BOOK 5641

ORIGINAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE

DEPENDENT RESURVEY

OF

THE

TENTH STANDARD

PARALLEL NORTH,

(SOUTH BOUNDARY),

TOWNSHIP 41 NORTH, RANGE 27 EAST,

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

EXECUTED BY

Leonard R. Sandoval, Cadastral Surveyor

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 January 18, 2000
Survey Completed March 15, 2000

INDEX DIAGRAM

TOWNSHIP 41 NORTH, RANGE 27 EAST,

GILA AND SALT RIVER MERIDIAN, ARIZONA

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T. 41 N., R. 27 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of the Tenth Standard Parallel North, (south boundary), Township 41 North, Range 27 East, Gila and Salt River Meridian, Arizona.

The Tenth Standard Parallel North, (south boundary), was originally surveyed by Horace G. Parker in 1953.

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 4400 and 4700 model 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. 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 first order or better U. S. Coast and Geodetic Survey triangulation stations "BEAUTIFUL 1951" and "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°54'31.56" N. Longitude: 109°23'28.61" W.

The mean magnetic declination is 12° E.

Dependent Resurvey of the Tenth Standard Parallel North, (South Boundary),
T. 41 N., R. 27 E., Gila and Salt River Meridian, Arizona

CHAINS	
	Restoring the survey executed by Horace G. Parker, in 1953
	Beginning at the stan. cor. of Tps. 41 N., Rs. 27 and 28 E., determined at record distances from the original bearing trees:
	A forked piñon, 9 ins. diam. at base, bears N. 69° E., 1.05 chs. dist., with scribe marks T41N R28E S31 SC BT visible on partially healed blaze. (Record: N. 69°05′ E.)
	Base of blaze on east fork of a forked piñon, 12 ins. diam. at base, bears N. 35 1/2° W., 25 lks. dist., with scribe marks 41N R27E S36 SC BT visible on partially healed blaze. (Record: N. 35°37′ W.) Root crown of same tree bears N. 38° W., 27 1/2 lks. dist.
	At the cor. point
	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 T41N R27E | R28E S36 | S31 2000
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.
	Cor. is located atop Toh Atin Mesa, 2.70 chs. S. of the N. rim, bears ENE and WSW.
	N. 89°59′ W., on the S. bdy. of sec. 36.
	Over gently rolling land atop Toh Atin Mesa.
39.99	The stan. 1/4 sec. cor. of sec. 36, determined at record distances from the original bearing trees:
	A juniper, 6 ins. diam., bears N. 82 1/4° E., 31 lks. dist., with scribe marks 4 S36 SC BT visible on partially healed blaze. (Record: N. 83°00′ E.)

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CHAINS	
	South trunk of a multiple trunked juniper, 7 ins. diam., bears N. 8 1/2° W., 1.15 chs. dist., with illegible marks visible on partially healed blaze. (Record: N. 6°54′ W.)
	At the cor. point
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.
	SC T41N R27E 1/4 S36 2000
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.
	Set a steel fence post nearby.
	West, beginning new measurement.
	Over gently rolling land atop Toh Atin Mesa.
40.00	The stan. cor. of secs. 35 and 36, determined at record distances from the original bearing trees:
	A stunted piñon, 8 ins. diam. at base, bears N. 81 1/4° E., 1.03 chs. dist., with scribe marks 41N R27E SC BT visible on partially healed blaze. (Record: N. 72°03′ E.)
	A stunted piñon, 6 ins. diam. at base, bears N. 7 1/2° W., 1.56 chs. dist., with scribe marks 41N R27 visible on partially healed blaze. (Record: N. 16°24′ W.)
	At the cor. point
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in sandstone bedrock, with brass cap mkd.
	SC T41N R27E S35 | S36 2000
	Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.

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CHAINS	
	S. 89°58′ W., on the S. bdy. of sec. 35.
	Over gently rolling land atop Toh Atin Mesa.
3.10	S. rim of Toh Atin Mesa, bears SE and NW; thence over rugged land on descent of S. slope of Toh Atin Mesa.
39.98	The stan. 1/4 sec. cor. of sec. 35, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 6 ins. above ground, with a scattered mound of stone to the N., with brass cap mkd. SC 1/4 S35 ——— 1953 from which the original bearing trees A gnarled forked juniper, 14 ins. at base, bears N. 2 3/4° E., 28 lks. dist., with scribe marks 1/4 S35 SC BT visible on open blaze. (Record: N. 2°42′ E., 27 lks.) A juniper, 7 ins. diam., bears N. 36 3/4° W., 40 lks. dist., with scribe marks 1/4 S35 SC BT visible on partially healed blaze. (Record: N. 36°03′ W.) Remark the brass cap to read SC T41N R27E 1/4 S35 ——— 2000 1953 Rebuild the mound of stone, 2 1/2 ft. base, 2 ft. high, N. of cor.
	—————————— N. 89°53′ W., beginning new measurement. Over rugged S. slope of Toh Atin Mesa.
40.02	The stan. cor. of secs. 34 and 35, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 10 ins. above ground, with a mound of stone, 3 ft. base, 2 ft. high, to the N., with brass cap mkd.

Dependent Resurvey of the Tenth Standard Parallel North, (South Boundary),
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CHAINS	
	SC T41N R27E S34 | S35 1953 Add the marks 2000 to the brass cap.
	S. 89°53′ W., on the S. bdy. of sec. 34. Over rugged S. slope of Toh Atin Mesa.
40.00	The stan. 1/4 sec. cor. of sec. 34, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 6 ins. above ground, with a mound of stone, 3 ft. base, 3 ft. high, to the N., with brass cap mkd. SC 1/4 S34 1953 Remark the brass cap to read SC T41N R27E 1/4 S34 2000 1953
	S. 89°59′ W., beginning new measurement. Over rugged S. slope of Toh Atin Mesa.
40.02	The stan. cor. of secs. 33 and 34, determined at 6 ins. S. of S. edge of the original accessory mound of stone of record, 3 ft. base, 1 1/2 ft. high; there is no remaining evidence of the original iron post. This is accepted as the best available evidence of the original cor. position. At the cor. point Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, encircled with a collar of stone, with brass cap mkd.

Dependent Resurvey of the Tenth Standard Parallel North, (South Boundary),
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CHAINS	
	SC T41N R27E S33 | S34 2000 Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.
	West, on the S. bdy. of sec. 33. Over rugged S. slope of Toh Atin Mesa.
13.00	Base of S. slope of Toh Atin Mesa, bears ESE and WNW; thence over rolling, sparsely vegetated sand dunes.
40.02	The stan. 1/4 sec. cor. of sec. 33, determined 6 ins. S. of S. edge of the partially embedded original accessory mound of stone of record, 3 ft. base, 1 ft. high; there is no remaining evidence of the original iron post. This is accepted as the best available evidence of the original cor. position. At the cor. point Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd. SC T41N R27E 1/4 S33 2000 Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.
	West, beginning new measurement. Over rolling land.
39.99	The stan. cor. of secs. 32 and 33, monumented with an iron post, 2 1/2 ins. diam., set 3 ft. below the surface of the ground, with brass cap mkd. SC T41N R27E S32 | S33 1953

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CHAINS	
	At the cor. point Reset the original iron post, 30 ins. long, 24 ins. in the ground, atop a steel fence post, 6 ft. long, and deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the iron post alongside the steel fence post. Add the marks 2000 to the brass cap.
	S. 89°59′ W., on the S. bdy. of sec. 32. Over gently rolling land.
40.02	Point for the stan. 1/4 sec. cor. of sec. 32, 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. SC T41N R27E 1/4 S32 2000 Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.
80.04	Point for the stan. cor. of secs. 31 and 32, at proportionate dist.; with the original iron post, 2 1/2 ins. diam., 30 ins. long, lying loose nearby, with brass cap mkd. SC T41N R27E S31 S32 1953. Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd. SC T41N R27E S31 | S32 2000 Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post. Destroy the original iron post.
	S. 89°59′ W., on the S. bdy. of sec. 31.

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CHAINS	
	Over gently rolling land.
9.20	Navajo Route 5045, a graded road, 25 ft. wide, bears SE and NW.
40.02	Point for the stan. 1/4 sec. cor. of sec. 31, 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. SC T41N R27E 1/4 S31 2000 Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post.
80.04	The stan. Tp. cor. of Tps. 41 N., Rs. 26 and 27 E., established by Charles W. Dryden (deceased), R.L.S. No. 4321, Az., monumented with a brass disk, 2 ins. diam., set in a roughly pentagonal shaped concrete collar, 14 ins. diam., set flush with the surface of the ground, with top mkd. SC T41N T40N R26E R27E S31 S36 1964 RLS 4321; noted by Ernest V. Echohawk in April 1964 as an apparent re-set of the "USBLM STANDARD BRASS CAP" on a plat entitled "SURVEY OF TRACTS NOS. 199, 200, 204 AND 205 TOWNSHIP 38 NORTH RANGE 27 EAST". This is accepted as the best available evidence of the original cor. position. At the cor. point Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd. SC T41N R26E | R27E S36 | S31 2000 Deposit a magnet in a 1 x 1 x 2 5/8 ins. white colored plastic case beneath the stainless steel post, and bury the brass disk with concrete collar alongside the stainless steel post. Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of the cor.

Dependent Resurvey of the Tenth Standard Parallel North, (South Boundary), T. 41 N., R. 27 E., Gila and Salt River Meridian, Arizona

CHAINS

From this cor. point, the 1/4 sec. cor. of secs. 19 and 24, Tps. 41 N., Rs. 26 and 27 E., bears North, 199.96 chs. dist., monumented with an iron post, 2 1/2 ins. diam., firmly set in a mound of stone, 4 ft. base, 2 ft. high, with brass cap mkd. 1/4 S19 S24 1953.

From this same cor. point, third order National Geodetic Survey triangulation station "DINNE 1949", bears N. 79°30′ E., 249.27 chs. dist., monumented with a standard U. S. Geological Survey Benchmark brass tablet, 3 3/4 ins. diam., cemented flush with bedrock, with top mkd. DINNE 1949. (Record: 249.186 chs.)

From this same cor. point, an iron pipe, 2 1/2 ins. diam., firmly set, projecting 17 ins. above ground, in a collar of stone, established by Ernest V. Echohawk, R.L.S. No. 2311, Az., in 1958, bears N. 89°53′ W., 1.535 chs. dist., mkd. T41N R26E R27E 1 6 T4ON on the side. This tie is contrary to the ties reported by Echohawk in 1958 of East, 101 ft. and in 1964 of East, 75.9 ft.

GENERAL DESCRIPTION

The area surveyed is within the Navajo Indian Reservation, approximately 4 miles north of the community of Sweetwater. The terrain varies from rugged to gently rolling. Toh Atin Mesa, a nearly inaccessible mesa, occupies the east three miles. The drainage is southwest.

The elevation varies from 5270 to 6540 feet above sea level. The soil varies from sandy and rocky clay with rock outcrops on the mesa to sand and sandy clay below. The timber is scattered piñon and juniper on the mesa with scattered brush and native grasses throughout. The main access is provided by Navajo Route 5045, a graded road, which crosses the south boundary of section 31. There are a few trail roads below Toh Atin Mesa.

Most of the area is utilized for grazing livestock. There is no current mining activity in the area.

The mean magnetic declination is 12°, as derived from the computer program GEOMAGIX utilizing the Regional Magnetic Field Model for Epoch 2000 for the dates of survey.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Jones Curtiss	Cadastral Surveyor
William F. Olver	Cadastral Surveyor
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 dependently resurveyed the Tenth Standard Parallel North, (south boundary), Township 41 North, Range 27 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.

August 1, 2002 (Date)

Leonard R. Sandoval (Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT
Arizona State Office
Phoenix, Arizona

The foregoing field notes of the dependent resurvey of the Tenth Standard Parallel North, (south boundary), Township 41 North, Range 27 East, Gila and Salt River Meridian, Arizona, executed by Leonard R. Sandoval, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

August 26, 2002 (Date)

Kenny D Ravnikar (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. 27 E., ~~Gila~~ and Salt River Meridian, Arizona, is a true copy of the original field notes.

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