



BOOK 5346

INDEX DIAGRAM

TOWNSHIP 29 NORTH, RANGE 24 EAST,

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

## T. 29 N., R. 24 E., Gila and Salt River Meridian, Arizona

## CHAINS

The following field notes describe the survey of the south boundary, identical with the Seventh Standard Parallel North, through Range 24 East, of Township 29 North, Range 24 East, Gila and Salt River Meridian, Arizona.

The survey was executed in accordance with the specifications as set forth in the Manual of Surveying Instructions, 1973, and the Special Instructions dated November 22, 1989, for Group No. 715, Arizona.

The directions of lines were determined by hour angle observations of the sun and refer to the true meridian. Distances and angles were measured using Zeiss ELTA-3 and Nikon NTD-4 total station instruments.

The geographic position of the standard corner of T. 29 N., Rs. 24 and 25 E., as determined from a tie made to Electronic Control Point 8, hereinafter described, is as follows:

Latitude: 35°52'02.95" N., Longitude: 109°42'26.50" W. NAD27

The geographic position of Electronic Control Point 8, hereinafter described, was determined by the technique of relative positioning utilizing the Motorola Golden Eagle Global Positioning System Satellite Surveyor. "BEAUTIFUL" and "GANADO", first order triangulation stations established by the U.S. Coast and Geodetic Survey, were used as the control stations. The geographic position is as follows:

Latitude: 35°52'09.94" N., Longitude: 109°42'58.95" W. NAD27

The mean magnetic declination, as taken from the 1985 magnetic declination map published by U.S. Geological Survey, is 12 1/2° E.

Survey of the South Boundary of T. 29 N., R. 24 E.,  
 Identical with the Seventh Stan. Par. N., through R. 24 E.,  
 Gila and Salt River Meridian, Arizona.

CHAINS

Beginning at the point for the stan. cor. of T. 29 N., Rs. 23 and 24 E., established at latitude of 35°52'02.95" N. and longitude of 109°48'51.27" W. (NAD27), which is 24 miles E. of the stan. cor. of T. 29 N., Rs. 19 and 20 E.

At the cor. point

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

SC	
T29N	
R23E	R24E
S36	S31
-----	
1989	

from which

A rock outcrop, 4 x 2 x 1 1/2 ft. high, bears  
 N. 43 1/2° E., 22 lks. dist., with X BO chiseled on the  
 SW face.

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, Electronic Control Point 14, monumented with an aluminum post, 36 ins. long, 5/8 in. diam., set flush with the surface of the ground, with magnetized aluminum cap mkd. EC-14 1989, bears S. 83°11' E., 29.67 chs. dist. This control point has latitude of 35°52'00.65" N. and longitude of 109°48'27.66" W. (NAD27), as determined by the technique of relative positioning utilizing the Motorola Golden Eagle Global Positioning System Satellite Surveyor. "BEAUTIFUL" and "GANADO", first order triangulation stations established by the U.S. Coast and Geodetic Survey, were used as the control stations.

East, on the S. bdy. of sec. 31.

Over rugged land on abrupt descent to gently rolling land.

Survey of the South Boundary of T. 29 N., R. 24 E.,  
Identical with the Seventh Stan. Par. N., through R. 24 E.,  
Gila and Salt River Meridian, Arizona.

CHAINS	
28.20	Graded road, 38 lks. wide, bears N. and S.
40.00	Point for the stan. 1/4 sec. cor. of sec. 31.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.
	<div style="text-align: center;">           SC            T29N R24E            1/4 S31  <hr style="width: 20%; margin: auto;"/>           1989         </div>
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
80.00	Point for the stan. cor. of secs. 31 and 32.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, with brass cap mkd.
	<div style="text-align: center;">           SC            T29N R24E            S31   S32  <hr style="width: 20%; margin: auto;"/>           1989         </div>
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.
	Land, rugged to gently rolling. Soil, rocky and sandy clay. No timber; sparse native grasses.
	East, on the S. bdy. of sec. 32.
	Over gently rolling land.
40.00	Point for the stan. 1/4 sec. cor. of sec. 32.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, with brass cap mkd.

Survey of the South Boundary of T. 29 N., R. 24 E.,  
 Identical with the Seventh Stan. Par. N., through R. 24 E.,  
 Gila and Salt River Meridian, Arizona.

CHAINS	
80.00	<p style="text-align: center;">SC T29N R24E 1/4 S32 ----- 1989</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>Point for the stan. cor. of secs. 32 and 33.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">SC T29N R24E S32   S33 ----- 1989</p> <p>from which</p> <p style="padding-left: 40px;">A juniper, 19 ins. diam. at base, bears N. 13 1/4° E., 185 lks. dist., mkd. T29N R24E S33 SC BT.</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>Land, gently rolling.          Soil, sandy clay.          No timber; sparse native grasses.</p> <hr/> <p>East, on the S. bdy. of sec. 33.</p> <p>Over gently rolling land.</p>
40.00	<p>Point for the stan. 1/4 sec. cor. of sec. 33.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p>

Survey of the South Boundary of T. 29 N., R. 24 E.,  
 Identical with the Seventh Stan. Par. N., through R. 24 E.,  
 Gila and Salt River Meridian, Arizona.

CHAINS	
	<p style="text-align: center;">SC                      T29N R24E                      1/4 S33  <hr style="width: 10%; margin: auto;"/>                     1989</p>
80.00	<p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>Point for the stan. cor. of secs. 33 and 34.</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> <p style="text-align: center;">SC                      T29N R24E                      S33   S34  <hr style="width: 10%; margin: auto;"/>                     1989</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>Land, gently rolling.                      Soil, sandy clay.                      No timber; sparse native grasses.</p>
40.00	<hr/> <p>East, on the S. bdy. of sec. 34.</p> <p>Over gently rolling land.</p> <p>Point for the stan. 1/4 sec. cor. of sec. 34.</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> <p style="text-align: center;">SC                      T29N R24E                      1/4 S34  <hr style="width: 10%; margin: auto;"/>                     1989</p>

Survey of the South Boundary of T. 29 N., R. 24 E.,  
 Identical with the Seventh Stan. Par. N., through R. 24 E.,  
 Gila and Salt River Meridian, Arizona.

CHAINS	<p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p>								
80.00	<p>Point for the stan. cor. of secs. 34 and 35.</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; margin: 10px 0;"> <table style="margin: auto; border-collapse: collapse;"> <tr><td colspan="2">SC</td></tr> <tr><td colspan="2">T29N R24E</td></tr> <tr><td style="border-right: 1px solid black; padding: 0 5px;">S34</td><td style="padding: 0 5px;">S35</td></tr> <tr><td colspan="2" style="border-top: 1px solid black; margin-top: 5px;">1989</td></tr> </table> </div> <p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>Land, gently rolling.                  Soil, sandy clay.                  No timber; sparse native grasses.</p> <hr style="width: 80%; margin: 10px auto;"/> <p>East, on the S. bdy. of sec. 35.</p> <p>Over gently rolling land.</p>	SC		T29N R24E		S34	S35	1989	
SC									
T29N R24E									
S34	S35								
1989									
40.00	<p>Point for the stan. 1/4 sec. cor. of sec. 35.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center; margin: 10px 0;"> <table style="margin: auto; border-collapse: collapse;"> <tr><td colspan="2">SC</td></tr> <tr><td colspan="2">T29N R24E</td></tr> <tr><td colspan="2" style="border-bottom: 1px solid black; padding-bottom: 5px;">1/4 S35</td></tr> <tr><td colspan="2" style="border-top: 1px solid black; margin-top: 5px;">1989</td></tr> </table> </div> <p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>Cor. is located on the NW edge of a trail road, bears NE and SW.</p>	SC		T29N R24E		1/4 S35		1989	
SC									
T29N R24E									
1/4 S35									
1989									
75.90	<p>Graded road, 30 lks. wide, bears SSE and NNW.</p>								
80.00	<p>Point for the stan. cor. of secs. 35 and 36.</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>								

Survey of the South Boundary of T. 29 N., R. 24 E.,  
 Identical with the Seventh Stan. Par. N., through R. 24 E.,  
 Gila and Salt River Meridian, Arizona.

CHAINS	
	<p style="text-align: center;">SC                      T29N R24E                      S35   S36  <hr style="width: 50%; margin: auto;"/>                     1989</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>Land, gently rolling.                      Soil, sandy clay.                      No timber; sparse native grasses.</p> <hr/> <p>East, on the S. bdy. of sec. 36.</p> <p>Over gently rolling land.</p>
40.00	<p>Point for the stan. 1/4 sec. cor. of sec. 36.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam.,                      26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">SC                      T29N R24E                      1/4 S36  <hr style="width: 50%; margin: auto;"/>                     1989</p> <p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case                      beneath the stainless steel post.</p>
80.00	<p>Point for the stan. cor. of T. 29 N., Rs. 24 and 25 E.</p> <p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam.,                      26 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">SC                      T29N                      R24E   R25E                      S36   S31  <hr style="width: 50%; margin: auto;"/>                     1989</p>

Survey of the South Boundary of T. 29 N., R. 24 E.,  
Identical with the Seventh Stan. Par. N., through R. 24 E.,  
Gila and Salt River Meridian, Arizona.

CHAINS	<p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>From this cor. point, Electronic Control Point 8, monumented with an aluminum post, 36 ins. long, 5/8 in. diam., set flush with the surface of the ground, with magnetized aluminum cap mkd. EC-8 1989, bears N. 75°10' W., 41.875 chs. dist.</p> <p>Land, gently rolling. Soil, sandy clay. No timber; sparse native grasses.</p> <hr/> <p style="text-align: center;">GENERAL DESCRIPTION</p> <hr/> <p>The area surveyed is located about 16 miles NW of Ganado, Arizona, within the Navajo Indian Reservation. The land is predominantly gently rolling, with elevations ranging from 6,100 to 6,600 ft. above sea level. The soil is generally sandy clay with very few bedrock outcroppings.</p> <p>Vegetation consists of native grasses and very sparse juniper.</p> <p>Access to the area is provided by a major graded road from the south and numerous other graded roads and trail roads.</p> <p>The area is used primarily for grazing purposes with no evidence of mining activity.</p> <p>The mean magnetic declination is 12 1/2° E. with no noticeable differences due to local attraction.</p>
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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## FIELD ASSISTANTS

NAMES	CAPACITY
Daniel Bryan	Navajo Engineering Technician II
Nelson Kinsel	Navajo Engineering Technician II
Reuben Mason	Navajo Engineering Technician II

CERTIFICATE OF SURVEY

We, William F. Olver and Daniel N. Patterson, Cadastral Surveyors, HEREBY CERTIFY upon honor that, in pursuance of Special Instructions bearing date of the 22nd day of November, 1989, we have surveyed the south boundary, identical with a portion of the Seventh Standard Parallel North, of Township 29 North, Range 24 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.

Daniel N. Patterson is no longer assigned to this office and is not available for signature.

November 13, 1991  
(Date)

William F. Olver  
(Project Manager and Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT  
Arizona State Office  
Phoenix, Arizona

The foregoing field notes of the survey of the south boundary, identical with a portion of the Seventh Standard Parallel North, of Township 29 North, Range 24 East, Gila and Salt River Meridian, Arizona, executed by William F. Olver and Daniel N. Patterson, Cadastral Surveyors, having been critically examined and found correct, are hereby approved.

MAR 4 1992  
(Date)

Fanny A. Tolbert  
*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. 29 N., R. 24 E., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.~~

~~(Date)~~

~~(Chief Cadastral Surveyor of Arizona)~~