

2707

BOOK 2707

FIELD NOTES

OF THE SURVEY OF THE Completion

of the East boundary of

Township No 23 South, Range No 23 East

of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

Alfred N. Oliver - U.S.

~~In the capacity of U.S. Surveyor~~, under instructions dated August 24, 1911,
issued by the United States Surveyor General to govern surveys included in
Group No. 5, which were approved by the Commissioner of the General Land
Office, September 11, 1911, pursuant to authority contained in the Act of
Congress dated March 4, 1911

Survey commenced October 23, 1911

Survey completed " 25, 1911

INDEX DIAGRAM.

Township _____, Range _____

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

PRELIMINARY OATHS OF ASSISTANTS.

To, R. L. Bates and N. R. Harvey
do solemnly swear that we will well and faithfully execute the duties
of chainmen; that we will level the chain upon even and uneven ground,
and plumb the tally pins, either by sticking or dropping the same; that
we will report the true distances to all notable objects, and the true
lengths of all lines that we assist in measuring, to the best of our
skill and ability, and in accordance with instructions given us, in the
survey of the E. ldy. of Twp. 23 S. R. 23 E. of the G. & S. R. B. & M. Arizona.
part of

----- R. L. Bates ----- Chairman
----- N. R. Harvey ----- Chairman

Subscribed and sworn to before me this 23rd
day of October, 1911

Alfred N. Oliver

----- U. S. Transitman -----

(Seal)

To, J. L. Gardner and
do solemnly swear that we will well and truly perform the duties of
moundman in the establishment of corners, according to the instructions
given me, to the best of our skill and ability, in the survey of part of
the E. ldy. of Twp. 23 S. R. 23 E. of the G. & S. R. B. & M. Arizona.

----- Moundman
----- Moundman -----

Subscribed and sworn to before me this 23rd
day of October, 1911

J. L. Gardner

----- Alfred N. Oliver -----
----- U. S. Transitman -----

(Seal)

To, E. Barnes and
do solemnly swear that we will well and truly perform the duties of
axman in the establishment of corners and other duties, according to
instructions given me, to the best of our skill and ability, in the
survey of the E. ldy. of Twp. 23 S. R. 23 E. of the G. & S. R. B. & M. Arizona.
part of

----- Axman
----- Axman -----

Subscribed and sworn to before me this 23rd
day of October, 1911

E. Barnes

----- Alfred N. Oliver -----
----- U. S. Transitman -----

(Seal)

To, A. W. Hendrix do solemnly swear that I will
well and truly perform the duties of flagman according to instructions
given me, to the best of my skill and ability, in the survey of part of
the E. ldy. of Twp. 23 S. R. 23 E. of the G. & S. R. B. & M. Arizona.

----- A. W. Hendrix ----- Flagman.
Subscribed and sworn to before me this 23rd
day of October, 1911

Alfred N. Oliver

----- U. S. Transitman -----

(SEAL)

Completion of East boundary of Township 23 South, Range 23 East.

Chains

Survey commenced October 23, 1911, and executed with a W. and L. E. Gurley solar compass, not numbered. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined and approved by the Supervising Surveyor.

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

At the cor. of secs. 19, 24, 25 and 30, T. 23 S., R. 23 and 24 E.; latitude, 31° 24' 13" N.; longitude, 109° 57' 21" W., I set off 31° 24' N. on the lat. arc; 11° 13' S. on the decl. arc; and at 5h. 00m. p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground 5 chs. N. of the cor.

October 23, 1911.

October 24¹⁹¹¹ At 5h. 19m. a.m., by my watch, which has correct l.m.t., I observe Polaris at western elongation in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground 5 chs. N. of the cor.

At 6h. 30m. a.m., l.m.t., I lay off the azimuth of Polaris 1° 22' to the east, and mark the meridian thus determined, by cutting a small groove in the stone set October 23, on which the meridian coincides with the mark determined with the solar.

At 7h. 00m. a.m., l.m.t., I set off 31° 24' N. on the lat. arc; 11° 26' S. on the decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of the cor.; this mark coincides with the meridian established by the Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians which coincide with the meridian determined by Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h. 15m. a.m., l.m.t. is N. 13° 15' W.; the angle thus determined gives the magnetic decl. 13° 15' E.

I commence at the cor. of secs. 19, 24, 25 and 30, Tps. 23 S., R. 23 and 24 E., which is a limestone 9x6 ins. x 4 ins. above ground, marked & witnessed as described by the Surveyor General

Thence I run, North, bet. secs. 19 and 24.

Ascending steep rocky ridge, through scattering brush.

16.00 Top of ridge, brs. E. and W.; descend.

24.55 Drain, course E., 12 lks. wide.

40.00 Set an iron post 3 ft. long, 1 in. in diam, 26 ins. in the ground for 1/4 sec. cor., marked on brass cap, 1/4 S 24 in W. and S 19 in E. half; raise a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

52.80 Cross wash, 50 lks. wide, course E.; ascend.

80.00 Top of ridge, brs. E. and W.

Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 13, 18, 19 and 24, marked on brass cap, 1911;

- T 23 S in N. half;
- R 23 E, S 13 in NW.,
- R 24 E, S 18 in NE.,
- S 19 in SE., and
- S 24 in SW. quadrant; raise a mound of stone 2 ft.

base, 1 1/2 ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky and worthless, 4th rate.

No timber. Undergrowth, oak brush.

October 24¹⁹¹¹ At this cor. I set off 11° 33 1/2' S. on the

Completion of
2. East Boundary of Tp. 23 S. Rg. 23 E.

Chains.

decl. arc and observe the sun on the meridian at noon;
the resulting lat. is $31^{\circ} 25' N$.

North, bet. secs. 13 and 18.

- 13.00 Descending, through dense brush.
- 18.55 Cross wash 60 lks. wide, course S.E.
- 40.00 Drain 20 lks. wide, course E.
- 43.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap¹⁹¹¹ S13 in W. and S18 in E. half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 55.00 Cross same wash 50 lks. wide, course S.W. ascend
- 61.50 Top of ridge, bears E. and W. descend.
- 80.00 Cross wash 30 lks. wide, course S.W. ascend.
- Set an iron post 3 ft. long, 3 in. diam., 24 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked on brass cap¹⁹¹¹;
T23S in N. half;
R23E, S12 in N.W.
R24E, S7 in N.E.
S18 in S.E. and
S13 in S.W. quadrant; raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky and worthless, 4th rate.
No timber.
Undergrowth, oak brush.

October 24, 1911.

October 25¹⁹¹¹ At 7h.00m. a.m. l.m.t. I set off $31^{\circ} 25' N$ on the lat. arc; $11^{\circ} 47' S$ on the decl. arc and determine a meridian with the solar at the cor. of secs. 7, 12, 13 and 18, above described,

Thence I run
North, bet. secs. 7 and 12

- 7.50 Ascending, through dense brush.
- 35.36 Top of range, bears E. and W.
- 38.00 Drain, 10 lks. wide, course N.E. ascend.
- 40.00 Top of ridge, bears E. and W. descend.
- 50.00 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap¹⁹¹¹ S12 in W. and S7 in E. half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 80.00 Drain 10 lks. wide, course W.
- Set an iron post 3 ft. long 3 ins. diam., 24 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked on brass cap¹⁹¹¹;
T23S in N. half;
R23E, S1 in N.W.
R24E, S6 in N.E.
S7 in S.E. and
S12 in S.W. quadrant; raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky and worthless, 4th rate.
No timber.
Undergrowth, oak brush and manzanita.

October 25¹⁹¹¹ at this cor. I set off $11^{\circ} 54\frac{1}{2}' S$ on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 26' N$.

North, bet. secs. 1 and 6.

- 4.30 Descending, through dense brush.
- 6.50 Wire fence, bears E. and W.
- 15.50 Cross wash 20 lks. wide, course N.E.
- 30.00 Cross wash 20 lks. wide, course N.E. ascend.
- 39.26 Top of ridge, bears E. and W. descend.
- 40.00 Wire fence, bears E. and W.
- Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap¹⁹¹¹ S1 in W. and S6 in E. half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Completion of
East Boundary of Tp. 23 S. Rg. 24 E.

Chains.	
40.20	Cross wash 15 lks. wide, course N.W.
40.40	Cross road, bears N.W. and S.E.
44.20	Cross same road, bears N.E. and S.W.
45.00	Cross same wash 15 lks. wide, course N.E.
55.27	Fence, bears E. and W.
56.37	Fence, bears N.W. and S.E.
56.46	Cross road, bears N.W. and S.E. (Bisbee road)
57.10	Fence, bears N.W. and S.E.
58.45	Cross creek, clear running water 15 lks. wide, 4 ins. deep; course N.W. ascend.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for the cor. of Tps. 22 and 23 S., Rgs. 23 and 24 E, marked on brass cap, 1911; T22S in N. R24E in E. T23S in S. and R23E in W. half; S36 in N.W. S31 in N.E. S6 in S.E. and S1 in S.W. quadrant; raise a mound of stone 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable. Land, mountainous. Soil, rocky and worthless, 4th rate. No timber. Undergrowth, oak brush and manzanita.

October 25, 1911.

Alfred N. Plumb

U.S. Transitman.

General Description.

{ This line runs over rough mountains. There is no water or timber along the line. }

FINAL OATHS OF U. S. TRANSITMAN AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by John P. Hesse, United States Transitman, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the E. bdy. of Twp 23 S. Rg. 23 E. of the G. & S. R. Base & Meridian, Arizona. part of showing the respective capacities in which they acted:

- R. L. Bates -----, Chairman.
- N. R. Harvey -----, Chairman.
- J. L. Gardner -----, Moundman.
- ~~-----, Moundman.~~
- E. Barnes -----, Axman.
- ~~-----, Axman.~~
- A. W. Hendrix -----, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alfred N. Oliver, United States Transitman, in surveying all those parts or portions of the E. bdy. of Twp 23 S. Rg. 23 E.

of the Gila and Salt River ^{Base and} Meridian, Territory of Arizona, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Arizona.

- R. L. Bates -----, Chairman.
- N. R. Harvey -----, Chairman.
- J. L. Gardner -----, Moundman.
- E. Barnes -----, ~~Moundman;~~
Axman.
- ~~-----, Axman.~~
- A. W. Hendrix -----, Flagman.

Subscribed and sworn to before me this 26th day of October, 1911

Alfred N. Oliver
U. S. Transitman

(SEAL)

FINAL OATH OF UNITED STATES TRANSITMAN.

I, Alfred N. Oliver, United States Transitman, do solemnly swear that, in pursuance of instructions received from Frank S. Ingalls, United States Surveyor General for Arizona, bearing date of the 24th day of August, 1911, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the E. bdy of Tp. 23 S. Rg. 23 E.

Salt River Base and Meridian, in the Territory of Arizona, which are represented in the foregoing field notes as having been surveyed 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 United States Surveyor General for Arizona, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Alfred N. Oliver
United States Transitman

Subscribed by said Alfred N. Oliver and sworn to before me) this 2nd day of August, 1912

Frank S. Ingalls
Surveyor General of Arizona

(SEAL)

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Phoenix, Arizona, Nov. 14, 1914

The foregoing field notes of the completion of the

EAST BDY. OF TP. N° 23 S. R. N° 23 E. of the

Gila and Salt River Base and Meridian, Arizona.

executed by Alfred N. Oliver, U.S. Transitman under Group No. 5, dated August 24, 1911, 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
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.~~

~~United States Surveyor General~~