

# ORIGINAL

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FIELD NOTES  
OF THE

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SURVEY

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OF

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THE TENTH STANDARD PARALLEL NORTH (SOUTH BOUNDARY)

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AND

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A PORTION OF THE WEST BOUNDARY,

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TOWNSHIP 41 NORTH, RANGE 24 EAST,

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

EXECUTED BY

Leonard R. Sandoval, Cadastral Surveyor

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Under Special Instructions dated and approved September 9, 1999, which provided for the surveys included under Group Number 844 and assignment instructions dated September 9, 1999.

Survey Commenced December 22, 2000

Survey Completed January 8, 2001

INDEX DIAGRAM

TOWNSHIP 41 NORTH, RANGE 24 EAST,

GILA AND SALT RIVER MERIDIAN, ARIZONA

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T. 41 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the survey of the Tenth Standard Parallel North (south boundary) and a portion of the west boundary, Township 41 North, Range 24 East, Gila and Salt River Meridian, Arizona.

The Tenth Standard Parallel North (south boundary), T. 41 N., R. 25 E., was surveyed by Jones Curtiss in 2000-02, concurrently under this same group.

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 September 9, 1999, for Group No. 844, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic and static global positioning system observations using Trimble Navigation 4400 model receivers.

Geodetic control was derived from first order U. S. Coast and Geodetic Survey triangulation station "COMB 1951", as published by the National Geodetic Survey, NAD83(1992). The geographic position of the southeast corner of the township is as follows:

Latitude: 36°54'31.52" N.                      Longitude: 109°42'58.57" W.

The mean magnetic declination is 12° E.

Survey of the Tenth Parallel North (South Boundary),  
T. 41 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p>Beginning at the stan. cor. of Tps. 41 N., Rs. 24 and 25 E., monumented with a stainless steel post, 2 1/2 ins. diam., with brass cap, set and mkd. as described in the field notes of the survey of the Tenth Standard Parallel North, (south boundary), T. 41 N., R. 25 E., executed concurrently under this same group.</p>
	<p>West, on the S. bdy. of sec. 36.</p>
	<p>Over rugged and broken 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., 20 ins. in sandstone bedrock, in a mound of stone, 3 ft. base, to top, with brass cap mkd.</p>
	<p style="text-align: center;">SC T41N R24E 1/4 S36 ----- 2001</p>
	<p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.</p>
52.40	<p>E. rim of Chinle Valley, atop sandstone cliff, bears ESE and WNW; thence descend abruptly into the valley.</p>
53.90	<p>Base of E. wall of Chinle Valley, bears SE and NW; thence across the valley over nearly level land.</p>
64.20	<p>E. bank of the flood plain of Chinle Creek, 50 ft. high, bears N. and S.; thence across the flood plain.</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>
	<p style="text-align: center;">SC T41N R24E S35   S36 ----- 2001</p>
	<p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.</p>

Survey of the Tenth Parallel North (South Boundary),  
T. 41 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p>Cor. is located 90 lks. E. of Chinle Creek, 30 ft. wide, 5 ft. deep, drains NE.</p>
	<p>Land, rugged and broken to nearly level. Soil, sandy clay with sandstone outcrop. Timber, cottonwood, Russian olive, and saltcedar along the Chinle Valley; undergrowth, brush and native grasses.</p>
	<p>West, on the S. bdy. of sec. 35.</p>
	<p>Over nearly level land, in the flood plain of Chinle Creek.</p>
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., 24 ins. in the ground, with brass cap mkd.</p>
	<p style="text-align: center;">SC T41N R24E 1/4 S35</p>
	<p style="text-align: center;">2001</p>
	<p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.</p>
50.70	<p>Base of W. wall of Chinle Valley, bears NNE and SSW; thence ascend out of the valley.</p>
53.20	<p>W. rim of Chinle Valley, atop sandstone cliff, bears NNE and SSW; thence over rolling and broken land.</p>
80.00	<p>Point for the stan. cor. of secs. 34 and 35.</p>
	<p>Set a brass tablet, 3 1/4 ins. diam., 2 1/2 ins. stem, cemented in place, in a drill hole, in sandstone bedrock, with top mkd.</p>
	<p style="text-align: center;">SC T41N R24E S34   S35</p>
	<p style="text-align: center;">2001</p>
	<p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case in the drill hole beneath the brass tablet.</p>

Survey of the Tenth Parallel North (South Boundary),  
T. 41 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p>Land, nearly level to rolling and broken. Soil, sandy clay with sandstone outcrop. Timber, cottonwood, Russian olive, and saltcedar in Chinle Valley; undergrowth, brush and native grasses.</p> <hr/> <p>West, on the S. bdy. of sec. 34.</p> <p>Over rolling land.</p>
26.10	High voltage transmission line, bears NE and SW.
40.00	Point for the stan. 1/4 sec. cor. of sec. 34.
	<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 T41N R24E 1/4 S34</p> <hr style="width: 10%; margin: auto;"/> <p style="text-align: center;">2001</p>
	<p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.</p>
80.00	Point for the stan. cor. of secs. 33 and 34.
	<p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in sandstone bedrock, in a mound of stone, 2 ft. base, to top, with brass cap mkd.</p> <p style="text-align: center;">SC T41N R24E S33   S34</p> <hr style="width: 10%; margin: auto;"/> <p style="text-align: center;">2001</p>
	<p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.</p>
	<p>Land, rolling. Soil, sandy clay with exposed sandstone outcrops. No timber; scattered brush and native grasses.</p> <hr/> <p>West, on the S. bdy. of sec. 33.</p> <p>Over rolling land.</p>

Survey of the Tenth Parallel North (South Boundary),  
T. 41 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS	
38.90	Power line, bears NE and SW.
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 T41N R24E 1/4 S33 <hr style="width: 10%; margin: auto;"/> 2001
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.
57.44	E. right-of-way fence of U. S. Highway 160, barbed wire, 5 strands, parallels highway.
59.50	U. S. Highway 160, asphalt pavement, 35 ft. wide, bears NE and SW.
61.50	Underground gas pipeline, bears NE and SW.
63.26	W. right-of-way fence of U. S. Highway 160, barbed wire, 5 strands, parallels highway; thence ascend over rocky E. slope of mesa.
66.00	E. rim of mesa, bears NE and SW; thence over rolling land.
80.00	Point for the stan. cor. of secs. 32 and 33.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in sandstone bedrock, with brass cap mkd.
	SC T41N R24E S32   S33 <hr style="width: 10%; margin: auto;"/> 2001
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.
	Land, rolling and broken. Soil, sandy and rocky clay with exposed sandstone outcrops. No timber; scattered brush and native grasses.

Survey of the Tenth Parallel North (South Boundary),  
T. 41 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p>West, 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> <p style="text-align: center;">SC T41N R24E 1/4 S32 ----- 2001</p> <p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.</p>
62.80	<p>Graded road, 15 ft. wide, bears N. and S.</p>
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> <p style="text-align: center;">SC T41N R24E S31   S32 ----- 2001</p> <p>Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.</p> <p>Land, rolling. Soil, sandy and rocky clay. No timber; scattered brush and native grasses.</p>
40.00	<p>West, on the S. bdy. of sec. 31.</p> <p>Over rolling and broken land.</p> <p>Point for the stan. 1/4 sec. cor. 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>

Survey of the Tenth Parallel North (South Boundary),  
T. 41 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS	
80.00	<p style="text-align: center;">SC T41N R24E 1/4 S31 ----- 2001</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Cor. is located 80 lks. E. of a wash, 8 ft. wide, 4 ft. deep, drains SSE.</p> <p>Point for the stan. cor. of T. 41 N., R. 24 E. only.</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 T41N R24E S31 ----- 2001</p> <p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p> <p>Land, rolling and broken. Soil, sandy clay and rocky clay. No timber; scattered brush and native grasses.</p>
<p>Survey of a Portion of the West Boundary, T. 41 N., R. 24 E., Gila and Salt River Meridian, Arizona</p>	
23.80	<p>From the stan. cor. of T. 41 N., R. 24 E. only, hereinbefore described.</p> <p>North, on the W. bdy. of sec. 31.</p> <p>Over rolling land.</p> <p>S. rim of a red sandstone bluff, 60 ft. high, bears ENE and WSW; thence ascend over rocky S. slope of a ridge.</p>
40.00	<p>Point for the 1/4 sec. cor. of sec. 31 only.</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 a Portion of the West Boundary,  
T. 41 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS	
	<p style="text-align: center;">T41N   R24E   1/4   S31 2001</p>
	<p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p>
44.80	<p>Top of rocky ridge, bears NE and SW; thence over rolling and broken land.</p>
73.55	<p>Trail road, bears E. and W.</p>
80.00	<p>Point for the cor. of secs. 30 and 31 only.</p>
	<p>Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in sandstone bedrock, with brass cap mkd.</p>
	<p style="text-align: center;">T41N   S30 -----   S31   R24E 2001</p>
	<p>Deposit a magnet in a 1 x 1 x 2 ins. white colored plastic case beneath the stainless steel post.</p>
	<p>From this cor. point, first order U. S. Coast and Geodetic Survey triangulation station "COMB 1951", bears N. 24°47' E., 63.28 chs. dist., monumented with a standard brass tablet, 3 1/2 ins. diam., set flush on a limestone outcrop, cemented in place, with top partial defaced and faintly mkd. COMB 1951 and a triangle.</p>
	<p>Land, rolling, rugged and broken. Soil, sandy and gravelly clay with exposed sandstone outcrops. Timber, scattered juniper; undergrowth, brush and native grasses.</p>

T. 41 N., R. 24 E., Gila and Salt River Meridian, Arizona

CHAINS	<p data-bbox="764 268 1068 296" style="text-align: center;">GENERAL DESCRIPTION</p> <hr/> <p data-bbox="397 365 1442 520">The area surveyed is located between the community of Mexican Water and Dennehotso, Arizona, on the Navajo Indian Reservation. The terrain is mostly rolling rocky hills with Chinle Valley on the eastern portion of the standard line. The drainage is to the northeast, with Chinle Creek being the principal drainage.</p> <p data-bbox="397 554 1442 741">The elevation varies from 4800 to 5700 feet above sea level. The soil is mostly sandy clay and sandstone outcrops and ledges. The timber is scattered piñon and juniper mostly on the west and northwest portion of the township. Undergrowth principally consists of sagebrush, scattered rabbitbrush, greasewood, and native grasses.</p> <p data-bbox="397 777 1404 932">Principal access to the township is provided by U. S. Highway 160, which crosses the standard line in section 33. A graded road branches off this highway crossing the line in section 32. Much of the area is used for grazing livestock. There is no mining activity in the township.</p> <p data-bbox="397 968 1409 1060">The mean magnetic declination is 12° E, as derived from the computer program GEOMAGIX utilizing the Regional Magnetic Field Model for Epoch 2000 for the dates of survey.</p> <hr/>
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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## FIELD ASSISTANTS

NAMES	CAPACITY
Daniel Bryan	Engineering Technician
Wilfred Chee	Engineering Technician
Edward Clarke	Engineering Technician
Reuben Mason	Engineering Technician
Barney Woodie	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 9th day of September, 1999, I have surveyed the Tenth Standard Parallel North (south boundary) and a portion of the west boundary, Township 41 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, 1973, and in specific manner described in the foregoing field notes.

5/12/03  
(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 Tenth Standard Parallel North (south boundary) and a portion of the west boundary, Township 41 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.

8/19/03  
(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. 41 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)~~