

4-679  
(April 1933)

BOOK 4167

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Book A.

# FIELD NOTES

of the

survey of a portion of the East and West center lines

of

Sections 28 and 29,

Township 5 South, Range 4 East,

Of the Gila and Salt River Meridian,

In the State of Arizona

### EXECUTED BY

Roger F. Wilson, Surveyor

General Land Office

Under special instructions dated May 9, 1936, which provided for the surveys included under Group No. 216, bearing the approval of the Commissioner of the General Land Office under date of May 25, 1936 and assignment instructions dated May 9, 1936.

Survey commenced May 28, 1936

Survey completed May 29, 1936

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# INDEX DIAGRAM.

Township 5 South, Range 4 East

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30TR42	TR53 29	28	TR4027	26	25
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## Subdivision of sections in T. 5 S., R. 4 E.

chains

The  $\frac{1}{4}$  sec. cor. of secs. 27 and 28, is an iron post, 1 in. diam., firmly set, marked and witnessed as described in the official record.

Alongside of this post,

Set an iron post, 3 ft. long, 1 in. diam., 29 ins. in the ground, for  $\frac{1}{4}$  sec. cor. and cor. of the Maricopa Indian Reservation, with brass cap mkd.

$$\begin{array}{c} \text{MIR} \\ \text{CC} \\ \text{C} \text{---} \text{C TR 40} \\ \text{S 28} \end{array}$$

1936

Thence

N.89°33'W., on E. and W. center line of sec. 28, S. bdy. of Maricopa Indian Reservation.

Over level land, thru mesquite timber and sagebrush.

64.18 Intersect E. bdy. of Tract 53.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for clos. cor. on E. and W. center line of sec. 28, and cor. of the Maricopa Indian Reservation, with brass cap mkd.

$$\begin{array}{c} \text{MIR} \\ \text{CC} \\ \text{TR 53} \text{---} \text{C} \\ \text{S 28} \end{array}$$

1936

dig a circular

trench, 6 ft. diam., and pile the dirt around post, to top.

From this point cor. No. 4 of Tract 53 bears S.0°09'E., 12.61 chs. dist., an iron post, 1 in. diam., firmly set, marked and witnessed as described in the official record.

From the same point cor. No. 1 of Tract 53 bears N.0°09'W., 27.44 chs. dist., an iron post, 1 in. diam., firmly set, marked and witnessed as described in the official record.

From the  $\frac{1}{4}$  sec. cor. of secs. 29 and 30, which is an iron post, 1 in. diam., firmly set, marked and witnessed as described in the official record.

East, on E. and W. center line of sec. 29, S. bdy. of Maricopa Indian Reservation.

Over level land, thru mesquite timber and sagebrush.

13.50 Intersect W. bdy. of Tract 53.

Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for clos. cor. on E. and W. center line of sec. 29 and cor. of the Maricopa Indian Reservation, with brass cap mkd.

$$\begin{array}{c} \text{MIR} \\ \text{CC} \\ \text{C} \text{---} \text{C TR 53} \\ \text{S 29} \end{array}$$

1936

dig a circular

trench, 6 ft. diam., and pile dirt around post to top.

Subdivision of Sections in T. 5 S., R. 4 E.

chains

The surveys in this township were executed with a light-mountain solar transit made by Buff & Buff Manufacturing Co., Serial No. 10125, equipped with the improved Smith solar attachment, and constructed in accordance with the standard specifications of the General Land Office. The instrument was in good condition, and having been placed in satisfactory adjustment prior to beginning the survey, and tested and found free from appreciable error, was approved by the district cadastral engineer on May 9, 1936. I examined all the instrumental adjustments before making the field tests hereinafter recorded.

The directions of the lines were determined by solar transit method. The measurements were made with a Lallie steel tape, 5 chs. in length, graduated every link for the first 100 lks., and thereafter at intervals of 10 lks. The tape was tested by comparison with a Lufkin standard and found correct. The measurements were made on the slope and the vertical angle of each interval was ascertained by a clinometer in good adjustment; the horizontal equivalents are entered in the field note record.

The data furnished with the special instructions gives the geographic position for the SW. cor. of T. 5 S., R. 4 E., as follows: latitude 32°56'17"N., and longitude 111°59'50"W.

May 26, 1936, in camp at the SE. cor. of sec. 32, T. 4 S., R. 2 E., G. & S.R. Meridian, my watch having been checked by radio time signals and found correct, I make an hour angle observation on Polaris west of the meridian, making four readings, two each with the telescope in direct and reversed positions, deflecting the angle from a sharp peak about 8 miles distant, in the direction N-E to Polaris.

Mean watch time of observation, p.m.	7h 53m 45s.
Watch fast of l.m.t.	28m 15s.
Mean deflection angle from peak to Polaris	40°47.5' N-E.
Reduced bearing of peak	N.41°23.1' W.
Mean vertical angle to Polaris	32°08'30"
Reduced latitude	33°01'45"N.

May 26, 1936

May 27, 1936: at the above station, every 30 min. from 7 to 10.30 a.m. and from 1.30 to 5 p.m., I make proper settings on the arcs of the solar attachment and ascertain that the resulting orientation of the instrument, when compared with the meridian established by Polaris observation, has a maximum error of less than 1'30".

I repeat the tests of the arcs daily by noon observation, and verify the meridional indications at frequent intervals thruout the survey.

May 27, 1936.

Practically all of this township not included within the Maricopa Indian Reservation was resurveyed by J.F. Hesse, Surveyor, in 1916, in view of which it is not necessary to resurvey any of the lines of the original Ingalls survey of 1868.

The following notes describe the establishment of a corner on the west boundary of Tract 40, and the east boundary of Tract 53, to mark the latitudinal center line of sec. 28; a corner on the west boundary of Tract 53, at a point due east of the 1/4 sec. cor. bet. secs. 29 and 30, and one due west thereof on the east boundary of Tract 42.

Subdivision of Sections in T. 5 S., R. 4 E.

chains

From this point cor. No. 2 of Tract 53 bears N.0°01'E., 28.49 chs. dist., an iron post, 1 in. diam., set and marked as described in the official record.

From the same point, cor. No. 3 of Tract 53 bears S.0°01'W., 11.50 chs. dist., an iron post, 1 in. diam., set an marked as described in the official record.

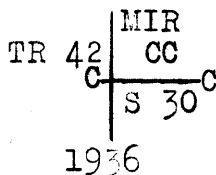
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From the 1/4 sec. cor. of secs. 29 and 30.

West, on E. and W. center line of sec. 30, S. bdy. of Maricopa Indian Reservation.

Over level land, thru mesquite timber and sagebrush.

6.47 Intersect the E. bdy. of Tract 42.

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for clos. cor. of E. and W. center line of sec. 30 and cor. of the Maricopa Indian Reservation, with brass cap mkd.



dig a circular

trench, 6 ft. diam., and pile the dirt around post to top.

From this point, cor. No. 2 of Tract 41, on E. bdy. of Tract 42, bears S.0°08'W., 11.15 chs. dist., an iron post 1 in. diam., firmly set and marked as described in the official record.

From the same point, cor. No. 1 of Tract 42 bears N.0°08'E., 27.46 chs. dist., an iron post, 1 in. diam., firmly set and marked as described in the official record.

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FINAL TEST OF SOLAR ATTACHMENT

May 30: At my station at the SE. cor. of sec. 32, T.4 S., R.3 E., at 8h 0m a.m., app.t., I set off 33°02'N., on the lat. arc; 21°49'N., on the decl. arc; and orient the instrument with the solar; the line of sight agrees with the meridian established by Polaris observation.

At 4h 0m p.m., app.t., with latitude arc unchanged, I set off 21°52'N., on the decl. arc; and repeat the test of the solar; the line of sight agrees with the meridian established by Polaris observation.

May 30, 1936.

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(Revised May 1934)

### FIELD ASSISTANTS

NAMES	CAPACITY
H.A. Weedon	Principal Assistant
Walter Wright	Chainman
Albert A. Blevins	Flagman

CERTIFICATE OF ~~UNITED STATES~~ SURVEYOR

I, Roger F. Wilson, Surveyor, General Land Office, HEREBY CERTIFY upon honor that, in pursuance of special instructions bearing date of the 9th day of May, 1936, received from the district cadastral engineer for Arizona, with assignment instructions dated May 9, 1936, I have surveyed a portion of the East and West center lines of Sections 28 and 29, Township 5 South, Range 4 East,

Gila and  
of the 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 instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in the specific manner described in the foregoing field notes.

Glendale, California  
February 1, 1939

Roger F. Wilson  
Surveyor,  
General Land Office

CERTIFICATE OF APPROVAL

OFFICE OF ~~U.S.~~ SUPERVISOR OF SURVEYS,  
Denver, Colorado, February 25, 1939.

The foregoing field notes of the survey of a portion of the East and West center lines of Sections 28 and 29, Township 5 South, Range 4 East, of the Gila and Salt River Meridian, in the State of Arizona,

executed by Roger F. Wilson, Surveyor,  
General Land Office,  
under special instructions dated May 9, 1936, and assignment instructions dated May 9, 1936, having been critically examined, and the necessary corrections made prior to their certification by the engineer, the said field notes, and the survey therein described, are hereby approved.

Monte A. Prinson  
U.S. Supervisor of Surveys.

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 on file in the public survey office.~~

U.S. Supervisor of Surveys.