

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE

DEPENDENT RESURVEY AND SURVEY OF A

PORTION OF THE SUBDIVISIONAL LINES

WHICH IS A PORTION OF THE EAST BOUNDARY

OF SAGUARO NATIONAL MONUMENT

TOWNSHIP 15 SOUTH, RANGE 18 EAST

Of the GILA AND SALT RIVER Meridian,

In the State of ARIZONA

EXECUTED BY

LEONARD W. MURPHY

SUPERVISORY CADASTRAL SURVEYOR

KENNETH A. KRENKE

SUPERVISORY CADASTRAL SURVEYOR

Under special instructions dated JANUARY 18, 19 72, approved JANUARY 24, 1972,

and AMENDED SPECIAL INSTRUCTIONS DATED DECEMBER 3, 1976, APPROVED JANUARY 10,

1977, which provided for the surveys included under ~~U.S. Survey~~ Group

Number 533, and assignment instructions dated JANUARY 18, 19 72.

and DECEMBER 3, 1976,

Survey commenced JANUARY 25, 19 72

Survey completed FEBRUARY 8, 19 77

1A

BOOK 5032

INDEX DIAGRAM

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T. 15 S., R. 18 E., Gila and Salt River Meridian, Arizona

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The following field notes are those of the dependent resurvey and survey of a portion of the subdivisional lines, which is a portion of the east boundary of Saguaro National Monument, Township 15 South, Range 18 East of the Gila and Salt River Meridian, Arizona.

The east 3 miles of the north boundary and a portion of the subdivisional lines were surveyed by L. D. Chillson, in 1881.

This survey was executed in accordance with the specifications as set forth in the Manual of Surveying Instructions, 1947 and 1973, the Special Instructions dated January 18, 1972, and the Amended Special Instructions dated December 3, 1976, for Group No. 533, 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 record bearings and distances based on the official record. The retracement data were thoroughly verified and only the true line field notes are given herein.

The directions of the lines were determined by solar and polaris observations. They refer to the true meridian.

The geographic position of the corner of sections 21, 22, 27 and 28, determined from a tie made to U.S. Coast and Geodetic Survey triangulation station "TURKEY", located in section 34, T. 14 S., R. 18 E., is as follows:

Latitude $32^{\circ} 06' 23.5''$ N. Longitude $110^{\circ} 29' 41.0''$ W.

The mean magnetic declination is $13\frac{1}{2}^{\circ}$ E.

Dependent Resurvey, Portion of the Subdivisional Lines
T. 15 S., R. 18 E., Gila and Salt River Meridian, Arizona

Restoring the Survey Executed by L. D. Chillson, in 1881

Beginning at the cor. of secs. 3, 4, 33 and 34, on the N. bdy. of the Tp., described in the field note record of the dependent resurvey of a portion of the S. bdy. of T. 14 S., R. 18 E., executed concurrently under this group.

South, bet. secs. 3 and 4, along the E. bdy. of Saguaro National Monument.

Ascend over NE slope, through scattered timber and dense undergrowth.

- 13.00 Spur, slopes SE; des. over SE slope.
- 28.50 Ravine, drains SE; asc. over steep broken NE slope.
- 40.00 Point for the $\frac{1}{4}$ sec. cor. of secs. 3 and 4, at record bearing and distance; there is no remaining evidence of the original cor.

Dependent Resurvey, Portion of the Subdivisional Lines
T. 15 S., R. 18 E., Gila and Salt River Meridian, Arizona

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	<p>Set an iron post, 28 ins. long, 2½ ins. diam., 16 ins. in the ground, supported with a mound of stone, 3 ft. base, to top, with brass cap mkd.</p>
	<p style="text-align: center;">T15S R18E ¼ S 4 S 3 1977</p>
	<p>From the cor. of secs. 2, 3, 10 and 11, determined at a cor. of fences extending S. and E. This point is accepted as the best available evidence of the original cor. position.</p>
	<p>Set an iron post, 28 ins. long, 2½ ins. diam., 22 ins. in the ground, with brass cap mkd.</p>
	<p style="text-align: center;">T15S R18E S 3 S 2 S 10 S 11 1977</p>
	<p>from which</p>
	<p style="padding-left: 40px;">A twin oak, 20 ins. diam., bears N. 23½° E., 54 lks. dist., mkd. T15S R18E S2 BT.</p>
	<p style="padding-left: 40px;">An oak, 16 ins. diam., bears S. 84½° E., 96½ lks. dist., mkd. T15S R18E S11 BT.</p>
	<p>Raise a mound of stone, 2 ft. base, 2 ft. high, W. of the cor.</p>
	<p>West, bet. secs. 3 and 10.</p>
	<p>Over gently rolling pasture land.</p>
7.00	<p>Ravine, drains NNE, leave pasture land, bears N. and S.; asc. over NE slope, through scattered timber and dense undergrowth.</p>
37.50	<p>Spur, slopes SE; desc. over steep SW slope.</p>
40.00	<p>Point for the ¼ sec. cor. of secs. 3 and 10, at record bearing and distance; there is no remaining evidence of the original cor.</p>
	<p>Set an iron post, 28 ins. long, 2½ ins. diam., 24 ins. in the ground, with brass cap mkd.</p>
	<p style="text-align: center;">T15S R18E ¼ S 3 S 10 1977</p>
	<p>Raise a mound of stone, 2½ ft. base, 1½ ft. high, N. of the cor.</p>
62.00	<p>Bottom of descent, slopes SE; asc. over SE slope.</p>
76.00	<p>Point for the witness cor. of secs. 3, 4, 9 and 10, at record bearing and distance; there is no remaining evidence of the original cor. This point is not monumented.</p>

Dependent Resurvey, Portion of the Subdivisional Lines
T. 15 S., R. 18 E., Gila and Salt River Meridian, Arizona

CHAINS	
80.00	<p>Point for the cor. of secs. 3, 4, 9 and 10, at record bearing and distnace.</p> <p>Set an iron post, 28 ins. long, 2½ ins. diam., 22 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T15S R18E S 4 S 3 S 9 S 10 1977</p> <p>from which</p> <p style="padding-left: 40px;">The west fork of a twin oak, 10 ins. diam., bears S. 51½° E., 17½ lks. dist., mkd. T15S R18E S10 BT.</p> <p>Set a steel fence post alongside the iron post.</p> <p>Cor. is located 6 lks. W. of a boulder, 5 x 3½ x 5 ft. showing above ground.</p>
<p>Portion of the Subdivisional Lines T. 15 S., R. 18 E., Gila and Salt River Meridian, Arizona</p>	
14.25	<p>From the ¼ sec. cor. of secs. 3 and 4.</p> <p>S. 2° 14' E., bet. secs. 3 and 4, along the E. bdy. of Saguaro National Monument.</p> <p>Ascend over NE slope, through scattered timber and dense undergrowth.</p> <p>Spur, slopes E.; desc. over SE slope.</p>
38.60	<p>Ravine, drains NE; asc. over NE slope.</p>
40.63	<p>The cor. of secs. 3, 4, 9 and 10.</p> <p>Land, mountainous. Soil, rocky clay. Timber, juniper and pinon; undergrowth, manzanita cacti, and native grasses.</p>
<p>S. 0° 02' E., bet. secs. 9 and 10, along the E. bdy. of Saguaro National Monument.</p> <p>Ascend over NE slope, through scattered timber and dense undergrowth.</p>	
21.00	<p>Spur, slopes SE; desc. SE slope.</p>
26.00	<p>Ravine, drains E.; asc. over NE slope.</p>
31.00	<p>Spur, slopes E.; desc. over SE slope.</p>
40.00	<p>True point for the ¼ sec. cor. of secs. 9 and 10, falls in a creek, 7 lks. wide, course E., where it is impracticable to establish a permanent monument.</p> <p>Ascend over NE slope.</p>

Portion of the Subdivisional Lines
T. 15 S., R. 18 E., Gila and Salt River Meridian, Arizona

CHAINS	
40.38	<p>Point selected for the witness $\frac{1}{4}$ sec. cor. to secs. 9 and 10.</p> <p>Set an iron post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.</p> <p style="text-align: center;">T15S R18E W C $\frac{1}{4}$ S 9\uparrowS 10 1977</p> <p>from which</p> <p style="padding-left: 40px;">A pinon, 6 ins. diam., bears N. $83\frac{3}{4}^{\circ}$ E., $56\frac{1}{2}$ lks. dist., mkd. $\frac{1}{4}$ S10 WC BT.</p> <p style="padding-left: 40px;">The west fork of a twin oak, 6 ins. diam., bears N. $13\frac{3}{4}^{\circ}$ W., $94\frac{1}{2}$ lks. dist., mkd. $\frac{1}{4}$ S9 WC BT.</p> <p>Ascend over NE slope.</p>
66.50	<p>Point for the witness point on line bet. secs. 9 and 10.</p> <p>Set an iron post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 4 ins. in the ground, over a cross (+) chiseled on bedrock, supported with a mound of stone, 4 ft. base, to top, with brass cap mkd.</p> <p style="text-align: center;">T15S R18E W P S 9 S 10 1977</p> <p>Cor. is located on top of a ridge, bears E. and W.</p> <p>Descend over SE slope.</p>
80.00	<p>Point for the cor. of secs. 9, 10, 15 and 16.</p> <p>Set an iron post, 28 ins. long, $2\frac{1}{2}$ ins. diam., over a cross (+) chiseled on the E. edge of a large boulder, supported with a mound of stone, $5\frac{1}{2}$ ft. base, 4 ft. high, with brass cap mkd.</p> <p style="text-align: center;">T15S R18E S 9 S 10 S 16 S 15 1977</p> <p>Land, mountainous. Soil, rocky clay. Timber, juniper, pinon and oak; undergrowth, scrub oak, cacti, and manzanita.</p>
	<p>S. $0^{\circ} 02'$ E., bet. secs. 15 and 16, along the E. bdy. of Saguaro National Monument.</p>
	<p>Descend over SE slope, through scattered timber and dense undergrowth.</p>
3.00	<p>Ravine, drains ESE; asc. over NE slope.</p>
20.00	<p>Spur, slopes E.; desc. over SE slope.</p>

Portion of the Subdivisional Lines
T. 15 S., R. 18 E., Gila and Salt River Meridian, Arizona

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29.50	Ravine, drains SSE; asc. over NE slope.
38.50	Small ravine, drains E.; continue asc. over NE slope.
40.00	True point for the $\frac{1}{4}$ sec. cor. of secs. 15 and 16, falls on a vertical rocky cliff, facing E., where it is impracticable to establish a permanent monument.
40.36	<p>Point selected for the witness $\frac{1}{4}$ sec. cor. to secs. 15 and 16.</p> <p>Set an iron post, 28 ins. long, $2\frac{1}{2}$ ins. diam., 4 ins. in the ground, over a cross (+) chiseled on bedrock, supported with a mound of stone, $3\frac{1}{2}$ ft. base, to top, with brass cap mkd.</p> <div style="text-align: center;"> <p>T15S R18E W C $\frac{1}{4}$ S 16 S 15 1977</p> </div> <p>Ascend over NE slope.</p>
58.00	Spur, slopes E.; desc. over steep SE slope.
65.00	Draw, drains ENE; asc. over NE slope.
69.00	Spur, slopes E.; desc. over steep SE slope.
74.00	Paige Creek, 15 lks. wide, course E.; asc. over steep N. slope.
80.00	<p>True point for the cor. of secs. 15, 16, 21 and 22, falls on a vertical cliff, facing N., where it is impracticable to establish a permanent monument.</p> <p>Land, mountainous. Soil, rocky clay. Timber, juniper, pinon and oak; undergrowth, scrub oak, manzanita and cacti.</p>
1.44	<p>S. $0^{\circ} 02'$ E., bet. secs. 21 and 22, along the E. bdy. of Saguaro National Monument.</p> <p>Ascend over steep N. slope, through dense scattered timber and dense undergrowth.</p> <p>Point selected for the witness cor. to secs. 15, 16, 21 and 22.</p> <p>Set an iron post, 28 ins. long, $2\frac{1}{2}$ ins. diam., over a cross (+) chiseled on bedrock, supported with a mound of stone, 4 ft. base, to top, with brass cap mkd.</p> <div style="text-align: center;"> <p>T15S R18E W C S 16 S 15 S 21 S 22 1977</p> </div> <p>Set a steel fence post in the mound of stone, alongside the iron post.</p>
3.00	Ridge, bears NE and SE; desc. over steep SE slope.

Portion of the Subdivisional Lines
T. 15 S., R. 18 E., Gila and Salt River Meridian, Arizona

CHAINS	
12.00	Ravine, drains E.; asc. steep NE slope.
23.33	<p>Point for the witness point on line bet. secs. 21 and 22.</p> <p>Set an iron post, 28 ins. long, 2½ ins. diam., 18 ins. in the ground, supported with a mound of stone, 2 ft. base, to top, with brass cap mkd.</p> <p style="text-align: center;">T15S R18E W P S 21 S 22 1977</p>
25.00	Spur, slopes E.; desc. over steep SE slope.
40.00	<p>Point for the ¼ sec. cor. of secs. 21 and 22.</p> <p>Set an iron post, 28 ins. long, 2½ ins. diam., 10 ins. in the ground, supported with a mound of stone, 3 ft. base, to top, with brass cap mkd.</p> <p style="text-align: center;">T15S R18E ¼ S 21 S 22 1977</p> <p>Set a steel fence post alongside the iron post.</p>
44.00	Ravine, drains SE; asc. over broken NE slope.
70.00	Spur, slopes E.; desc. over steep SE slope.
77.00	Ravine, drains ENE; asc. steep N. slope.
80.00	<p>True point for the cor. of secs. 21, 22, 27 and 28, common with the SE cor. of Saguaro National Monument, falls on a vertical cliff, facing N., where it is impracticable to establish a permanent monument.</p> <p>At a point, S. 0° 02' E., 1.78 chs. dist., point selected for the witness cor. to secs. 21, 22, 27 and 28, common with the SE cor. of Saguaro National Monument.</p> <p>Set an iron post, 28 ins. long, 2½ ins. diam., 18 ins. in the ground, supported with a mound of stone, 2 ft. base, to top, with brass cap mkd.</p> <p style="text-align: center;">T15S R18E W C ↑ S 21 S 22 S 28 S 27 1977</p> <p>Cor. is located on top of a cliff, edge bears E. and W.</p> <p>Land, mountainous. Soil, rocky clay. Timber, juniper, pinon, oak; undergrowth, scrub oak, cacti and manzanita.</p>
<u>GENERAL DESCRIPTION</u>	
<p>The lands included in the notes of the foregoing survey are located about 35 miles east of Tucson, Arizona, and on the east slopes of the Rincon Mountains. The area is</p>	

T. 15 S., R. 18 E., Gila and Salt River Meridian, Arizona

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drained by Miller Canyon, Paige Creek, and a number of their tributaries. Elevations range from about 4200 feet above sea level near the corner of sections 2, 3, 10 and 11 to about 6000 feet above sea level near the witness point on line between sections 21 and 22.

Access into the area is limited to a gravel road, which branches from Interstate Highway 10 and then by foot trails.

Soil in the area is composed of rocky clay, varying from a few inches to several feet in depth. There are a number of cliffs and outcroppings throughout the area.

Timber consists of juniper, pinon and oak, with undergrowth of manzanita, scrub oak, cacti, and native grasses.

No mineral deposits were noted during the course of the survey.

The average of a number of readings throughout the area gives a value of $13\frac{1}{2}^{\circ}$ E., for the mean magnetic declination. There is a range of 1° in local attraction.

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CERTIFICATE OF SURVEY

(X)(We), Leonard W. Murphy and Kenneth A. Krenke , HEREBY CERTIFY upon honor that, in pursuance of special instructions bearing date of the 18th day of January , 1972 , ~~of the~~ amended special instructions dated December 3, 1976, We have dependently resurveyed and surveyed a portion of the subdivisional lines, which is a portion of the east boundary of Saguaro National Monument, Township 15 South, Range 18 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)~~, (us) and under ~~(my)~~ (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.

May 3, 1977
(Date)

Leonard W. Murphy
(Cadastral Surveyor)
Leonard W. Murphy

May 3, 1977
(Date)

Kenneth A. Krenke
(Cadastral Surveyor)
Kenneth A. Krenke

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT
Washington, D.C.

The foregoing field notes of the dependent resurvey and survey of a portion of the subdivisional lines, which is a portion of the east boundary of Saguaro National Monument, Township 15 South, Range 18 East, of the Gila and Salt River Meridian, Arizona, executed by Leonard W. Murphy and Kenneth A. Krenke, Supervisory Cadastral Surveyors having been critically examined and found correct, are hereby approved.

JUN 21 1977
(Date)

Donald W. Foley
(Chief, Division of Cadastral Survey)

CERTIFICATE OF TRANSCRIPT

I CERTIFY That the foregoing transcript of the field notes of the above-described surveys in , is a true copy of the original field notes.

(Date)

(Chief, Division of Cadastral Survey) ~~690 240 222~~