

INDEX DIAGRAM

TOWNSHIP 33 NORTH, RANGE 24 EAST,

6	5	4	3	2	1
7	8	9	10	11	12
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19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
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T. 33 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the survey of the Eighth Standard Parallel North, along the south boundary of Township 33 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 direct hour angle observations of the sun and refer to the true meridian. Distances and angles were measured using a LIETZ SET-4 total station instrument.

The geographic position of the standard corner of T. 33 N., Rs. 23 and 24 E., as determined from a tie made to Electronic Control Point 19, hereinafter described, is as follows:

Latitude: 36°12'56.19" N., Longitude: 109°48'32.91" 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 Eighth Standard Parallel North,
Along the South Boundary of
T. 33 N., R. 24 E., Gila and Salt River Meridian, Arizona

Beginning at the point for the stan. cor. of T. 33 N., Rs. 23 and 24 E., determined 7 miles N. and 66 miles E. from the cor. of secs. 6 and 7 only, T. 31 N., R. 13 E., on the Third Guide Meridian East, as per the Special Instructions for Group 715 Arizona, approved November 22, 1989.

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

SC	
T33N	
R23E	R24E
S36	S31

1990	

Deposit a magnet enclosed in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.

Survey of the Eighth Standard Parallel North,
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CHAINS	
40.00	<p>Cor. is located on the steep SW slope of a clay outcrop.</p> <p>From this cor. point, Electronic Control Point 19 - Latitude: 36°12'33.90" N., Longitude: 109°47'45.00" W. NAD27 - monumented with an aluminum post, 24 ins. long, 5/8 in. diam., set flush with the surface of the ground, with magnetized aluminum cap mkd. GP715 EC-19 1990, bears S. 60°09.0' E., 68.62 chs. dist. This position was determined by the technique of relative positioning utilizing the Motorola Golden Eagle Global Positioning System Satellite Surveyor. "GANADO" and "LOHALI", first order triangulation stations established by the U.S. Coast and Geodetic Survey, were used as control stations.</p> <p>From this same cor. point, the cor. of secs. 6 and 7 only, T. 31 N., R. 13 E., on the Third Guide Meridian East, is located 7 miles S. and 66 miles W., monumented with an iron post, 3 ins. diam., firmly set, projecting 5 ins. above ground, with brass cap mkd., T31N T31N R12E R13E S1 S6 S7 S12 1911.</p> <p>From this cor. point, first order U.S. Coast and Geodetic Survey triangulation station, "LITTLE WHITE MESA 1951", bears N. 8°47.4' W., 723.845 chs. dist., monumented with a standard brass tablet, cemented in bedrock, with top mkd. LITTLE WHITE MESA 1951 and a triangle.</p> <p>From this same cor. point, first order U.S. Coast and Geodetic Survey triangulation station "BAT 1951", bears S. 86°15.8' E., 849.74 chs. dist., monumented with a standard brass tablet, cemented in bedrock, with top mkd. BAT 1951 and a triangle.</p> <p>East, on the S. bdy. of sec. 31.</p> <p>Over rugged land, on descent.</p> <p>Point for the stan. 1/4 sec. cor. of sec. 31.</p> <p>Set a brass tablet, 3 1/4 ins. diam., 3 ins. stem, in a drill hole, cemented in place, in sandstone bedrock, flush with surface, with top mkd.</p> <div style="text-align: center;"> <p>SC T33N R24E 1/4 S31 <hr style="width: 10%; margin: 0 auto;"/> 1990</p> </div> <p>Deposit a magnet, 1 in. long, 7/8 in. diam., beneath the brass tablet.</p>

Survey of the Eighth Standard Parallel North,
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CHAINS	
80.00	<p>Point for the stan. cor. of secs. 31 and 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> <div style="text-align: center;"> <p>SC T33N R24E S31 S32 ----- 1990</p> </div> <p>Deposit a magnet enclosed in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>Cor. is located in a flood plain, on S. edge of main wash, 15 lks. wide, 3 ft. deep, drains SE, and 90 lks. W. of same wash, drains SE.</p> <p>Land, rugged. Soil, rocky and sandy clay, with scattered sandstone outcrops. Timber, sparse piñon and juniper; undergrowth, sagebrush, rabbitbrush, cacti, scrub oak and native grasses.</p> <hr/> <p>East, on the S. bdy. of sec. 32.</p> <p>Over rolling land.</p>
40.00	<p>Point for the stan. 1/4 sec. cor. 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> <div style="text-align: center;"> <p>SC T33N R24E 1/4 S32 ----- 1990</p> </div> <p>Deposit a magnet enclosed 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. 32 and 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>

Survey of the Eighth Standard Parallel North,
 Along the South Boundary of
 T. 33 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS	
	SC T33N R24E S32 S33 <hr style="width: 50%; margin: auto;"/> 1990
	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post. Cor. is located on the E. edge of a trail road, bears NNE and SSW. Land, rolling. Soil, sandy clay. No timber; sagebrush, rabbitbrush, cacti, greasewood and native grasses.
	<hr/> East, on the S. bdy. of sec. 33. Over rolling land.
12.00	Graded road, 30 lks. wide, bears SE and NW.
37.90	Black Mountain Wash, 90 lks. wide, 12 ft. deep, drains NE.
40.00	Point for the stan. 1/4 sec. cor. of sec. 33. Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.
	SC T33N R24E 1/4 S33 <hr style="width: 50%; margin: auto;"/> 1990
80.00	Deposit a magnet enclosed in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post. Point for the stan. cor. of secs. 33 and 34. Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.

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CHAINS	
	<p style="text-align: center;">SC T33N R24E S33 S34 ----- 1990</p> <p>Deposit a magnet enclosed in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p> <p>Land, rolling. Soil, sandy clay. No timber; sagebrush, rabbitbrush, cacti, greasewood and native grasses.</p> <hr/> <p>East, on the S. bdy. of sec. 34. Over gently rolling land.</p>
40.00	<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 T33N R24E 1/4 S34 ----- 1990</p> <p>Deposit a magnet enclosed in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p>
44.20	<p>Wash, 45 lks. wide, 20 ft. deep, drains NNE.</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>
	<p style="text-align: center;">SC T33N R24E S34 S35 ----- 1990</p> <p>Deposit a magnet enclosed in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post.</p>

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CHAINS	
	<p>Land, gently rolling. Soil, sandy clay. No timber; sagebrush, rabbitbrush, cacti, greasewood and native grasses.</p> <hr/>
<p>40.00</p>	<p>East, on the S. bdy. of sec. 35. Over gently rolling land. Point for the stan. 1/4 sec. cor. of sec. 35. 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 T33N R24E 1/4 S35 <hr style="width: 10%; margin: auto;"/> 1990 </p>
<p>80.00</p>	<p>Deposit a magnet enclosed in a 1 x 1 x 2 5/8 ins. white plastic case beneath the stainless steel post. Point for the stan. cor. of secs. 35 and 36. 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 T33N R24E S35 S36 <hr style="width: 10%; margin: auto;"/> 1990 </p> <p>Deposit a magnet enclosed 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; rabbitbrush, cacti, greasewood and native grasses.</p> <hr/>
	<p>East, on the S. bdy. of sec. 36. Over gently rolling land.</p>

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CHAINS					
40.00	<p>Point for the stan. 1/4 sec. cor. of sec. 36.</p> <p>Set a brass tablet, 3 1/4 ins. diam., 3 ins. stem, in a drill hole, cemented in place, in sandstone bedrock, flush with surface, with top mkd.</p> <div style="text-align: center;"> <p>SC T33N R24E 1/4 S36</p> <hr style="width: 20%; margin: auto;"/> <p>1990</p> </div> <p>Deposit a magnet, 1 in. long, 7/8 in. diam., beneath the brass tablet.</p>				
57.20	Trail road, bears NNE and SSW.				
80.00	<p>Point for the stan. cor. of T. 33 N., Rs. 24 and 25 E.</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>SC T33N</p> <table border="1" style="margin: auto;"> <tr> <td style="padding: 2px;">R24E</td> <td style="padding: 2px;">R25E</td> </tr> <tr> <td style="padding: 2px;">S36</td> <td style="padding: 2px;">S31</td> </tr> </table> <hr style="width: 20%; margin: auto;"/> <p>1990</p> </div> <p>Deposit a magnet enclosed 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, with scattered sandstone outcrops. No timber; rabbitbrush, cacti, greasewood and native grasses.</p> <hr style="width: 80%; margin-left: 0;"/>	R24E	R25E	S36	S31
R24E	R25E				
S36	S31				

T. 33 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS

GENERAL DESCRIPTION

The land covered by this survey is located within the Navajo Indian Reservation, approximately 12 miles west of Chinle. The land is predominantly gently rolling with some rugged land in the western portion. The elevation ranges from 5,800 to 6,500 ft. above sea level.

Access is by several graded roads and trail roads. Drainage is northerly.

The soil is predominantly sandy clay, with some sandstone and clay outcrops.

There is virtually no timber in this township with vegetation consisting of cacti, rabbitbrush, greasewood, and native grasses.

The mean magnetic declination is $12\ 1/2^\circ$ E., with no noticeable differences due to local attraction.

The geodetic position of the following cor., which was used to establish the beginning point for this survey is given for informational purposes.

The cor. of secs. 6 and 7 only, T. 31 N., R. 13 E., on the Third Guide Meridian.

Latitude: $36^\circ 06' 30.75''$ N., Longitude: $110^\circ 59' 24.09''$ W., NAD27

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Robin T. Mathews	Cadastral Surveyor
Olian T. Shockley	Cadastral Surveyor
Jones Curtiss	Cadastral Survey Technician
Daniel Bryan	Engineering Technician
Nelson Kinsel	Engineering Technician
Reuben Mason	Engineering Technician
Andrew Murphy	Engineering Technician

CERTIFICATE OF SURVEY

I, Leonard R. Sandoval, Cadastral Surveyor, HEREBY CERTIFY upon honor that, in pursuance of special instructions bearing date of the 22nd day of November, 1989, I have surveyed the Eighth Standard Parallel North, along the south boundary of Township 33 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 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.

October 7, 1992

(Date)

Leonard R. Sandoval

(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT
Arizona State Office
Phoenix, Arizona

The foregoing field notes of the survey of the Eighth Standard Parallel North, along the south boundary of Township 33 North, Range 24 East, Gila and Salt River Meridian, Arizona, executed by Leonard R. Sandoval, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

OCT 14 1992

(Date)

James P. Kelly

(Chief Cadastral Surveyor of Arizona)

~~CERTIFICATE OF TRANSCRIPT~~

~~I Certify that the foregoing transcript of the field notes of the above described survey in T. 33 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)~~