

2648

4-679

BOOK "A"

BOOK 2648

(1)

FIELD NOTES

OF THE SURVEY OF THE

EAST HALF OF THE

SOUTH BOUNDARY OF

TOWNSHIP NO. 8 SOUTH, RANGE NO. 20 EAST

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

John F. Hesse

In the capacity of U. S. Surveyor, under instructions dated August 25, 1910, issued by the United States Surveyor General to govern surveys included in Group No. 186, which were approved by the Commissioner of the General Land Office, September 9th, 1910, pursuant to authority contained in the Act of Congress dated June 23rd, 1913.

Survey commenced October 3, 1913.

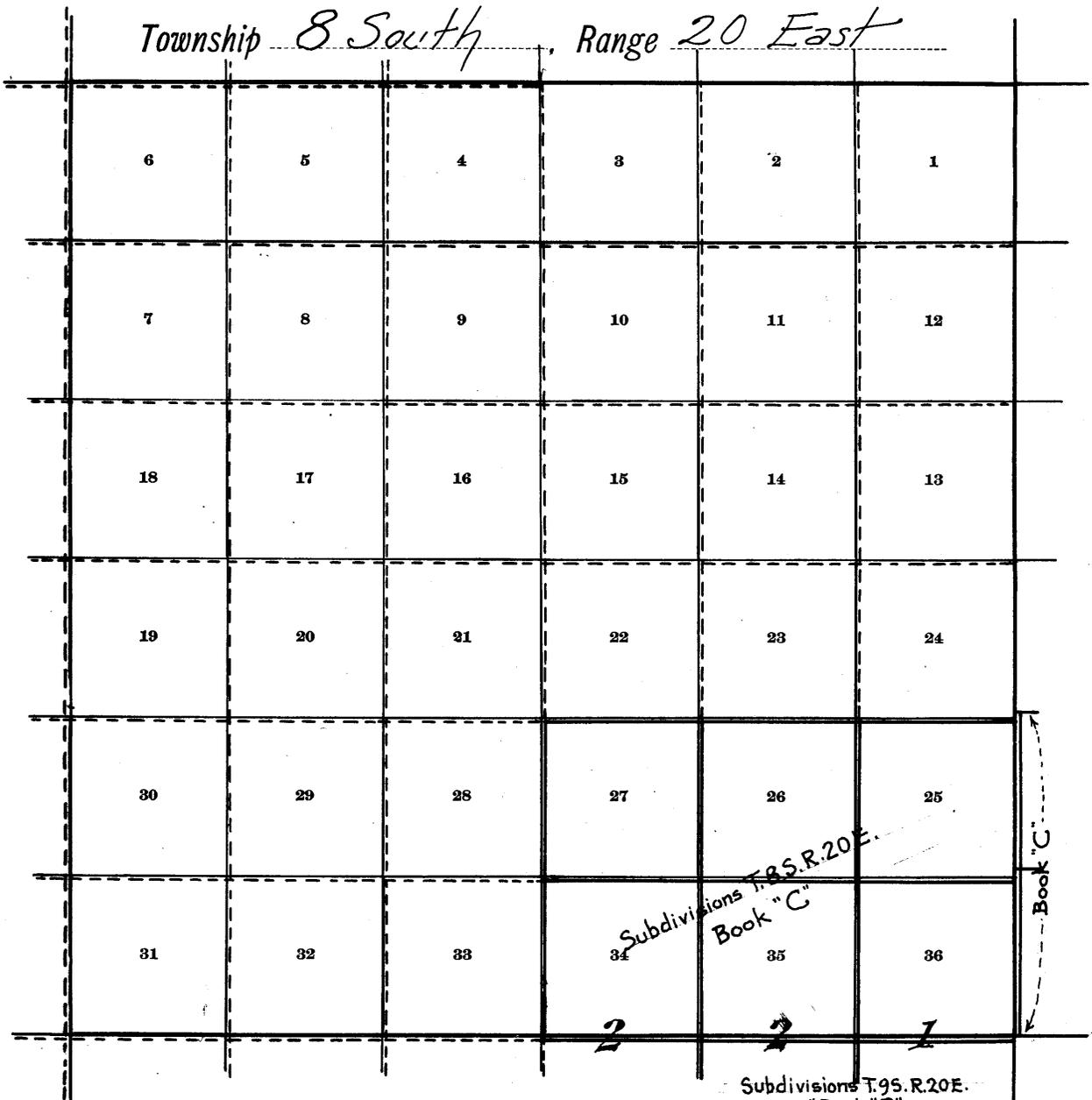
Survey completed October 4, 1913.

(A)

BOOK 2648

INDEX DIAGRAM.

Township 8 South, Range 20 East



Subdivisions T.9S.R.20E. "Book B" 6-151

- Surveys this Group.
- Previous accepted surveys.
- Unsurveyed.
- Resurveyed this Group.

E¹/₂ of South Boundary of T 8 S., R 20 E.

Chains

Survey commenced October 3, 1913, and was executed with a W and L.E. Gurly transit, not numbered, with solar attachment. The horizontal limb is provided with one double vernier, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declinations arcs.

This instrument was approved by the Supervising Surveyor, August 28, 1913.

October 3, 1913. At the true cor. point of Ts. 8 and 9 S, Rs. 20 and 21 E, which is located in a wash 2.00 chains N. of WC of Ts. 8 and 9 S. Rs 20 and 21 E, which is a cross on rock in place, marked and witnessed as described by the Surveyor General, I set off 32°41' N on the lat. arc; 3°57' S on the decl arc; and at 1h.00m p.m., l.m.t., I determine a meridian with the solar. Thence I run

West, bet secs. 1 and 36, on true line
Over mountainous land through scattered timber and brush. Ascend gradually in the bottom of wash.

17.50 Leave wash. Cliff 75 ft. high bears NE and SW. Over heavily rolling land.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¹/₄ sec. cor., marked on brass cap, ¹/₄ S36 in N and S19 in S half.

Raise a mound of stone 2 ft. base, 1 1/2 ft. high, N of cor. Pits impracticable.

80.00 Set an iron post 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, marked on brass cap

- T8S in N,
- T9S in S and
- R20E in W half;
- S35 in NW,
- S36 in NE,
- S 1 in SE and
- S 2 in SW quadrant.

Raise a mound of stone 2 ft. base, 1 1/2 ft. high, W of cor. Pits impracticable.

Land, mountainous and rolling.
Soil, rocky sandy loam 2nd rate.
Timber, oak.
Undergrowth, mesquite, catclaw.

October 3, 1913.

October 3, 1913. I examine the adjustments of the transit and find them correct, then to test the solar apparatus, by comparing its indications, resulting from observations made during a.m. and p.m. hours, with a meridian determined by Polaris observations. I proceed as follows.

At the cor. of secs. 1, 2, 35 and 36, ^{as described} latitude 32°41' N, longitude 110°13'26" W; I set off 32°41' N on the lat. arc; 3°59 1/2' S on the decl. arc; and at 4h.30m p.m., l.m.t., I determine with the solar a meridian, and mark a point thereof on a stone firmly set in the ground 5 chains N of my station.

At 6h.45m p.m., by my watch which has correct l.m.t., I observe Polaris at Eastern Elongation, in accordance with the Manual of Instruction, and mark a point in the line thus determined, on a peg driven in the ground, 5 chains N of my station.

October 3, 1913.

E¹ of South Boundary of T8S R20E

Chains.

October 4, 1913. At 7h.00m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}32'$ to west and mark a point in the meridian thus determined, by cutting a small groove in the stone already set 5 chs. N of my station; this mark falls about 0.3 ins. to the E of the mark determined by the solar.

At 7h.30m a.m., l.m.t., I set off $32^{\circ}41'N$ on the lat arc; $4^{\circ}13'S$ on the decl. arc; and determine with the solar a meridian, marking a point thereof on the stone already set 5 chs. N of my station; this mark falls 0.3 ins. E of the meridian determined by Polaris observation.

The solar apparatus, by p.m. and a.m. observations defines positions for meridians, respectively about $0'16''$ W and E of meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h.00m a.m., l.m.t., is $N.13^{\circ}30'W$, the angle thus determined gives the magnetic declination $13^{\circ}30'E$.

From the cor. of secs. 1, 2, 35 and 36, ~~hereinbefore~~ described, run, West, bet. secs. 2 and 35, on true line,

Over level land covered with loose rocks.

14.10 Road, bears N.E. and S.W.

18.00 Land becomes rolling

40.00 Set an iron post 1 in. diam., 36 ft. long, 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}S35$ in N. and $S2^{\circ}1'$ in S half. Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.

42.50 Cross wash 15 lks. wide, course N.E.

66.90 Descend rocky slope into canyon.

77.80 Bottom of canyon, 1.25 chs. wide, course N.E., ascend.

80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 2, 3, 34 and 35 marked on brass cap

T8S in N.

T9S^{19'} in S., and

R20E in W. half.;

S34 in N.W.

S35 in N.E.

S2 in S.E. and

S3 in S.W. quadrant; from which

1. An oak, 6 ins. diam., bears $N18^{\circ}W$, 2.16 chs. dist., marked T8SR20ES34BT

An oak 6 ins. diam., bears $S24^{\circ}E$, 46 lks. dist., marked T9SR20ES2BT. No other trees available

therefore raise mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Land, level 18.00 chs. Rough rolling 62.00 chs.

Soil, rocky 4th rate.

No timber.

No undergrowth.

NOTE: October 4, 1913. At this cor. I set off $4^{\circ}19\frac{1}{2}'S$ on decl. arc and observe the sun on the meridian at noon. the resulting lat. is $32^{\circ}41'N$
East

West bet. secs. 3 and 34, on true line.

Over rough ~~rolling~~ land, through scattering brush.

8.40 Top of ridge, bears N.E. and S.W., desc.

21.60 Bottom of descent, bed of canyon 40 lks. wide, course N.E. Asc.

25.90 Ascend sheer cliff 70 ft. high,

26.40 Top of rim of canyon

40.00 Set an iron post 3 ft. long 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}S34$ in N. and $S3^{\circ}1'$ in S. half, from which

An oak 6 ins. bears $N80^{\circ}E$. 7 lks. dist. marked $\frac{1}{4}S34BT$

An oak 5 ins. bears $S17^{\circ}E$, 36 lks. dist. marked $\frac{1}{4}S3BT$

62.00 Top of ridge, bears N.E. and S.W., thence desc. along NW. slope of small canyon to cor.

E $\frac{1}{2}$ of South Boundary of Tp. 8 S. R. 20 E.Chains.
80.00

Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 3, 4, 33 and 34 marked on brass cap

T8S in N.

T9S⁰⁵ in S and

R20E in W. half;

S33 in N.W.

S34 in N.E.

S3 in S.E. and

S4 in S.W. quadrant, raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.

Land, rough mountainous.

Soil, rocky 4th rate.

No timber.

Undergrowth, scattering mesquite and oak.

October 4, 1913.

John P. Hesse

U.S. Surveyor.

BOOK 2648

FOR FINAL OATH OF UNITED STATES SURVEYOR.

See Book " Z " Group 18

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 _____, I have well, faithfully and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191 _____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Arizona *July 21*, 1914

The foregoing field notes of the survey of the East half of
the South boundary of
Township No.8 South, Range No.20 East
of the Gila and Salt River Base and Meridian
Arizona

executed by John F. Hesse, U.S. Surveyor
under his special instructions dated August 25, 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank S. Ingalls

~~U. S.~~ Surveyor General.
of Arizona.

~~I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.~~