auto;"/> <p>S. 89°22' E., beginning new measurement.</p> <p>Point for a witness point on the S. bdy. of sec. 31.</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, Fifth Standard Parallel North (south boundary),
T. 21 N., R. 31 E., Gila and Salt River Mer., Arizona

CHAINS	
	<p style="text-align: center;">WP T21N R31E S31 ----- 1993</p> <p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>Set a steel fence post alongside the cor.</p> <p>40.71 The stan. sec. cor. of secs. 31 and 32 only, monumented with an iron post, 2 ins. diam., firmly set, projecting 9 ins. above ground, with brass cap mkd. SC T21N R31E S31 S32 1947, from which the remains of bearing trees mkd. in 1947</p> <p style="padding-left: 40px;">A fallen juniper, 20 ins. diam., bears N. 12° E., 60 lks. dist., mkd. T21NR31ES32SCBT.</p> <p style="padding-left: 40px;">A fallen juniper, 6 ins. diam., bears N. 41° W., 25 lks. dist., mkd. T21NR31ES32SCBT.</p> <p>Add the marks 1993 to the brass cap.</p> <hr/> <p>S. 89°22' E., on the S. bdy. of sec. 32.</p> <p>Over gently rolling land through dense junipers.</p> <p>40.64 The stan. 1/4 sec. cor. of sec. 32 only, monumented with an iron post, 1 in. diam., firmly set, projecting 9 ins. above ground, with brass cap mkd. SC 1/4 S32 1947.</p> <p>Add the marks 1993 to the brass cap.</p> <p>NE. bearing tree was uprooted and original position could not be determined.</p> <hr/> <p>S. 89°17' E., beginning new measurement.</p> <p>17.57 Point for a witness point on the S. bdy. of sec. 32.</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, Fifth Standard Parallel North (south boundary),
T. 21 N., R. 31 E., Gila and Salt River Mer., Arizona

CHAINS	
	<p style="text-align: center;">WP T21N R31E S32 ----- 1993</p>
	<p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>Set a steel fence post alongside the cor.</p>
40.68	<p>The stan. cor. of secs. 32 and 33 only, monumented with an iron post, 2 ins. diam., firmly set, projecting 11 ins. above ground, with brass cap mkd. SC T21N R31E S32 S33 1947, from which the remains of the bearing trees mkd. in 1947</p> <p style="padding-left: 40px;">A juniper stump, 22 ins. diam., bears N. 38 1/2° E., 18 lks. dist., No marks.</p> <p style="padding-left: 40px;">A juniper stump, 26 ins. diam., bears N. 73 1/2° W., 7 lks. dist. (Record: 10 lks. dist.)</p> <p>Add the marks 1993 to brass cap.</p> <hr/>
	<p>S. 89°23' E., on the S. bdy. of sec. 33.</p> <p>Over gently rolling land through dense junipers.</p>
3.50	<p>Barbed wire fence, 5 strand, bears ESE. and WNW.</p>
40.67	<p>The stan. 1/4 sec. cor. of sec. 33 only, monumented with an iron post, 1 in. diam., loosely set and bent over, projecting 4 ins. above ground, with brass cap mkd. SC 1/4 S33 1947, from which the remaining bearing tree mkd. in 1947</p> <p style="padding-left: 40px;">A juniper, 7 ins. diam., bears N. 8° W., 46 lks. dist., mkd. 1/4S33SCBT on partially healed blaze.</p> <p>At the cor. point</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, Fifth Standard Parallel North (south boundary),
T. 21 N., R. 31 E., Gila and Salt River Mer., Arizona

CHAINS	
	<p style="text-align: center;">SC T21N R31E 1/4 S33 ----- 1993</p> <p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>Set a steel fence post alongside the cor.</p> <p>Bury the 1 in. iron post alongside the stainless steel post.</p> <p>NE. bearing tree was uprooted and original position could not be determined.</p> <p style="text-align: center;">-----</p> <p>S. 89°23' E., beginning new measurement.</p>
10.85	<p>Point for a witness point on the S. bdy. of sec. 33.</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>
40.63	<p style="text-align: center;">WP T21N R31E S33 ----- 1993</p> <p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>Set a steel fence post alongside the cor.</p> <p>The stan. cor. of secs. 33 and 34 only, monumented with an iron post, 2 ins. diam., firmly set, projecting 8 ins. above ground, with brass cap mkd. SC T21N R31E S33 S34 1947.</p> <p>Add the marks 1993 to brass cap.</p> <p>Bearing trees were uprooted and original position could not be determined.</p> <p style="text-align: center;">-----</p>

Dependent Resurvey, Fifth Standard Parallel North (south boundary),
T. 21 N., R. 31 E., Gila and Salt River Mer., Arizona

CHAINS	
	<p>S. 89°35' E., on the S. bdy. of sec. 34.</p> <p>Over gently rolling land through dense juniper trees.</p>
10.65	<p>Barbed wire fence, 5 strand, bears N. and S.</p>
10.77	<p>The stan. closing cor. of T. 21 N., R. 31 E., at intersection with the Arizona and New Mexico State Line, monumented with an iron post, 3 in. diam., firmly set, projecting 9 ins. above ground, with brass cap mkd. T21N R31E S34 CC NMEX 1947, from which the bearing trees mkd. in 1947</p> <p style="padding-left: 40px;">A juniper, 13 ins. diam., bears N. 40° W., 66 lks. dist., mkd. T21NR31ES34CCBT, plainly visible.</p> <p style="padding-left: 40px;">A juniper, 11 ins. diam., bears N. 16 1/2° W., 76 lks. dist., mkd. T21NR31ES34CCBT, on partially healed blaze.</p> <p>Add the marks 1993 to brass cap.</p> <p>From this cor point U.S. Coast and Geodetic Survey triangulation station "CRAFTON 1959", with published latitude of 35°11'38.164" N. and longitude of 109°06'51.338" W., NAD27, bears N. 64°11.2' W., (forward bearing), 346.60 chs. dist., monumented with a standard brass tablet, 3 ins. diam., set in a concrete block, 12 X 12 ins. square, 1 in. above ground, with top mkd. CRAFTON 1920 1959 and a triangle.</p> <p>From this same cor. point, the 126th Mi. cor. on the Arizona and New Mexico State Line, bears N. 0°06' W., 53.60 chs. dist., monumented with an iron post, 3 ins. in diam., firmly set, 1 in. below the surface of the ground, with brass cap mkd. 126 M ARIZ NMEX 1977 1947, from which the remaining bearing tree mkd. in 1947</p> <p style="padding-left: 40px;">A juniper, 13 ins. diam., bears N. 80 1/4° W., 69 lks. dist., mkd. 126MARIZBT, plainly visible. (Record: N. 79° W.)</p> <p>From this same cor. point, the 127th Mi. cor. on the Arizona and New Mexico State Line, bears S. 0°06' E., 25.80 chs. dist., monumented with an iron post, 3 ins. in diam., firmly set, projecting 2 ins. above ground, with brass cap mkd. 127 M ARIZ NMEX 1977 1947, from which the remaining bearing tree mkd. in 1947</p> <p style="padding-left: 40px;">A juniper, 10 ins. diam., bears N. 75° W., 33 lks. dist., mkd. 127MARIZBT, plainly visible. (Record: 30 lks. dist.)</p>

Dependent Resurvey, Fifth Standard Parallel North (south boundary),
T. 21 N., R. 31 E., Gila and Salt River Mer., Arizona

CHAINS

and new bearing trees

A juniper, 9 ins. diam., bears N. 26 1/2° E.,
175 1/2 lks. dist., mkd. 127MNMET.

A juniper, 6 ins. diam., bears S. 35° E.,
204 1/2 lks. dist., mkd. 127MNMET.

A juniper, 8 ins. diam., bears S. 16 1/4° W.,
157 lks. dist., mkd. 127MAZET.

Add the marks 1991 to brass cap.

GENERAL DESCRIPTION

Township 21 North, Range 31 East is located approximately 65 miles northeast of Holbrook, Arizona, and approximately 14 miles east southeast of Sanders, Arizona. The Navajo Indian Reservation boundary is identical with the Fifth Standard Parallel North in this township.

The terrain consists of rolling land with dense juniper forests south of the Fifth Standard Parallel North, and extensively railed lands north of the Fifth Standard Parallel North. The average elevation is 6,700 feet above sea level.

The area surveyed drains westerly into Hardscrabble Wash, located in the township to the west.

Access to the area is provided by a track road following Hardscrabble Wash to the west, or by a track road servicing the kilovolt powerline paralleling the Arizona and New Mexico State Line to the east.

There is no occupancy in this region and the area is used for limited grazing and woodcutting.

The mean declination is 13 1/2° E. as shown on U.S.G.S. Quadrangle "CHAFTIN WELL, ARIZ.", 1971 edition.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Darren R. Breckenridge	Land Surveyor
Robert M. Charboneau	Surveying Technician
Luke B. Granger	Surveying Technician
Robert J. Lyle	Surveying Technician
W. William Foster	Surveying Technician
Rebecca Ramirez	Surveying Technician
Johnny R. Ramirez	Surveying Technician
Michael A. Searles	Surveying Technician
Bruce J. Olson	Surveying Aide

CERTIFICATE OF SURVEY

We, Stephen J. Malloy and Joe R. Salazar, Cadastral Surveyors, HEREBY CERTIFY upon honor that, in pursuance of Special Instructions bearing date of the 12th day of January, 1987, and Supplemental Special Instructions bearing date of the 29th day of February, 1988, We have dependently resurveyed the Fifth Standard Parallel North (south boundary) through Township 21 North, Range 31 East, 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 us and under our 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.

9/27/93
(Date)

Stephen J. Malloy
(Cadastral Surveyor)

9/28/93
(Date)

Joe R. Salazar
(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT
Arizona State Office
Phoenix, Arizona

The foregoing field notes of the dependent resurvey of the Fifth Standard Parallel North (south boundary) through Township 21 North, Range 31 East, Gila and Salt River Meridian, Arizona, executed by Stephen J. Malloy and Joe R. Salazar, Cadastral Surveyors, having been critically examined and found correct, are hereby approved.

OCT 5 1993
(Date)

James P. Kelley
(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. 21 N., R. 31 E., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.~~

~~_____~~
(Date)

~~_____~~
(Chief Cadastral Surveyor of Arizona)